Supplementary Text 1: Reference list of included studies on global seroprevalence of Hepatitis B virus serological markers among Healthcare Workers

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Supplementary Table 1. Preferred reporting items for systematic reviews and meta-analyses checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	2
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	7-8
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	8
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	9
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	9
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	9-10
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Appendix
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	10
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	10
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	10

Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	11
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	11-12
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	11-12

Section/topic	**#**	**Checklist item**	**Reported on page #**
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	12
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	12
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	12
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	13
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	13
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	13
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	13-16
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	13
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	13-16
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	17
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	19-20

Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	20
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	13

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

Supplementary Table 2. Search strategy in Medline (Pubmed)

Search	**Virus**
#1	Hepatitis b OR Viral hepatitis b OR Hepatitis b virus OR HBV
#2	Health care worker* OR HCW* OR Healthcare worker* OR Health worker* OR Health personnel* OR Health staff OR Health officer* OR Health practitioner* OR Medical personnel* OR Medical Staff OR Hospital OR Medical Staff OR Medical Administrator* OR Medical Secretar* OR Emergency Medical Dispatcher* OR Medical Laboratory Personnel OR Hospital Personnel OR Nurs* OR Midwive* OR Physician* OR Surgeon* OR Doctor* OR Dentist* OR Technician* OR Auxiliar* OR Therapist* OR Anatomist* OR Anesthetist* OR Anesthesiologist* OR Audiologist* OR Caregiver* OR Coroner* OR Orthodontist* OR Doulas OR Practitioner* OR Nutritionist* OR Optometrist* OR Pharmacist* OR Allergist* OR Anesthesiologist* OR Cardiologist* OR Dermatologist* OR Endocrinologist* OR Gastroenterologist* OR Geriatrician* OR Hospitalist* OR Nephrologist* OR Neurologist* OR Oncologist* OR Ophthalmologist* OR Otolaryngologist* OR Pathologist* OR Pediatrician* OR Physiatrist* OR Pulmonologist* OR Radiologist* OR Rheumatologist* OR Urologist* OR Veterinarian*
#3	#2 in [Title/Abstract]
#4	Prevalence OR Detection OR Epidemiology OR Survey OR Seroprevalence OR Surveillance OR Serological
#5	#1 AND #3 AND #4
#6	Limit #5 to English and French

Supplementary Table 3. Items for risk of bias assessment

Hoy et al. tool for cross sectional studies	**Yes (1)/No (0)**
External validity	
1. Was the study's target population a close representation of the national population in relation to hepatitis B virus prevalence in healthcare workers?	**1**
2. Was the sampling frame a true or close representation of the study population?	**1**
3. Was some form of random selection used to select the sample, OR was a census undertaken?	**1**
4. Was the likelihood of nonresponse bias minimal (> 70%)?	**1**
Internal validity	**1**
5. Were data collected directly from the subjects (as opposed to a proxy)?	**1**
6. Was an acceptable case definition used in the study?	**1**
7. Was the study viral detection assay shown to have validity and reliability?	**1**
8. Was the same mode type of sample collected for all subjects?	**1**
9. Was the length of the length of the study period > 1 year?	**1**
10. Were the numerator(s) and denominator(s) for the hepatitis B prevalence appropriate?	**1**
Total score	**10**
Interpretation of the risk of bias tool • 7-10: Low risk of bias • 4-6: Moderate risk of bias • 0-3: High risk of bias	

Supplementary Table 4. Main reasons of exclusion of eligible studies

N°	Author, Year	Title	Reason of exclusion
1	Aarnio, 2001	Glove perforation rate in vascular surgery--a comparison between single and double gloving.	No data on HBV serological markers prevalence
2	Aaron, 2017	Hepatitis B vaccination coverage among healthcare workers at national hospital in Tanzania: how much, who and why?	No data on HBV serological markers prevalence
3	Abara, 2017	Hepatitis B vaccination, screening, and linkage to care: Best practice advice from the American College of Physicians and the Centers for Disease Control and Prevention.	Review
4	Abdela, 2016	Assessment of knowledge, attitudes and practices toward prevention of hepatitis B virus infection among students of medicine and health sciences in Northwest Ethiopia.	No Laboratory-Confirmed data
5	Abebaw, 2017	Hepatitis B virus vaccination status and associated factors among health care workers in Shashemene Zonal Town, Shashemene, Ethiopia: a cross sectional study.	No Laboratory-Confirmed data
6	Abeje, 2015	Hepatitis B vaccine knowledge and vaccination status among health care workers of Bahir Dar City Administration, Northwest Ethiopia: a cross sectional study.	No Laboratory-Confirmed data
7	Abiteboul, 1990	Prevention of hepatitis B in Assistance Publique Hospitals of Paris results after seven years' vaccination in occupational health department.	No abstract and full text available
8	Abiye, 2019	Health professionals' acceptance and willingness to pay for hepatitis B virus vaccination in Gondar City Administration governmental health institutions, Northwest Ethiopia.	No data on HBV serological markers prevalence
9	Abkar, 2013	Unsafe injection practices in Hodeidah governorate, Yemen.	No Laboratory-Confirmed data
10	Abraham, 2019	Universal hepatitis B screening in a high risk community.	No abstract and full text available
11	Acevedo, 2016	Association of vaccination coverage with sociodemographic factors in workers of primary health care centers of Cordoba, Argentina.	Study not in English or French
12	Acharga, 2008	Does the level of hepatitis B virus vaccination in health-care workers need improvement?	Comment on an article
13	Acharya, 2002	Incidental detection of hepatitis B surface antigen: a growing concern for the Indian physician.	No abstract and full text available
14	Acharya, 2013	Awareness and practices of standard precautions for infection control among nurses in a tertiary care hospital.	No data on HBV serological markers prevalence
15	Adam, 2009	Accidental blood exposures among medical residents in Paris, France.	Comment on an article
16	Adebamowo, 1997	The immunization status and level of knowledge about hepatitis B virus infection among Nigerian surgeons.	No data on HBV serological markers prevalence
17	Adebowale, 2010	Updates from the 19th National Immunisation Conference for Health Care Workers Manchester: Conference Centre, December 2008.	Review
18	Adegboye, 1997	Glove utilization and reasons for poor compliance by health care workers in a Nigerian teaching hospital.	No data on HBV serological markers prevalence
19	Adjei, 2019	Chronic Hepatitis B stigma in Ghana: a qualitative study with patients and providers.	Comment on an article
20	Afridi, 2013	Needle stick injuries--risk and preventive factors: a study among health care workers in tertiary care hospitals in Pakistan.	No data on HBV serological markers prevalence among HCWs

21	Agerton, 1995	Impact of the bloodborne pathogens standard on vaccination of healthcare workers with hepatitis B vaccine.	No data on HBV serological markers prevalence
22	Agustian, 2009	An estimation of the occupational risk of HBV, HCV and HIV infection among Indonesian health-care workers.	Sample with already known result
23	Ahmed Elmukashfi, 2012	Socio-demographic characteristics of health care workers and hepatitis B virus (HBV) infection in public teaching hospitals in Khartoum State, Sudan.	No data on HBV serological markers prevalence
24	Ahmed, 2009	Status and attitude towards hepatitis 'B' virus vaccination in staff of lady reading hospital Peshawar.	No Laboratory-Confirmed data
25	Ahmed, 2018	Assessing of policies and practices for occupational exposure to blood-borne viral infections in Tanta University Hospitals, Egypt.	No data on HBV serological markers prevalence
26	Akibu, 2018	Attitude and Vaccination Status of Healthcare Workers against Hepatitis B Infection in a Teaching Hospital, Ethiopia.	No data on HBV serological markers prevalence
27	Akibu, 2018	Attitude and Vaccination status of health care workers against hepatitis B infection in a teaching hospital, Ethiopia: Institution based cross sectional study.	No data on HBV serological markers prevalence
28	Akpinar-Elci, 2018	Needlestick injury prevention training among health care workers in the Caribbean.	No data on HBV serological markers prevalence
29	Al Awaidy, 2018	Assessment of safe injection practices in health facilities in Oman.	No data on HBV serological markers prevalence
30	Al Mahtab, 2014	An Outbreak of Acute Hepatitis in a Medical Facility of Bangladesh.	Only HBV positive samples included
31	Alavian, 2005	Concerns regarding dentists' compliance in hepatitis B vaccination and infection control.	No data on HBV serological markers prevalence
32	Alavian, 2008	Survey of the level of anti-HBs antibody titer in vaccinated Iranian general dentists.	Sample with already known result
33	Alavian, 2011	Hepatitis B infection in dentistry setting needs more attention.	No data on HBV serological markers prevalence
34	Alavian, 2011	Iranian dental students' knowledge of hepatitis B virus infection and its control practices.	No data on HBV serological markers prevalence
35	Albertoni, 1992	Needlestick injury in hospital personnel: a multicenter survey from central Italy. The Latium Hepatitis B Prevention Group.	No data on HBV serological markers prevalence
36	Aldakhil, 2019	Prevalence and associated factors for needlestick and sharp injuries (NSIs) among dental assistants in Jeddah, Saudi Arabia.	No data on HBV serological markers prevalence
37	Al-Dharrab, 2012	Assessment of hepatitis B vaccination and compliance with infection control among dentists in Saudi Arabia.	No Laboratory-Confirmed data
38	Al-Dwairi, 2007	Infection control procedures in commercial dental laboratories in Jordan.	No Laboratory-Confirmed data
39	Alexander, 1984	Hepatitis B infection in other hospital personnel.	No abstract and full text available
40	Alexander, 1990	Hepatitis B vaccination programs for health care personnel in U.S. hospitals.	No data on HBV serological markers prevalence
41	Al-Haddad, 2013	Hepatitis B vaccination among physicians, dentists and nurses in Bahrain.	No data on HBV serological markers prevalence among HCWs
42	Ali, 2001	Prevalence of hepatitis B & D viral infections among hospital personnel in Mosul-Iraq.	No abstract and full text available
43	Ali, 2005	Hepatitis B vaccination status and identification of risk factors for hepatitis B in health care workers.	No data on HBV serological markers prevalence among HCWs
44	Al-Jarba, 2003	Prevalence of hepatitis B virus and hepatitis C virus in health workers in 3 major hospitals in Aden, Republic of Yemen.	No abstract and full text available

45	Al-Khatib, 2006	Dentists' perceptions of occupational hazards and preventive measures in East Jerusalem.	No data on HBV serological markers prevalence
46	Almuneef, 2006	Seroprevalence survey of varicella, measles, rubella, and hepatitis A and B viruses in a multinational healthcare workforce in Saudi Arabia.	No data on HBV serological markers prevalence among HCWs
47	Alner, 2008	Are residential and nursing homes adequately screening overseas healthcare workers?	No data on HBV serological markers prevalence
48	Al-Rabeah, 2002	Infection control in the private dental sector in Riyadh.	No data on HBV serological markers prevalence among HCWs
49	Al-Ruhaimi, 1991	Response of dental professionals in Saudi Arabia towards hepatitis B vaccine and glove wearing.	No abstract and full text available
50	Al-Tawil, 2013	Effect of infection control strategy on knowledge, attitude and practice towards hepatitis B transmission and prevention in vulnerable populations.	No Laboratory-Confirmed data
51	Alter, 1975	Health-care workers positive for hepatitis B surface antigen. Are their contacts at risk?	Only HBV positive samples included
52	Al-Thaqafy, 2013	Hepatitis B virus among Saudi National Guard Personnel: Seroprevalence and risk of exposure.	No data on HBV serological markers prevalence
53	Alzahrani, 2000	Needlestick injuries and hepatitis B virus vaccination in health care workers.	Review
54	Al-zoughool, 2018	Injury and infection in dental clinics: Risk factors and prevention.	No data on HBV serological markers prevalence
55	Amerena, 1987	Hepatitis B virus: the risk to Australian dentists and dental health care workers.	No data on HBV serological markers prevalence among HCWs
56	American College of, 2011	ACOG Committee Opinion No. 489: Hepatitis B, hepatitis C, and human immunodeficiency virus infections in obstetrician-gynecologists.	No abstract and full text available
57	Anderson, 1982	Hepatitis B virus infections in laboratory staff.	No data on HBV serological markers prevalence
58	Angsuwathana, 2012	The prevalence of hepatitis B in premarital counseling clinic at Siriraj Hospital.	No data on HBV serological markers prevalence among HCWs
59	Aniaku, 2019	Assessment of knowledge, attitude and vaccination status of hepatitis B among nursing training students in ho, ghana.	Not possible to extract data on HBV serological markers prevalence
60	Ankur, 2012	Very low prevalence of hepatitis B and C Co-infection in HIV-positive medical inpatients in a tertiary care hospital in Agra (UP), Northern India.	No data on HBV serological markers prevalence among HCWs
61	Ansa, 2002	Occupational risk of infection by human immunodeficiency and hepatitis B viruses among health workers in south-eastern Nigeria.	No data on HBV serological markers prevalence
62	Ansa, 2019	Hepatitis B vaccine uptake among healthcare workers in a referral hospital, Accra.	No data on HBV serological markers prevalence
63	Ansari, 2008	Assessment of knowledge of students of Zahedan University of Medical Sciences about viral hepatitis infections and related factors.	No data on HBV serological markers prevalence
64	Antono, 2010	Occupational risk for human immunodeficiency virus, hepatitis B, and hepatitis C infection in health care workers in a teaching hospital in Indonesia.	No data on HBV serological markers prevalence
65	Apisarnthanarak, 2006	Compliance with universal precautions among medical students in a Tertiary Care Center in Thailand.	No data on HBV serological markers prevalence
66	Arakawa, 1982	Hepatitis B virus infection in personnel of a general hospital.	Not possible to extract data on HBV serological markers prevalence
67	Arias-moliz, 2015	Serologic control against hepatitis B virus among dental students of the University of Granada, Spain.	Sample with already known result

68	Arumugam, 2019	Educational intervention to increase hepatitis B vaccination among housekeeping staff.	Not possible to extract data on HBV serological markers prevalence
69	Arya, 2001	Hepatitis B virus among Libyan health care workers.	No abstract and full text available
70	Askarian , 2006	Prevalence of needlestick injuries among medical students at a university in Iran [2].	No data on HBV serological markers prevalence
71	Askarian , 2008	Body fluid exposure in nurses of Fars Province, southern Iran.	No data on HBV serological markers prevalence
72	Askarian , 2011	Precautions for health care workers to avoid hepatitis b and c virus infection.	Review
73	Askarian , 2012	Prevalence of needle stick injuries among dental, nursing and midwifery students in Shiraz, Iran.	No data on HBV serological markers prevalence
74	Askarian, 2006	The prevalence of needle stick injuries in medical, dental, nursing and midwifery students at the University Teaching Hospitals of Shiraz, Iran.	No data on HBV serological markers prevalence
75	Astbury, 1990	Infection risks in hospital staff from blood: hazardous injury rates and acceptance of hepatitis B immunization.	No data on HBV serological markers prevalence
76	Ataei, 2014	Knowledge, attitude, and performance of medical staff of teaching healthcare settings about hepatitis B and C in Isfahan, Iran.	No Laboratory-Confirmed data
77	Attaullah, 2011	Prevalence of HBV and HBV vaccination coverage in health care workers of tertiary hospitals of Peshawar, Pakistan.	No data on HBV serological markers prevalence
78	Aubert, 1987	Results of hepatitis B vaccination in a Paris hospital. 386 subjects.	No data on HBV serological markers prevalence
79	Aubert, 1987	Evaluation of hepatitis B vaccination in a Paris hospital personnel. 386 subjects.	Duplicate study
80	Aubert, 2016	Occupational hazards of traditional healers: repeated unprotected blood exposures risk infectious disease transmission.	No data on HBV serological markers prevalence
81	Auta, 2018	Hepatitis B vaccination coverage among health-care workers in Africa: A systematic review and meta-analysis.	Review
82	Averhoff, 1998	Immunogenicity of hepatitis B Vaccines. Implications for persons at occupational risk of hepatitis B virus infection.	No Laboratory-Confirmed data
83	Ayranci, 2004	Needlestick and sharps injuries among nurses in the healthcare sector in a city of western Turkey.	No Laboratory-Confirmed data
84	Ayub, 2014	Hemodialysis and hepatitis B vaccination: a challenge to physicians.	No data on HBV serological markers prevalence
85	Azap, 2005	Occupational exposure to blood and body fluids among health care workers in Ankara, Turkey.	No data on HBV serological markers prevalence
86	Aziz, 2002	Prevalence of HIV, hepatitis B and C amongst health workers of Civil Hospital Karachi.	Not possible to extract data on HBV serological markers prevalence
87	Azodo, 2010	Occupational risks and hepatitis B vaccination status of dental auxiliaries in Nigeria.	No data on HBV serological markers prevalence
88	Azodo, 2012	Hepatitis-B vaccination status among dental surgeons in benin city, Nigeria.	No data on HBV serological markers prevalence
89	Babanejad, 2019	A Systematic Review and Meta-analysis on the Prevalence of HBsAg in Health Care Workers from Eastern Mediterranean and Middle Eastern Countries.	Review
90	Babb, 1976	Hepatitis B antigen: a review of its importance in the practice of obstetrics and gynecology.	Review
91	Bachner, 1990	The epidemiology of fear. Scientific, social, and political responses to the occupational risk of blood-borne infection.	No abstract and full text available

92	Backus, 2014	Screening for and prevalence of hepatitis b virus infection among high-risk veterans under the care of the U.S. Department of Veterans Affairs: A case report.	Case report
93	Bahadori, 2010	Occupational exposure to blood and body fluids.	Review
94	Bălteanu , 1997	Prevalence of hepatitis B and C virus markers among the members of the medical-sanitary staff from the Faculty of Dentistry	No abstract and full text available
95	Bancescu, 1999	Infection control practices and compliance to national recommendations among dentists in Romania.	No data on HBV serological markers prevalence
96	Barchitta, 2019	Vaccine-preventable diseases and vaccination among Italian healthcare workers: a review of current literature.	Review
97	Bardan, 1993	Hepatitis B vaccination in hospital personnel: To B or not to B.	No abstract and full text available
98	Barie, 1994	Assessment of hepatitis B virus immunization status among North American surgeons.	Duplicate study
99	Bârlean, 2013	Occupational health problems among dentists in Moldavian Region of Romania.	No data on HBV serological markers prevalence
100	Barrigar, 2001	Hepatitis B virus infected physicians and disclosure of transmission risks to patients: A critical analysis.	No data on HBV serological markers prevalence
101	Bathija, 2013	A study on prevalence of needle stick injuries among junior doctors and nursing students in Kims, Hubli.	No data on HBV serological markers prevalence
102	Bechini, 2015	Identification of hepatitis B and C screening and patient management guidelines and availability of training for chronic viral hepatitis among health professionals in six European countries: Results of a semi-quantitative survey.	Review
103	Bednarsh, 1990	Infection-control practices of Massachusetts dentists 1986-1988.	No abstract and full text available
104	Beghdadli, 2009	Personnel at risk for occupational blood exposure in a university hospital in West Algeria.	No data on HBV serological markers prevalence
105	Bekele, 2014	Status of hepatitis B vaccination among surgeons practicing in Ethiopia: a cross sectional study.	No data on HBV serological markers prevalence
106	Belefquih, 2012	Epidemiological profile of occupational blood exposure accident in the mohamed 5th military teaching hospital.	No abstract and full text available
107	Bellissimo-Rodrigues, 2006	Occupational exposure to biological fluids among a cohort of Brazilian dentists.	No data on HBV serological markers prevalence
108	Belo, 2000	Prevalence of hepatitis B virus markers in surgeons in Lagos, Nigeria.	Duplicate study
109	Beltrami, 2000	Risk and management of blood-borne infections in health care workers.	Review
110	Beltrami, 2000	Immune response to hepatitis B vaccine in staff and patients in renal dialysis units.	Sample with already known result
111	Bennett, 1985	An assessment of the prevalence of hepatitis B among health care personnel in Victoria.	No abstract and full text available
112	Berk, 1994	Infection control for health care workers caring for critically injured patients: A national survey.	No data on HBV serological markers prevalence
113	Berris, 1974	Letter: Frequency of hepatitis in dentists in Ontario.	No abstract and full text available
114	Berry, 1984	A multicenter study of the prevalence of hepatitis B viral serologic markers in anesthesia personnel.	No data on HBV serological markers prevalence
115	Berry, 1984	Provider-reported barriers to chronic hepatitis B care in the veterans health administration.	No data on HBV serological markers prevalence among HCWs
116	Berry, 1985	A multicenter study of the epidemiology of hepatitis B in anesthesia residents.	Not possible to extract data on HBV serological markers prevalence
117	Beškovnik, 2013	Hepatitis B vaccination coverage of health care workers in the Celje region.	Not possible to extract data on HBV serological markers prevalence

118	Bezzaoucha, 1985	Infection of hospital personnel in a moderately endemic country by hepatitis B virus. Prevalence of hepatitis B serologic markers (HBs, anti-HBs) among 1502 people.	No abstract and full text available
119	Bhagwat, 1983	Hepatitis B surface antigen (HbsAg): (a survey of hospital staff in Zambia).	No abstract and full text available
120	Bhardwaj, 2014	The Prevalence of Accidental Needle Stick Injury and their Reporting among Healthcare Workers in Orthopaedic Wards in General Hospital Melaka, Malaysia.	No data on HBV serological markers prevalence among HCWs
121	Bhat, 2012	Hepatitis B and the infected health care worker: Public safety at what cost?	Review
122	Bhattacharya, 2001	Hepatitis B viral infection amongst hospital personnel in Calcutta.	No abstract and full text available
123	Bhattarai, 2014	Hepatitis B vaccination status and needle-stick and sharps-related Injuries among medical school students in Nepal: a cross-sectional study.	No data on HBV serological markers prevalence among HCWs
124	Bi, 2006	Occupational blood and body fluid exposure in an Australian teaching hospital.	No data on HBV serological markers prevalence among HCWs
125	Bi, 2008	Sharps injury and body fluid exposure among health care workers in an Australian tertiary hospital.	No data on HBV serological markers prevalence
126	Bibi, 2019	Infection control practices in blood banks of Pakistan.	No data on HBV serological markers prevalence
127	Bilski, 2002	Viral hepatitis in health service workers in the province of Wielkopolska.	Sample with already known result
128	Bilski, 2011	Viral hepatitis as an occupational disease in poland.	Not possible to extract data on HBV serological markers prevalence
129	Birrell, 1998	Hepatitis B--are surgeons putting patients at risk?	No data on HBV serological markers prevalence
130	Birrell, 1998	Hepatitis B - Are surgeons putting patients at risk?	Duplicate study
131	Blanco, 2011	Impact of a nurse vaccination program on hepatitis B immunity in a swiss HIV clinic.	No data on HBV serological markers prevalence
132	Blatchford, 2000	Infectious health care workers: should patients be told?	No data on HBV serological markers prevalence
133	Boal, 2005	Blood-borne pathogens among firefighters and emergency medical technicians.	Review
134	Bobinski, 2010	Health Care-Associated Hepatitis B and C Viruses: Legal Aspects.	No data on HBV serological markers prevalence
135	Bologna, 1990	Prevention of AIDS and other infectious diseases among dental professionals: A survey in two Italian regions.	No abstract and full text available
136	Bonanni, 2001	Vaccination against hepatitis B in health care workers.	No data on HBV serological markers prevalence
137	Borg, 2005	Hepatitis B transmission through blood and body fluids exposure of school personnel.	No Laboratory-Confirmed data
138	Borzooy, 2015	Identification of occult hepatitis B virus (HBV) infection and viral antigens in healthcare workers who presented low to moderate levels of anti-HBs after HBV vaccination.	No data on HBV serological markers prevalence
139	Borzooy, 2016	IL-17 and IL-22 genetic polymorphisms in HBV vaccine non- and low-responders among healthcare workers.	Sample with already known result
140	Bota, 2013	Frequency of hepatitis B and C in surgical patients, Civil Hospital Karachi.	No abstract and full text available
141	Boughton, 1982	Viral hepatitis: a four-year hospital and general-practice study in Sydney 1. Epidemiological features, natural history, and laboratory findings.	No data on HBV serological markers prevalence
142	Boughton, 1982	Viral hepatitis: a four-year hospital and general-practice study in Sydney. 2. Transmission of viral hepatitis among residential contacts in Sydney.	No data on HBV serological markers prevalence

143	Bowden, 2001	Needle-stick injuries in primary care.	No data on HBV serological markers prevalence
144	Briem, 1990	Prevalence of hepatitis B virus markers in Icelandic outpatients and hospital personnel in 1979 and in 1987.	No data on HBV serological markers prevalence
145	Broor, 1986	Epidemiology of hepatitis B virus infection in a select population of hospital staff.	No abstract and full text available
146	Browne, 1984	Viral hepatitis and the anaesthetist.	Review
147	Burnett, 2011	Hepatitis B vaccination coverage in healthcare workers in Gauteng Province, South Africa.	No data on HBV serological markers prevalence
148	Burns, 2011	Nosocomial outbreak of hepatitis B virus infection involving two hospitals in the Republic of Ireland.	No data on HBV serological markers prevalence
149	Burrell, 1976	Prevalence of antibody to hepatitis B antigen among hospital personnel.	No abstract and full text available
150	Burrell, 1977	Prevalence of antibody to hepatitis B surface antigen among staff in an Edinburgh hospital.	No data on HBV serological markers prevalence
151	Busen, 1997	A collaborative model for community-based health care screening of homeless adolescents.	No data on HBV serological markers prevalence
152	Butsashvili, 2012	Associated factors for recommending HBV vaccination to children among Georgian health care workers.	Duplicate study
153	Butsashvili, 2018	MEASUREMENT OF PERSONAL RISK BEHAVI-OR IN OCCUPATIONAL RISK STUDIES AMONG HEALTH CARE WORKERS.	No data on HBV serological markers prevalence
154	Cabana, 2002	Effect of state vaccine-financing strategy on hepatitis B immunization in hospital nurseries.	No data on HBV serological markers prevalence
155	Caccamo, 2019	Seroprevalence of hepatitis B virus and hepatitis C virus infections in elderly residents in nursing homes in Southern Italy.	No data on HBV serological markers prevalence
156	Callanan, 1993	Accidental skin punctures during ophthalmic surgery.	No data on HBV serological markers prevalence
157	Callender, 1982	Hepatitis B virus infection in medical and health care personnel.	Only HBV positive samples included
158	Camilleri, 1991	Needlestick injury in surgeons: what is the incidence?	No abstract and full text available
159	Camilleri, 1991	Epidemiology of sharps accidents in general surgery.	No abstract and full text available
160	Canini, 2005	Accidents with potentially hazardous biological material among workers in hospital supporting services.	No data on HBV serological markers prevalence
161	Capilouto, 1992	What is the dentist's occupational risk of becoming infected with hepatitis B or the human immunodeficiency virus?	No data on HBV serological markers prevalence
162	Cardo, 1997	Bloodborne pathogen transmission in health care workers. Risks and prevention strategies.	Review
163	Carlson, 2010	Health Care Workers as Source of Hepatitis B and C Virus Transmission.	Review
164	Caruana-Dingli, 1994	Prevention of hepatitis B infection: a survey of surgeons and interventional cardiologists.	No Laboratory-Confirmed data
165	Carvalho, 2012	Hepatitis B virus prevalence and vaccination response in health care workers and students at the Federal University of Bahia, Brazil.	Not possible to extract data on HBV serological markers prevalence
166	Catelle, 1983	Study of genetic markers of hepatitis B virus in 204 persons working in hospitals.	No abstract and full text available
167	Cekin, 2013	The level of knowledge of, attitude toward and emphasis given to HBV and HCV infections among healthcare professionals: data from a tertiary hospital in Turkey.	No data on HBV serological markers prevalence
168	Centers for Disease Control and Prevention (CDC)., 1997	Nosocomial hepatitis B virus infection associated with reusable fingerstick blood sampling devices--Ohio and New York City, 1996.	No data on HBV serological markers prevalence

169	Centers for Disease, 1987	Outbreak of hepatitis B associated with an oral surgeon--New Hampshire.	No abstract and full text available
170	Centers for Disease, 2012	Updated CDC recommendations for the management of hepatitis B virus-infected health-care providers and students.	No data on HBV serological markers prevalence
171	Chaiwarith, 2013	Occupational exposure to blood and body fluids among healthcare workers in a teaching hospital: an experience from northern Thailand.	No data on HBV serological markers prevalence
172	Chalker, 1982	Hepatitis B: A hazard for dermatologists.	No data on HBV serological markers prevalence
173	Chalya, 2015	Needle-stick injuries and splash exposures among health-care workers at a tertiary care hospital in north-western Tanzania.	No data on HBV serological markers prevalence
174	Chandrasekaran, 2000	Relative prevalence of hepatitis B viral markers and hepatitis C virus antibodies (anti HCV) in Madurai, south India.	Not possible to extract data on HBV serological markers prevalence
175	Chaudhari, 2009	Hepatitis B immunisation in health care workers.	No data on HBV serological markers prevalence
176	Chauhan, 2019	Status of adult immunity to hepatitis a virus in healthcare workers from a tertiary care hospital in north India.	No data on HBV serological markers prevalence
177	Chen, 2017	Junior doctors' knowledge about chronic hepatitis B guideline: A survey among 30 primary hospitals in sichuan province of China.	No data on HBV serological markers prevalence
178	Cheng, 2012	Factors affecting occupational exposure to needlestick and sharps injuries among dentists in Taiwan: A nationwide survey.	No data on HBV serological markers prevalence
179	Chiarakul, 2011	Response of health care workers with isolated antibody to hepatitis B core antigen to hepatitis B vaccine.	Sample with already known result
180	Chiarello, 2002	Preventing transmission of hepatitis B virus from surgeons to patients.	No data on HBV serological markers prevalence
181	Chien, 1999	Seroprevalence of viral hepatitis in an older nursing home population.	No data on HBV serological markers prevalence among HCWs
182	Chingle, 2017	Risk perception of hepatitis B infection and uptake of hepatitis B vaccine among students of tertiary institution in Jos.	No data on HBV serological markers prevalence
183	Chlabicz, 2006	Prevalence of HBsAg among residents of social assistance homes in Podlaskie Province (northeastern Poland).	No abstract and full text available
184	Chobe, 1991	Hepatitis B infection among dental personnel in Pune & Bombay (India).	No data on HBV serological markers prevalence
185	Chobe, 1991	Hepatitis B infection among dental personnel in Pune and Bombay (India).	Duplicate study
186	Chodick, 2002	Cost-utility analysis of hepatitis a prevention among health-care workers in Israel.	No data on HBV serological markers prevalence
187	Chokbunyasit, 1995	Prevalence of HBV infection in nurses and manual workers in Maharaj Nakorn Chiang Mai Hospital.	Not possible to extract data on HBV serological markers prevalence
188	Chongsuvivatwong, 1989	A simplified financial cost-effectiveness analysis of programs for prevention of hepatitis B accidental inoculation among hospital personnel in Thailand.	No data on HBV serological markers prevalence
189	Chowdhury, 2011	A comprehensive situation assessment of injection practices in primary health care hospitals in Bangladesh.	No data on HBV serological markers prevalence
190	Christensen, 1985	Acute infections with hepatitis B virus in medical personnel during a 15-year follow-up.	Only HBV positive samples included
191	Christian, 1991	Influenza and hepatitis B vaccine acceptance: a survey of health care workers.	No data on HBV serological markers prevalence

192	Çiçek-Şentürk, 2019	Retrospective investigation of 9 years of data on needlestick and sharps injuries: Effect of a hospital infection control committee.	No Laboratory-Confirmed data
193	Ciorlia, 2005	Seroprevalance of measles, rubella, mumps, varicella, diphtheria, tetanus and hepatitis b in healthcare workers.	Study not in English or French
194	Ciuffa, 2002	Blood-borne viruses and health care workers [3].	No abstract and full text available
195	Civljak, 2013	Influenza and hepatitis B vaccination coverage among healthcare workers in Croatian hospitals: a series of cross-sectional surveys, 2006-2011.	No Laboratory-Confirmed data
196	Claus, 2017	Seroepidemiology of hepatitis A and B and vaccination status in staff at German schools for the handicapped.	No data on HBV serological markers prevalence
197	Clawson, 1986	Prevalence of antibody to hepatitis B virus surface antigen in emergency medical personnel in Salt Lake City, Utah.	No data on HBV serological markers prevalence
198	Cleveland, 1994	Factors associated with hepatitis B vaccine response among dentists.	No data on HBV serological markers prevalence
199	Cleveland, 1996	Hepatitis B vaccination and infection among U.S. dentists, 1983-1992.	Not possible to extract data on HBV serological markers prevalence
200	Cleveland, 2016	Transmission of blood-borne pathogens in US dental health care settings: 2016 update.	Review
201	Coates, 1983	Hepatitis B vaccine requirements in at-risk hospital personnel: A survey of hospitals in Metropolitan Toronto.	No data on HBV serological markers prevalence
202	Coleman, 1991	Intradermal hepatitis B vaccination in a large hospital employee population.	No abstract and full text available
203	Coll, 2005	Immunization and screening for infectious disease: Health care workers in long-term care.	No abstract and full text available
204	Collins, 1994	Occupational acquisition of acute hepatitis B infection by health care workers: England and Wales, 1985-93.	No abstract and full text available
205	Comboroure, 2014	Perception of vaccination and role of the pharmacist: A survey among final year pharmacy students in France.	No data on HBV serological markers prevalence
206	Coppeta, 2019	Persistence of immunity for hepatitis B virus among heathcare workers and Italian medical students 20 years after vaccination.	No data on HBV serological markers prevalence
207	Corden, 2003	HBV DNA levels and transmission of hepatitis B by health care workers.	No data on HBV serological markers prevalence
208	Corden, 2003	HBV pre-vaccination screening in hospital personnel: Cost-effectiveness analysis.	No data on HBV serological markers prevalence
209	Corser, 1998	Occupational exposure of health care workers to bloodborne pathogens: A proposal for a systematic intervention approach.	No abstract and full text available
210	Costa, 1997	Hepatitis B Vaccination of Health Care Workers is Not Yet a Reality.	No data on HBV serological markers prevalence
211	Costigliola, 2012	Needlestick injuries in European nurses in diabetes.	No data on HBV serological markers prevalence
212	Cottone, 1985	Hepatitis B virus infection in the dental profession.	No abstract and full text available
213	Craven, 1986	Nonresponsiveness to hepatitis B vaccine in health care workers. Results of revaccination and genetic typings.	No data on HBV serological markers prevalence
214	Cuenca-Gomez, 2016	Viral hepatitis and immigration: A challenge for the healthcare system.	No data on HBV serological markers prevalence among HCWs
215	Cvejanov-Kezunovic, 2014	Occupational exposure to blood among hospital workers in Montenegro.	No data on HBV serological markers prevalence
216	Czernichow, 1985	Risk of hepatitis B virus in hospital personnel: Sero-epidemiologic survey.	No abstract and full text available

217	Czernichow, 1985	Sero-epidemiologic study of the risk of hepatitis B among hospital staff.	No abstract and full text available
218	da Costa, 2013	Is vaccination against hepatitis B a reality among primary health care workers?	No Laboratory-Confirmed data
219	Dagher, 2017	Infection Control Measures in Private Dental Clinics in Lebanon.	No Laboratory-Confirmed data
220	Daha, 2009	Hepatitis B virus infected health care workers in the Netherlands, 2000-2008.	Only HBV positive samples included
221	Danchaivijitr, 2005	Prevention and treatment of infectious diseases in healthcare workers.	No Laboratory-Confirmed data
222	Dancocks, 1994	Hepatitis B immunisation status of A&E healthcare workers.	No abstract and full text available
223	Daniel, 1996	Infection control knowledge, practice, and attitudes of Mississippi dental hygienists.	No Laboratory-Confirmed data
224	Dannetun, 2006	Coverage of hepatitis B vaccination in Swedish healthcare workers.	No Laboratory-Confirmed data
225	Davanzo, 2008	Occupational blood and body fluid exposure of university health care workers.	No data on HBV serological markers prevalence
226	Day, 2009	Utilisation of pre-chemotherapy Hepatitis B screening among Australian medical oncologists.	No data on HBV serological markers prevalence
227	de Almeida, 1991	Hepatitis B vaccination and infection control in Brazilian dental practice, 1990.	No Laboratory-Confirmed data
228	de Andrade Noshioka, 1998	Percutaneous Injuries With Sharp Instruments and the Behavior of Anesthesiologists and Obstetricians in Regard to the Associated Risk of Occupational Infectious Diseases: A Survey in a Town in Brazil.	No data on HBV serological markers prevalence
229	De Baets, 2007	Access to occupational postexposure prophylaxis for primary health care workers in rural Africa: A cross-sectional study.	No data on HBV serological markers prevalence
230	de la Hoz, 2005	Vaccine coverage with hepatitis B and other vaccines in the Colombian Amazon: do health worker knowledge and perception influence coverage?	No data on HBV serological markers prevalence
231	De Laune, 1990	Risk reduction through testing, screening and infection control precautions--with special emphasis on needlestick injuries.	Review
232	de Melo, 2000	Survey of the knowledge and practice of infection control among dental practitioners.	No data on HBV serological markers prevalence
233	De Oliveira Souza, 2015	Vaccination against hepatitis be anti-HBs between health workers of achievement.	No Laboratory-Confirmed data
234	De Schrijver, 2005	An outbreak of nosocomial hepatitis B virus infection in a nursing home for the elderly in Antwerp (Belgium).	Not possible to extract data on HBV serological markers prevalence
235	De Schryver, 2011	European survey of hepatitis B vaccination policies for healthcare workers.	No Laboratory-Confirmed data
236	De Schryver, 2014	Hepatitis B vaccination policies for student healthcare workers in Europe.	No Laboratory-Confirmed data
237	De Schryver, 2020	European survey of hepatitis B vaccination policies for healthcare workers: An updated overview.	No Laboratory-Confirmed data
238	Debes, 2018	Spectrum of hepatitis B awareness among healthcare workers across Africa.	No Laboratory-Confirmed data
239	Delaporte, 1995	Viral hepatitis in the National Health Service in 1993.	No abstract and full text available
240	Dement, 2004	Blood and body fluid exposure risks among health care workers: Results from the Duke health and safety surveillance system.	No data on HBV serological markers prevalence
241	Denes, 1978	Hepatitis B infection in physicians. Results of a nationwide seroepidemiologic survey.	Not possible to extract data on HBV serological markers prevalence

242	Denić, 2012	Knowledge and occupational exposure to blood and body fluids among health care workers and medical students.	No data on HBV serological markers prevalence
243	deVries, 1994	Needlestick injury in medical students.	No data on HBV serological markers prevalence
244	Devroey, 1997	Clinical acute viral hepatitis encountered by Belgian general practitioners.	No data on HBV serological markers prevalence
245	Di Giuseppe, 2007	A survey of knowledge, attitudes, and behavior of Italian dentists toward immunization.	No data on HBV serological markers prevalence
246	DiAngelis, 1989	Infection control practices of Minnesota dentists: changes during 1 year.	No data on HBV serological markers prevalence
247	Dikmen, 2017	Evaluation of laboratory safety of the laboratory staff.	No abstract and full text available
248	Dini, 2017	Persistence of protective anti-HBs antibody levels and anamnestic response to HBV booster vaccination: A cross-sectional study among healthcare students 20 years following the universal immunization campaign in Italy.	No data on HBV serological markers prevalence
249	Djeriri, 1996	Seroprevalence of viral hepatitis A, B and C in health care personnel in the Clermont-Ferrand University Hospital.	No abstract and full text available
250	Doebbeling, 1996	Predictors of hepatitis B vaccine acceptance in health care workers.	No data on HBV serological markers prevalence
251	Drinnan, 1987	Hepatitis and western New York dentists.	No abstract and full text available
252	Du Plessis, 1999	Bloodborne viruses in forensic medical practice in South Africa.	No data on HBV serological markers prevalence
253	Dumpis, 2003	An outbreak of HBV and HCV infection in a paediatric oncology ward: epidemiological investigations and prevention of further spread.	Sample with already known result
254	Duong, 2011	Vaccination coverage of healthcare professionals in an infectious diseases department.	No data on HBV serological markers prevalence
255	Durlach, 2003	Ten-Year Persistence of Antibody to Hepatitis B Surface Antigen in Healthcare Workers Vaccinated Against Hepatitis B Virus, and Response to Booster Vaccination.	No data on HBV serological markers prevalence among HCWs
256	Ebrahimi, 2007	Needlestick Injuries among Nurses.	No data on HBV serological markers prevalence
257	Echavez, 1987	Hepatitis B vaccine usage among dental practitioners in the United States: an epidemiological survey.	Not possible to extract data on HBV serological markers prevalence
258	Ehui, 2007	Management of accidental exposure to blood in the Treichville teaching hospital, Abidjan (Côte-d'Ivoire).	Sample size < or = 10 participants
259	El-Awady, 1998	Hepatitis B vaccination rates among medical personnel at Ain Shams University Hospital and obstacles to vaccine uptake.	No data on HBV serological markers prevalence
260	el-Dalil, 1995	A survey on hepatitis B vaccination policies in genitourinary medicine in UK and Ireland.	No data on HBV serological markers prevalence
261	Elder, 2006	Sharps injuries in UK health care: A review of injury rates, viral transmission and potential efficacy of safety devices.	Review
262	Elegbe, 1986	Viral hepatitis: an occupational health hazard to hospital and laboratory workers in Nigeria.	No data on HBV serological markers prevalence among HCWs
263	Elmaghloub, 2017	Occult hepatitis B infection in Egyptian health care workers.	Duplicate study
264	Elmukashfi, 2012	Hepatitis B virus infection among health care workers in Public Teaching Hospitals in Khartoum State, Sudan.	Duplicate study
265	El-Shafie, 1995	The relationship between the knowledge of nursing staff and their compliance to universal precautions for prevention of hepatitis B viral infection.	No abstract and full text available

266	Enfield, 2013	Transmission of hepatitis B virus from an orthopedic surgeon with a high viral load.	No data on HBV serological markers prevalence
267	Epstein, 1989	Infection control. Survey of dental health care workers.	No abstract and full text available
268	Escudero, 2015	Healthcare worker adherence to follow-up after occupational exposure to blood and body fluids at a teaching hospital in Brazil.	No data on HBV serological markers prevalence among HCWs
269	Estevez, 2016	Low rates of screening and treatment of chronic hepatitis B, C, D (HBV, HCV, HDV), and hepatocellular carcinoma (HCC), associated barriers, and proposed solutions: Results of a survey of physicians from all major provinces of Mongolia.	No data on HBV serological markers prevalence
270	Estrella, 2017	Perception of barriers and facilitators to hepatitis B virus screening, vaccination, and treatment care among Asian American physicians.	No data on HBV serological markers prevalence
271	Evans, 2001	Exposure of healthcare workers in England, Wales, and Northern Ireland to bloodborne viruses between July 1997 and June 2000: analysis of surveillance data.	No data on HBV serological markers prevalence
272	Eyal Malka, 2012	Exposure to blood borne infections in health care workers.	No data on HBV serological markers prevalence among HCWs
273	Falagas, 2007	Percutaneous exposure incidents of the health care personnel in a newly founded tertiary hospital: a prospective study.	No data on HBV serological markers prevalence among HCWs
274	Faoagali, 1977	HBsAg and anti-HBs in staff and patients of a psychopaedic hospital.	No abstract and full text available
275	Faoagali, 1978	Distribution of anti HBs in christchurch hospital staff.	No abstract and full text available
276	Faoagali, 1986	Hepatitis B markers in Canterbury dental workers: a seroepidemiological survey.	No abstract and full text available
277	Fasunloro, 2004	Occupational hazards among clinical dental staff.	No data on HBV serological markers prevalence
278	Faure, 2013	Vaccinal status of healthcare students in Lille.	No data on HBV serological markers prevalence
279	Fauvert, 1974	Viral hepatitis amongst hospital staff.	No abstract and full text available
280	Feleke, 2016	Low coverage of hepatitis B vaccine and determinants among health professionals working in Amhara regional state hospitals, Ethiopia.	No data on HBV serological markers prevalence
281	Felix, 1994	Recent non-sterile inoculation injuries to dental professionals in the Lothian region of Scotland.	No data on HBV serological markers prevalence
282	Ferguson, 1989	Hepatitis B virus marker prevalence in dental students.	No abstract and full text available
283	Fernandes, 2013	Need for a comprehensive, consistently applied national hepatitis B vaccination policy for healthcare workers in higher educational institutions: A case study from South Africa.	No data on HBV serological markers prevalence
284	Ferraz, 1998	Epidemiology of acute hepatitis B in a university hospital in São Paulo, Brazil: retrospective study of two five-year periods.	No data on HBV serological markers prevalence among HCWs
285	Ferreira, 2012	Hepatitis B vaccination and associated factors among dentists.	No data on HBV serological markers prevalence
286	Fisman, 2002	Willingness to pay to avoid sharps-related injuries: A study in injured health care workers.	No data on HBV serological markers prevalence
287	Foda, 2018	Hepatitis in nursing homes. Incidence and management strategies.	No Laboratory-Confirmed data
288	Foda, 2018	Safe injection procedures, injection practices, and needlestick injuries among health care workers in operating rooms.	No data on HBV serological markers prevalence

289	Follett, 1987	Experience with hepatitis B vaccination in nurses in a hospital for the mentally handicapped.	Sample with already known result
290	Fortier-Launois, 1997	Accidental professional exposure to blood in a parisian hospital between 1993 and 1994.	No abstract and full text available
291	Fortunato, 2015	Low vaccination coverage among italian healthcare workers in 2013.	Not possible to extract data on HBV serological markers prevalence
292	François, 2011	Hepatitis B virus vaccination by French family physicians.	No Laboratory-Confirmed data
293	François, 2013	Needleestick injuries among professionals in a safe injecting facility.	Not possible to extract data on HBV serological markers prevalence
294	Frijstein, 2011	Needlestick injuries and infectious patients in a major academic medical centre from 2003 to 2010.	Not possible to extract data on HBV serological markers prevalence
295	Froehlich, 2001	Compliance with hepatitis B virus vaccination in a high-risk population.	No data on HBV serological markers prevalence
296	Froesner, 1975	Prevalence of antibody to hepatitis B surface antigen in various populations.	Duplicate study
297	Fry, 2000	Hepatitis: Risks for the surgeon.	Not possible to extract data on HBV serological markers prevalence
298	Fry, 2005	Occupational blood-borne diseases in surgery.	Review
299	Fry, 2007	Occupational risks of blood exposure in the operating room.	Review
300	Fyman, 1984	Prevalence of hepatitis B markers in the anesthesia staff of a large inner-city hospital.	Not possible to extract data on HBV serological markers prevalence
301	Gagneux-Brunon, 2018	Vaccines for healthcare-associated infections: present, future, and expectations.	Review
302	Galougahi, 2010	Evaluation of needle stick injuries among nurses of Khanevadeh Hospital in Tehran.	No data on HBV serological markers prevalence
303	Gańczak, 2012	The comparison of sharps injuries reported by doctors versus nurses from surgical wards in the context of the prevalence of HBV, HCV and HIV infections.	No data on HBV serological markers prevalence
304	Ganczak, 2019	Seroprevalence of anti-HBc, risk factors of occupationally acquired HBV infection and HBV vaccination among hospital staff in Poland: a multicenter study.	No data on HBV serological markers prevalence
305	Gao, 2017	A large-scale survey on sharp injuries among hospital-based healthcare workers in China.	No data on HBV serological markers prevalence
306	Gara, 2015	Durability of antibody response against hepatitis B virus in healthcare workers vaccinated as adults.	Not possible to extract data on HBV serological markers prevalence
307	Garbin, 2019	Vaccination coverage and immunity against hepatitis B in public health dentists.	Not possible to extract data on HBV serological markers prevalence
308	García-Bengoechea, 2012	Pre-Immunosuppressant Hepatitis B Virus screening practices among various medical specialities (HEBRA Project): Results of a survey from 19 spanish hospitals.	No data on HBV serological markers prevalence
309	Gatto, 2013	Occupational exposure to blood and body fluids in a department of oral sciences: Results of a thirteen-year surveillance study.	No data on HBV serological markers prevalence
310	Gebremariam, 2019	Low vaccination coverage and high prevalence of hepatitis b infection in health care workers at university of Gondar hospital, Northwest Ethiopia.	No abstract and full text available
311	Gerber, 1977	The lack of nurse-infant transmission of type B hepatitis in a special care nursery.	No data on HBV serological markers prevalence

312	Gerberding, 1987	Risk of transmitting the human immunodeficiency virus, cytomegalovirus, and hepatitis B virus to health care workers exposed to patients with AIDS and AIDS-related conditions.	Not possible to extract data on HBV serological markers prevalence
313	Gerlich, 1997	Commentary: hepatitis B and C transmission. Are doctors the culprits?	Comment on an article
314	Gershon, 1995	Occupational risk of human immunodeficiency virus, hepatitis B virus, and hepatitis C virus infections among funeral service practitioners in Maryland.	No data on HBV serological markers prevalence
315	Gershon, 2002	Bloodborne pathogen exposure risk for non-hospital based healthcare workers.	No abstract and full text available
316	Gershon, 2005	Hepatitis B vaccination in correctional health care workers.	No data on HBV serological markers prevalence
317	Gessouli-Voltiraki, 2007	HBV immunization status of health care personnel: A study in two Greek regional hospitals.	No Laboratory-Confirmed data
318	Geubel, 1985	Viral hepatitis in the health care personnel.	No abstract and full text available
319	Ghasemzadeh, 2015	Sharp Injuries Among Medical Students.	No data on HBV serological markers prevalence
320	Ghomraoui, 2016	Medical students' awareness of and compliance with the hepatitis B vaccine in a tertiary care academic hospital: An epidemiological study.	No Laboratory-Confirmed data
321	Gibbs, 1994	A survey of practices in infectious diseases by obstetrician-gynecologists.	No data on HBV serological markers prevalence
322	Gilbert, 2002	Comparison of commercial assays for the quantification of HBV DNA load in health care workers: Calibration differences.	No data on HBV serological markers prevalence
323	Gillcrist, 1999	Hepatitis viruses A, B, C, D, E and G: implications for dental personnel.	Not possible to extract data on HBV serological markers prevalence
324	Glenwright, 1974	Serum hepatitis in dental surgeons.	No abstract and full text available
325	Goebel, 1979	Hepatitis B virus infection in dental students. A two-year evaluation.	No abstract and full text available
326	Goetz, 1990	Hepatitis B and hepatitis B vaccine requirements in schools of nursing in the United States: a national survey.	No Laboratory-Confirmed data
327	Goetz, 1992	Microbiology, infection control, immunizations, and infectious disease exposure: education and practices in United States nursing schools.	No data on HBV serological markers prevalence
328	Gold, 1979	Hepatitis in the Haemodialysis Unit, Baragwanath Hospital, 1973-1977. A cross-sectional and longitudinal survey.	No data on HBV serological markers prevalence
329	Goniewicz, 2012	Injuries caused by sharp instruments among healthcare workers--international and Polish perspectives.	No data on HBV serological markers prevalence
330	Gorar, 2014	Risk factors for bloodborne viral hepatitis in healthcare workers of Pakistan: A population based case-control study.	Only HBV positive samples included
331	Götz, 2008	A cluster of hepatitis B infections associated with incorrect use of a capillary blood sampling device in a nursing home in the Netherlands, 2007.	No abstract and full text available
332	Greene, 1996	Percutaneous injuries in anesthesia personnel.	No data on HBV serological markers prevalence
333	Green-McKenzie, 2001	Infection control practices among correctional healthcare workers: effect of management attitudes and availabiity of protective equipment and engineering controls.	No data on HBV serological markers prevalence
334	Grist, 1981	Hepatitis infection in clinical laboratory staff.	No abstract and full text available
335	Grob, 1981	Cluster of hepatitis B transmitted by a physician.	Sample with already known result

336	Grosso, 2012	Long-term persistence of seroprotection by hepatitis B vaccination in healthcare workers of southern Italy.	No data on HBV serological markers prevalence
337	Guet, 2011	Investigation of a severe nosocomial outbreak of hepatitis A among healthcare workers and adult patients.	No data on HBV serological markers prevalence
338	Gugelmann, 1998	Hepatitis B vaccination: knowledge and acceptance by Swiss physicians.	Study not in English or French
339	Guimet, 2001	Percutaneous injuries in a high-volume podiatric surgical residency program.	No data on HBV serological markers prevalence
340	Gunson, 2003	Hepatitis B virus (HBV) and hepatitis C virus (HCV) infections in health care workers (HCWs): Guidelines for prevention of transmission of HBV and HCV from HCW to patients.	No data on HBV serological markers prevalence
341	Guo, 1999	Needlestick and sharps injuries among health-care workers in Taiwan.	No data on HBV serological markers prevalence
342	Gupta, 2016	Blood-borne viruses and health care workers: A neglected entity!	No data on HBV serological markers prevalence
343	Gupta, 2017	Infection control knowledge and practice: A cross-sectional survey on dental laboratories in dental institutes of North India.	No data on HBV serological markers prevalence
344	Guthmann, 2012	Vaccination coverage of health care personnel working in health care facilities in France: results of a national survey, 2009.	No Laboratory-Confirmed data
345	Güven, 2006	Hepatitis B prevalence among workers in Turkey at low risk for hepatitis B exposure.	No data on HBV serological markers prevalence among HCWs
346	Gyawali, 1996	Mcnee bequest. Awareness of and protection against hepatitis B virus infection among healthcare workers in Nepal, 1997. Report on a period of elective study.	No abstract and full text available
347	H Muljono, 2018	Hepatitis B Virus Infection among Health Care Workers in Indonesia.	Review
348	Hadler, 1981	An outbreak of hepatitis B in a dental practice.	Review
349	Hadziyannis, 1983	Hepatitis B vaccination strategy for health-care workers in a country of intermediate hepatitis B endemicity.	Not possible to extract data on HBV serological markers prevalence
350	Halpern, 2006	Inadequate hepatitis B vaccination and post-exposure evaluation among transplant surgeons: Prevalence, correlates, and implications.	Not possible to extract data on HBV serological markers prevalence
351	Hamid, 1997	Hepatitis B immunization of hospital employees in an endemic area: should we screen?	Not possible to extract data on HBV serological markers prevalence
352	Hamid, 2007	Hepatitis and the healthcare worker - a pakistani perspective.	No abstract and full text available
353	Hamilton, 2010	Epidemiology of hepatitis B among professional male athletes in Qatar.	No data on HBV serological markers prevalence
354	Hanafi, 2011	Needlestick injuries among health care workers of University of Alexandria hospitals.	No data on HBV serological markers prevalence
355	Hankins, 1987	Hepatitis B vaccine and hepatitis B markers: cost effectiveness of screening prehospital personnel.	No data on HBV serological markers prevalence
356	Hanslik, 2000	A survey of physicians' vaccine risk perception and immunization practices for subjects with immunological diseases.	No data on HBV serological markers prevalence
357	Haridi, 2016	Compliance with infection control standard precautions guidelines: a survey among dental healthcare workers in Hail Region, Saudi Arabia.	No data on HBV serological markers prevalence
358	Hasak, 2018	Prevalence of Needlestick Injuries, Attitude Changes, and Prevention Practices Over 12 Years in an Urban Academic Hospital Surgery Department.	No data on HBV serological markers prevalence
359	Hassan, 2008	Hepatitis needs assessment among Jordanian healthcare workers.	No data on HBV serological markers prevalence

360	Havlichek, 1997	Age-related hepatitis B seroconversion rates in health care workers.	No data on HBV serological markers prevalence
361	Hayashi, 1987	Hepatitis B virus transmission in nursery schools.	No data on HBV serological markers prevalence
362	Helcl, 2000	Control of occupational hepatitis B among healthcare workers in the Czech Republic, 1982 to 1995.	No data on HBV serological markers prevalence
363	Herruzo-Cabrera, 1993	Predictive equation for acquisition of hepatitis B in hospital workers in a general hospital.	No Laboratory-Confirmed data
364	Hersey, 1994	Use of infection control guidelines by workers in healthcare facilities to prevent occupational transmission of HBV and HIV: results from a national survey.	No data on HBV serological markers prevalence
365	Herzig, 2017	Infection Trends in US Nursing Homes, 2006-2013.	No data on HBV serological markers prevalence
366	Hesham, 2005	Hepatitis B immunisation status among health care workers in two Kuala Lumpur hospitals.	No data on HBV serological markers prevalence
367	Hicks, 1989	Work-related risk factors for hepatitis B virus infection in personnel of a children's hospital.	No abstract and full text available
368	Hindy, 1995	Hepatitis B and C viruses among Egyptian dentists.	No abstract and full text available
369	Hizel, 2013	Evaluation of the hepatitis B vaccination and risky contacts of health care workers in a university hospital.	No abstract and full text available
370	Hlady, 1993	Patient-to-patient transmission of hepatitis B in a dermatology practice.	No data on HBV serological markers prevalence
371	Hochreiter, 1988	Epidemiology of needlestick injury in emergency medical service personnel.	No data on HBV serological markers prevalence
372	Hoey, 1998	When the physician is the vector.	No data on HBV serological markers prevalence
373	Hofherr, 1993	Physician experience with human immunodeficiency virus type 1 or hepatitis B virus testing in San Diego County: Methods for a census survey.	No abstract and full text available
374	Holland, 1992	Uptake of hepatitis B vaccination amongst West Midlands radiologists.	No data on HBV serological markers prevalence
375	Hosoglu, 2011	Healthcare workers' compliance with universal precautions in Turkey.	No Laboratory-Confirmed data
376	Howard, 1989	A survey of cross infection control in general dental practice in England.	No abstract and full text available
377	Hsieh, 2006	Occupational blood and infectious body fluid exposures in a teaching hospital: a three-year review.	Review
378	Huang , 2017	Sharp instrument injuries among hospital healthcare workers in mainland China: A cross-sectional study.	No Laboratory-Confirmed data
379	Hulme, 2009	Incidence of needlestick injuries among Ugandan student nurses in a rural hospital.	No abstract and full text available
380	Hurlen, 1979	Viral hepatitis in oral surgery and periodontics in Norway.	No Laboratory-Confirmed data
381	Hurlen, 1979	Frequency of hepatitis in dental health personnel in Norway.	No Laboratory-Confirmed data
382	Ibekwe, 2006	Hepatitis B vaccination status among health workers in Enugu, Nigeria.	No data on HBV serological markers prevalence
383	Iliyasu, 2016	Knowledge and practices of infection control among healthcare workers in a Tertiary Referral Center in North-Western Nigeria.	No data on HBV serological markers prevalence
384	Ip, 2015	Seroprevalences of hepatitis B virus and hepatitis c virus among participants of an Asian health fair in the lower Mainland, British Columbia.	No data on HBV serological markers prevalence
385	Ippolito, 1999	Surveillance of occupational exposure to bloodborne pathogens in health care workers: the Italian national programme.	No data on HBV serological markers prevalence among HCWs
386	Iqbal, 2013	Needle Stick injuries among doctors working in a tertiary care hospital of Karachi.	No Laboratory-Confirmed data

387	Isara, 2012	Prevalence of occupational accidents/injuries among health care workers in a federal medical centre in Southern Nigeria.	No Laboratory-Confirmed data
388	Islahi, 2018	Prevalence of needle-stick injuries among health-care workers in a tertiary care centre in North India.	No data on HBV serological markers prevalence
389	Israsena, 1992	Factors influencing acceptance of hepatitis B vaccination by hospital personnel in an area hyperendemic for hepatitis B.	No data on HBV serological markers prevalence
390	Jackson, 1978	Hepatitis B antigen and antibody. Prevalence among New York dentists.	No abstract and full text available
391	Jackson, 2004	Hepatitis B and hepatitis C: Occupational considerations for the anesthesiologist.	Review
392	Jacob, 2010	Sharps injuries among health care workers in the United Arab Emirates.	No data on HBV serological markers prevalence
393	Jacobson, 1983	Injuries of hospital employees from needles and sharp objects.	No data on HBV serological markers prevalence
394	Jacobson, 1989	Acceptance of hepatitis B vaccine among dental health care workers.	No data on HBV serological markers prevalence
395	Jahic, 2018	Epidemiological Characteristics of the Accidental Exposures to Blood-Borne Pathogens Among Workers in the Hospital.	No Laboratory-Confirmed data
396	Jain, 2016	Practices of health care personnel regarding occupational exposure.	No Laboratory-Confirmed data
397	James, 1985	A survey of hepatitis B vaccination programs for hospital employees.	No data on HBV serological markers prevalence
398	Javadi, 2007	Evaluation of needle-stick injuries among health care workers in Isfahan province, Islamic Republic of Iran [4].	No abstract and full text available
399	Jeffersonb, 2000	Vaccines for preventing hepatitis B in health-care workers.	Review
400	Jeffries, 1995	Viral hazards to and from health care workers.	No data on HBV serological markers prevalence
401	Joardar, 2008	Needle sticks injury among nurses involved in patient care: a study in two medical college hospitals of West Bengal.	Not possible to extract data on HBV serological markers prevalence
402	Johnston, 2003	Nosocomial transmission of bloodborne viruses from infected health care workers to patients.	No data on HBV serological markers prevalence
403	Johnston, 2005	Needlestick injuries, management and education: a role for emergency medicine?	No data on HBV serological markers prevalence
404	Joseph, 2014	Needlestick injuries among healthcare workers of a tertiary care hospital in South India.	No data on HBV serological markers prevalence
405	Joshi, 1986	Hepatitis B virus state among donors & hospital staff--a serological survey using different techniques.	No abstract and full text available
406	Joshi, 2013	A study of immune status to HBV infection in health care workers in a tertiary health care centre.	Not possible to extract data on HBV serological markers prevalence
407	Joshi, 2014	Hepatitis B vaccination status among healthcare workers in a tertiary care hospital in Haldwani City of Nainital, Uttarakhand, India.	No abstract and full text available
408	Joshi, 2018	Management of accidental exposure to HBVand HCV in health care workers: An experience at tertiary care hospital.	No abstract and full text available
409	Joshi, 2018	Incidence of accidental exposures to HBV and HCV in health care workers.	No abstract and full text available
410	Jovanovich, 1983	The risk of hepatitis B among select employee groups in an urban hospital.	No data on HBV serological markers prevalence
411	Juon, 2016	Lay Health Worker Intervention Improved Compliance with Hepatitis B Vaccination in Asian Americans: Randomized Controlled Trial.	No data on HBV serological markers prevalence

412	Kalemaki, 2020	Vaccination coverage of general practitioners: a cross-sectional study from Greece.	No Laboratory-Confirmed data
413	Kalish, 1987	Prevalence of antibody to hepatitis B virus in foreign-born hospital employees.	Not possible to extract data on HBV serological markers prevalence
414	Kaltsas, 2013	Vaccinations for healthcare personnel: Update on influenza, hepatitis B, and pertussis.	Review
415	Kao, 2016	Prevalence of chronic diseases among physicians in Taiwan: a population-based cross-sectional study.	No data on HBV serological markers prevalence
416	Karadağ, 2010	Occupational exposure to blood and body fluids among a group of Turkish nursing and midwifery students during clinical practise training: frequency of needlestick and sharps injuries.	No data on HBV serological markers prevalence
417	Karageorgou, 2014	Vaccination coverage and susceptibility against vaccine-preventable diseases of healthcare students in Athens, Greece.	No Laboratory-Confirmed data
418	Karimi, 2010	Evaluation of vaccine induced immunity to hepatitis b virus among health care workers in a university hospital in Iran.	No data on HBV serological markers prevalence
419	Karvelas, 2015	HBV knowledge, attitudes and vaccination coverage of healthcare workers in university general hospital.	No abstract and full text available
420	Kasatpibal, 2013	Prevalence and factors affecting needlesticks and sharp injuries among operating room nursing personnel in Thailand.	No data on HBV serological markers prevalence
421	Kaspar, 1991	Percutaneous injury during dermatologic surgery.	No Laboratory-Confirmed data
422	Kassa, 2016	Occupational exposure to bloodborne pathogens among health care workers in Botswana: Reporting and utilization of postexposure prophylaxis.	No Laboratory-Confirmed data
423	Kato-Maeda, 2000	Bloodborne viral infections in patients attending an emergency room in Mexico City: estimate of seroconversion probability in healthcare workers after an occupational exposure.	No data on HBV serological markers prevalence among HCWs
424	Keel, 2016	Assessing the impact of a nurse-delivered home dried blood spot service on uptake of testing for household contacts of hepatitis B-infected pregnant women across two London trusts.	No data on HBV serological markers prevalence
425	Kennedy, 1998	The use of a quality-improvement approach to reduce needlestick injuries in a Saudi Arabian hospital.	No abstract and full text available
426	Kerala, 2011	Prevalence and trends of Hepatitis Bvirus immunity among vaccinated healthcare workers in a tertiary care center.	No abstract and full text available
427	Kermode, 2005	Occupational exposure to blood and risk of bloodborne virus infection among health care workers in rural north Indian health care settings.	No data on HBV serological markers prevalence
428	Kesli, 2017	Detection of seropositivity rates of blood-borne viruses among dentists in province of afyonkarahisar.	No abstract and full text available
429	Kevitt, 2015	Sharps injuries in a teaching hospital: changes over a decade.	Review
430	Kevorkyan, 2012	A survey of occupational risk exposures and behaviour of healthcare workers.	No data on HBV serological markers prevalence
431	Khalil, 2015	Willingness of Saudi dental professionals to treat Hepatitis B virus-infected patients.	No Laboratory-Confirmed data
432	Khalili, 2011	Hepatitis B and hepatocellular carcinoma screening among Asian Americans: Survey of safety net healthcare providers.	No data on HBV serological markers prevalence
433	Khan, 2000	A high anti-HBs response in Turkish students of nursing with inexpensive, multidose vial hepatitis B vaccine [14].	Comment on an article

434	Khokhar, 2009	Oncologists and hepatitis B: A survey to determine current level of awareness and practice of antiviral prophylaxis to prevent reactivation.	No data on HBV serological markers prevalence
435	Khuri-Bulos, 1997	Epidemiology of needlestick and sharp injuries at a university hospital in a developing country: a 3-year prospective study at the Jordan University Hospital, 1993 through 1995.	Sample size < or = 10 participants
436	Kiel, 1986	Influence of country of origin on prevalence of hepatitis B markers among employees in a small suburban hospital.	Review
437	Killian, 2016	Vaccine hesitancy among general practitioners: evaluation and comparison of their immunisation practice for themselves, their patients and their children.	No data on HBV serological markers prevalence
438	Kindrick, 2002	Occupational exposure to blood-borne pathogens: Emerging issues from the National HIV/AIDS Clinicians' Consultation Center.	No data on HBV serological markers prevalence
439	kinlin, 2010	Use of gloves and reduction of risk of injury caused by needles or sharp medical devices in healthcare workers: Results from a case-crossover study.	Not possible to extract data on HBV serological markers prevalence
440	Kirkman-Liff, 1984	Cost of hepatitis B prevention in hospital employees: post-exposure prophylaxis.	Not possible to extract data on HBV serological markers prevalence
441	Kirkman-Liff, 1984	The risk and cost of hepatitis B exposures in hospital housekeeping personnel.	No abstract and full text available
442	Kisic-Tepavc evic, 2017	Predictors of hepatitis B vaccination status in healthcare workers in Belgrade, Serbia, December 2015.	No data on HBV serological markers prevalence
443	Kjaergard, 1992	Accidental injuries and blood exposure to cardiothoracic surgical teams.	No data on HBV serological markers prevalence
444	Ko, 2017	Knowledge, Current Status, and Barriers toward Healthcare Worker Vaccination among Family Medicine Resident Participants in a Web-Based Survey in Korea.	No data on HBV serological markers prevalence
445	Kocks, 1997	Hepatitis B immunisation for adults and health care workers in South Africa.	No abstract and full text available
446	Kocur, 2016	Analysis of occupational exposures to blood registered in the General Hospital in Zabrze in the years 2006-2015.	No data on HBV serological markers prevalence
447	Konlan, 2017	TOPIC: "The level of nurses' knowledge on occupational post exposure to hepatitis B infection in the Tamale metropolis, Ghana"	No abstract and full text available
448	Kotzee, 2006	HIV and hepatitis B coinfection in Southern Africa: A review for general practitioners.	Review
449	Krishnan, 2019	108. HEPATITIS B VACCINATION IN DUKE UNIVERSITY AND DUKE REGIONAL HOSPITAL NEWBORN NURSERIES.	No data on HBV serological markers prevalence
450	Kumar, 2015	A Cross-sectional Study on Hepatitis B Vaccination Status and Post-exposure Prophylaxis Practices Among Health Care Workers in Teaching Hospitals of Mangalore.	No data on HBV serological markers prevalence
451	Kuo, 1999	Decreasing occupational risk related to blood-borne viruses in cardiovascular surgery in Paris, France.	No data on HBV serological markers prevalence
452	Kuupiel, 2019	Accessibility of pregnancy-related point-of-care diagnostic tests for maternal healthcare in rural primary healthcare facilities in Northern Ghana: A cross-sectional survey.	No data on HBV serological markers prevalence
453	Kwapien, 1987	Hepatitis B program for health care personnel. Education, serologic surveillance, immunization.	No data on HBV serological markers prevalence
454	lane, 1997	A survey of policies at children's hospitals regarding immunity of healthcare workers: are physicians protected?	No data on HBV serological markers prevalence

455	Lange, 1995	Prevalence of hepatitis B, hepatitis C, and human immunodeficiency virus markers among hospital employment applicants.	No data on HBV serological markers prevalence
456	Lanphear, 1994	Trends and patterns in the transmission of bloodborne pathogens to health care workers.	Review
457	Lanphear, 1997	Transmission and control of bloodborne viral hepatitis in health care workers.	Review
458	Laraqui, 2008	Assessing knowledge, attitude, and practice on occupational blood exposure in caregiving facilities, in Morocco.	No data on HBV serological markers prevalence
459	Larke, 1983	Hepatitis B and the dental profession: response to hepatitis B vaccine in Canadian dental personnel. A study by the Canadian Red Cross Collaborative Group.	No data on HBV serological markers prevalence
460	Larouze, 1987	Infection with hepatitis A and B viruses in French volunteers working in tropical Africa.	Not possible to extract data on HBV serological markers prevalence
461	Larroque, 1990	Hepatitis B at the Dakar Dental School.	No abstract and full text available
462	Lazenby, 2011	Blood-borne viruses: Are we taking them seriously? A survey of UK oral and maxillofacial surgeons.	No data on HBV serological markers prevalence
463	L'Ecuyer, 1998	Tuberculosis, hepatitis B, rubella, rubeola, and varicella infection and immunity among medical school employees.	No abstract and full text available
464	Lee, 1997	Epidemiology of hepatitis B vaccine acceptance among urban paramedics and emergency medical technicians.	No data on HBV serological markers prevalence
465	Lee, 2005	Needlestick injuries in the United States. Epidemiologic, economic, and quality of life issues.	No data on HBV serological markers prevalence
466	Lee, 2011	HBV screening and prevention: Evaluating barriers for primary care physicians.	No abstract and full text available
467	Lee, 2017	Occupational blood exposures in health care workers: incidence, characteristics, and transmission of bloodborne pathogens in South Korea.	No data on HBV serological markers prevalence among HCWs
468	Leers, 1995	Prevalence of hepatitis B antibodies in hospital personnel.	Not possible to extract data on HBV serological markers prevalence
469	Leliopoulor, 1999	Nurses failure to appreciate the risks of infection due to needle stick accidents: A hospital based survey.	No data on HBV serological markers prevalence
470	Lettau, 1992	Human immunodeficiency virus testing experience and hepatitis B vaccination and testing status of healthcare workers in South Carolina: implications for compliance with US Public Health Service guidelines.	No data on HBV serological markers prevalence
471	Leung, 2014	Are they protected? Immunity to vaccine-preventable diseases in healthcare workers at an Australian hospital.	No data on HBV serological markers prevalence
472	Levi, 2013	Awareness of hepatitis B and C screening and patient management guidelines among health professionals in six European countries.	No data on HBV serological markers prevalence
473	Levin, 1974	Hepatitis B transmission by dentists.	No abstract and full text available
474	Levitz, 1995	Immunization with high-dose intradermal recombinant hepatitis B vaccine in healthcare workers who failed to respond to intramuscular vaccination.	No abstract and full text available
475	Libby, 2014	Student vaccination requirements of U.S. health professional schools: a national survey.	No data on HBV serological markers prevalence
476	Lin, 1986	Sero-epidemiological study on hepatitis A and B virus infection among dentists in the Philippines.	No abstract and full text available
477	Lin, 2007	Low seroprevalence of hepatitis B surface antibody among nursing students in Taiwan: an implication for boosting.	No abstract and full text available

478	Lin, 2011	Waning immunity and booster responses in nursing and medical technology students who had received plasma-derived or recombinant hepatitis B vaccine during infancy.	Not possible to extract data on HBV serological markers prevalence
479	Lin, 2011	Status of HBV infection and vaccination among health care workers in a public teaching hospital.	No abstract and full text available
480	Lin, 2019	A survey of sharps injuries and occupational infections among healthcare workers in Shanghai.	No Laboratory-Confirmed data
481	Lindley, 2011	Student vaccination requirements of U.S. health professional schools: a survey.	No Laboratory-Confirmed data
482	Ling, 2000	Sharps and needlestick injuries: the impact of hepatitis B vaccination as an intervention measure.	No data on HBV serological markers prevalence
483	Little, 1988	Cost-effective pre-vaccine screening of hepatitis B infection in hospital workers: a seroepidemiological study.	No data on HBV serological markers prevalence
484	Liu, 2013	Occupational blood exposure and compliance to universal precautions: A cross-sectional survey among healthcare workers in Beijing, China.	No data on HBV serological markers prevalence
485	Livengood, 1989	Hepatitis B and workers in institutions for the mentally retarded: Risk of infection for staff in patient care.	No data on HBV serological markers prevalence
486	Llewellyn, 1994	Hepatitis B vaccination: how many doctors are fully covered?	Not possible to extract data on HBV serological markers prevalence
487	LoGrippo, 1973	Incidence of hepatitis and Australia antigenemia among laboratory workers.	No abstract and full text available
488	Lohiya, 1984	Occupational exposure to hepatitis B virus. Analysis of indications for hepatitis B vaccine.	No abstract and full text available
489	Loulergue, 2009	Knowledge, attitudes and vaccination coverage of healthcare workers regarding occupational vaccinations.	No Laboratory-Confirmed data
490	Loulergue, 2013	Vaccine coverage of healthcare students in hospitals of the Paris region in 2009: the Studyvax survey.	Not possible to extract data on HBV serological markers prevalence
491	lyunggren, 1988	Varying antibody response in hospital staff vaccinated against hepatitis B.	No data on HBV serological markers prevalence
492	MacCannell, 2010	Occupational Exposure of Health Care Personnel to Hepatitis B and Hepatitis C: Prevention and Surveillance Strategies.	No data on HBV serological markers prevalence
493	Machiya, 2015	Hepatitis B vaccination of healthcare workers at the Princess Marina Hospital, Botswana.	Sample size < or = 10 participants
494	Madani, 2007	Meningococcal, influenza virus, and hepatitis B virus vaccination coverage level among health care workers in Hajj.	Not possible to extract data on HBV serological markers prevalence
495	Maggiore, 2017	Susceptibility to vaccine-preventable diseases and vaccination adherence among healthcare workers in Italy: A cross-sectional survey at a regional acute-care university hospital and a systematic review.	Review
496	Mahboobi, 2010	Hepatitis B virus infection in dentistry: a forgotten topic.	Review
497	Mahesh, Kumar, 2013	Study of needle sticks injuries in a medical college hospital in Northern District of Karnataka.	No abstract and full text available
498	Mahmood, 1999	Prevalence of hepatitis B- core antibodies amongst health care workers.	No abstract and full text available
499	Mahoney, 1997	Progress toward the elimination of hepatitis B virus transmission among health care workers in the United States.	No data on HBV serological markers prevalence
500	Makary, 2007	Needlestick injuries among surgeons in training.	No data on HBV serological markers prevalence
501	Malavaud, 1990	Hepatitis B and hospital personnel.	No abstract and full text available

502	Malavaud, 1990	Vaccination against hepatitis B of Toulouse hospital personnel.	No Laboratory-Confirmed data
503	Malka, 2012	Management of accidental exposure to HCV, HBV and HIV in healthcare workers in Romania.	No data on HBV serological markers prevalence
504	Maltezou, 2011	Vaccination policies for health-care workers in acute health-care facilities in Europe.	No data on HBV serological markers prevalence
505	Maltezou, 2012	Attitudes towards mandatory vaccination and vaccination coverage against vaccine-preventable diseases among health-care workers in tertiary-care hospitals.	No data on HBV serological markers prevalence
506	Maltezou, 2013	Attitudes toward mandatory occupational vaccinations and vaccination coverage against vaccine-preventable diseases of health care workers in primary health care centers.	No Laboratory-Confirmed data
507	Mandić, 2018	Occupational exposure to blood and bodily fluids among healthcare workers in Serbian general hospitals.	No data on HBV serological markers prevalence
508	Manian, 1991	Hepatitis vaccination among physicians: a decade later.	No Laboratory-Confirmed data
509	Manian, 1994	Improving hepatitis B vaccination rates among surgeons.	Not possible to extract data on HBV serological markers prevalence
510	Mann, 1984	Low prevalence of hepatitis B infections among residents of an institution for the mentally retarded in New Mexico.	No data on HBV serological markers prevalence among HCWs
511	Manso, 2003	Compliance with hepatitis B virus vaccination and risk of occupational exposure to blood and other body fluids in intensive care department personnel in Brazil.	No Laboratory-Confirmed data
512	Manzoor, 2010	Needle stick injuries in nurses at a tertiary health care facility.	No data on HBV serological markers prevalence
513	Mapstone, 2009	Mass vaccination of health workers in Peru.	No data on HBV serological markers prevalence
514	Marković-Denić, 2013	Occupational exposures to blood and body fluids among health care workers at university hospitals.	No data on HBV serological markers prevalence
515	Marshall, 2017	Vaccination coverage among social and healthcare workers in ten countries of Samu-social international sites.	No Laboratory-Confirmed data
516	Martin, 1986	The prevalence of hepatitis B in employees of small, rural hospitals. Implications for vaccine administration.	Duplicate study
517	Martin, 2015	Accidental needlestick exposures linked to the administration of local anesthesia by healthcare workers.	No data on HBV serological markers prevalence
518	Martins, 2012	Age and years in practice as factors associated with needlestick and sharps injuries among health care workers in a Portuguese hospital.	No data on HBV serological markers prevalence
519	Maruna, 1986	Epidemiology and risk calculation of hepatitis-B as an occupational disease in the Austrian health service.	Not possible to extract data on HBV serological markers prevalence
520	Masoumi-Asl, 2017	Epidemiology of needlestick injuries among healthcare workers in Tehran, Iran: A cross-sectional study.	No data on HBV serological markers prevalence
521	Mateen, 2008	Needlestick injuries among electromyographers.	No data on HBV serological markers prevalence
522	Mathieu, 1980	Viral hepatitis. Occupational hazard for anaesthesists (author's transl).	No abstract and full text available
523	Mathieu, 1980	Viral hepatitis. Occupational hazard for anesthesists.	Duplicate study
524	Mattey, 1997	Hepatitis B vaccine for school staff at risk.	No data on HBV serological markers prevalence
525	Matthews, 1986	Acceptance of hepatitis B vaccine by general dental practitioners in the United Kingdom.	No abstract and full text available
526	Maz, 1990	Needlestick injuries in anaesthetists.	No data on HBV serological markers prevalence

527	Mazi, 2015	Occupational exposure to blood-borne pathogens in a tertiary hospital: benchmarking using patient days.	No data on HBV serological markers prevalence
528	Mbaeyi, 2012	Assessment of management policies and practices for occupational exposure to bloodborne pathogens in dialysis facilities.	No data on HBV serological markers prevalence
529	Mbaisi, 2013	Prevalence and factors associated with percutaneous injuries and splash exposures among health-care workers in a provincial hospital, Kenya, 2010.	No data on HBV serological markers prevalence
530	McCartan, 1987	Awareness and acceptance of hepatitis B vaccine by Irish dental practitioners.	No data on HBV serological markers prevalence
531	McCarthy, 1998	A comparison of infection control practices of different groups of oral specialists and general dental practitioners.	No data on HBV serological markers prevalence
532	McCarthy, 1999	Infection control practices across Canada: do dentists follow the recommendations?	Not possible to extract data on HBV serological markers prevalence
533	McCarthy, 1999	Compliance with recommended infection control procedures among Canadian dentists: Results of a national survey.	No data on HBV serological markers prevalence
534	McCarthy, 1999	Occupational injuries and exposures among Canadian dentists: the results of a national survey.	No data on HBV serological markers prevalence
535	McCarthy, 2000	Risk of transmission of viruses in the dental office.	No data on HBV serological markers prevalence
536	McCarthy, 2000	A Survey of Final-Year Dental, Medical and Nursing Students: Occupational Injuries and Infection Control.	No data on HBV serological markers prevalence
537	McCarthy, 2013	Injuries to health workers are common but safety checks are rare, report finds.	No data on HBV serological markers prevalence
538	McEwen, 2005	Actions and beliefs related to hepatitis B and influenza immunization among registered nurses in Texas.	No data on HBV serological markers prevalence
539	McGaw, 2000	Dental Students with Hepatitis B e Antigen: A Survey of Canadian Dental Schools.	No data on HBV serological markers prevalence
540	McGinnis, 1976	Occurrence of hepatitis B serum antigen and antibody in the faculty of the University of Tennessee College of Dentistry.	No abstract and full text available
541	McGuff , 1989	Needlestick injuries in blood collection staff. A retrospective analysis.	No data on HBV serological markers prevalence
542	McKenzie, 1992	Hepatitis B vaccination: A survey of health care workers' knowledge and acceptance.	No abstract and full text available
543	McLean, 1987	Prevalence of hepatitis B serologic markers in community hospital personnel.	Not possible to extract data on HBV serological markers prevalence
544	Mehta, 2005	Needlestick injuries in a tertiary care centre in Mumbai, India.	No data on HBV serological markers prevalence
545	Mehta, 2010	Interventions to reduce needle stick injuries at a tertiary care centre.	No data on HBV serological markers prevalence
546	Mehta, 2013	Status of occupational hazards and their prevention among dental professionals in Chandigarh, India: A comprehensive questionnaire survey.	No data on HBV serological markers prevalence
547	Mele, 2001	Risk management of HBsAg or anti-HCV positive healthcare workers in hospital.	No data on HBV serological markers prevalence
548	Memish, 1998	Personalized education improves hepatitis B vaccination rate among physicians in Saudi Arabia.	No data on HBV serological markers prevalence
549	Memish, 2002	Epidemiology of needlestick and sharps injuries in a tertiary care center in Saudi Arabia.	No data on HBV serological markers prevalence
550	Mengal, 2008	Factors relating to acceptance of hepatitis b virus vaccination by nursing students in a tertiary hospital, Pakistan.	No Laboratory-Confirmed data
551	Meyers, 1978	Lack of transmission of hepatitis B after surgical exposure.	No data on HBV serological markers prevalence

552	Migneco, 1987	HBV infection risk in hospital workers.	No abstract and full text available
553	Minuk, 2005	Viral hepatitis and the surgeon.	Review
554	Mir, 2011	Accidental blood exposures among medical residents in Paris, France.	No Laboratory-Confirmed data
555	Mir, 2012	Vaccination coverage among medical residents in Paris, France.	No Laboratory-Confirmed data
556	Mobasherizadeh, 2005	Intervention study of needle stick injury in Iran.	No data on HBV serological markers prevalence
557	Mohammadi, 2011	Percutaneous exposure incidents in nurses: Knowledge, practice and exposure to hepatitis b infection.	No Laboratory-Confirmed data
558	Mohammadpouri, 2017	Report of occupational exposure and coverage of hepatitis B vaccine in health care workers.	No data on HBV serological markers prevalence
559	Mohite, 1999	Prevalence of HBsAg positivity in staff and patients at MGM Medical College and Hospital, Navi-Mumbai.	No abstract and full text available
560	Moloughney, 2001	Transmission and postexposure management of bloodborne virus infections in the health care setting: Where are we now?	Review
561	Monteil, 1990	Epidemiologic study of hepatitis B virus and human immunodeficiency virus transmission among dental surgeons in the Alpes Maritimes region.	No abstract and full text available
562	Moore, 2003	Provision of hepatitis B vaccination for primary care dental staff in Scotland.	No Laboratory-Confirmed data
563	Mori, 1984	Status of viral hepatitis in the world community: its incidence among dentists and other dental personnel.	Review
564	Moro, 2007	Epidemiology of needlesticks and other sharps injuries and injection safety practices in the Dominican Republic.	No Laboratory-Confirmed data
565	Mosley, 1980	Hepatitis B virus exposure of hospital staff.	No data on HBV serological markers prevalence
566	Mosley, 1980	Immunization coverage of health care workers against hepatitis B.	Sample with already known result
567	Mossoro-Kpinde, 2012	High incidence of occupationnal blood exposures (OBE) in the health care workers sector of low income countries, using the example of Bangui, Central African Republic (CAR).	No Laboratory-Confirmed data
568	Mungandi, 2017	Hepatitis B vaccination coverage and the determinants of vaccination among health care workers in selected health facilities in Lusaka district, Zambia: An exploratory study.	No Laboratory-Confirmed data
569	Murphy, 2000	Hepatitis B, vaccination and healthcare workers.	Review
570	Murray, 2002	Poor health care worker vaccination coverage and knowledge of vaccination recommendations in a tertiary Australia hospital.	No Laboratory-Confirmed data
571	Murray, 2009	Occupational exposure to blood and other bodily fluids at a military hospital in Iraq.	No data on HBV serological markers prevalence
572	Musa, 2014	Needle Stick Injuries, Sharp Injuries and other Occupational Exposures to Blood and Body Fluids among Health Care Workers in a general hospital in Sarajevo, Bosnia and Herzegovina.	No Laboratory-Confirmed data
573	Najjar, 2017	Barriers to optimal screening and vaccination of hepatitis B contacts: a survey of general practitioners in NSW, Australia.	No data on HBV serological markers prevalence
574	Naranzul, 2018	Prevalence of hepatitis B and hepatitis C virus infections among nurses in a tertiary hospital in Mongolia.	No abstract and full text available
575	Nasir, 2000	Hepatitis B vaccination among health care workers and students of a medical college.	No Laboratory-Confirmed data
576	Nee, 1995	Hepatitis B vaccination: uptake by medical staff in accident and emergency departments.	No data on HBV serological markers prevalence among HCWs

577	Nejad, 2011	Hepatitis B virus antibody levels in high-risk health care workers.	Comment on an article
578	Nelsing, 1993	Occupational blood exposure among health care workers: I. Frequency and reporting.	No data on HBV serological markers prevalence
579	Nemutandani, 2007	Occupational exposures among dental assistants in public health care facilities, Limpopo Province.	No data on HBV serological markers prevalence
580	Newsom, 2002	Needle-stick injuries in an Ugandan teaching hospital.	No data on HBV serological markers prevalence
581	Ngo, 2013	Literature review of hepatitis B virus outbreaks in assisted living facilities.	No abstract and full text available
582	Nguyen, 2001	Update. Surveillance of healthcare workers exposed to blood/body fluids and bloodborne pathogens: 1 April, 2000 to 31 March, 2001.	No abstract and full text available
583	Nicholas, 1977	Viral hepatitis among practising dentists.	No abstract and full text available
584	Nicholas, 1986	Viral hepatitis among Auckland dentists.	No abstract and full text available
585	Nienhaus, 2012	Infectious diseases in healthcare workers - An analysis of the standardised data set of a German compensation board.	Not possible to extract data on HBV serological markers prevalence
586	Nienhaus, 2018	Infections in Healthcare Workers in Germany-22-Year Time Trends.	Comment on an article
587	Nisar, 2019	Prevalence and perception of needle stick injury among health care professionals at a tertiary care hospital, Karachi, Pakistan.	No abstract and full text available
588	No author listed, 1974	Post-transfusion hepatitis in a London hospital: results of a two-year prospective study. A report to the M.R.C. Blood Transfusion Research Committee by the Medical Research Council Working Party on Post-Transfusion Hepatitis.	No data on HBV serological markers prevalence
589	No author listed, 1976	Hepatitis in clinical laboratories.	Not possible to extract data on HBV serological markers prevalence
590	No author listed, 1976	Relation of e antigen to infectivity of hBsAg-positive inoculations among medical personnel.	No data on HBV serological markers prevalence
591	No author listed, 1977	Research findings of potential value to the practitioner.	No data on HBV serological markers prevalence
592	No author listed, 1979	Hepatitis B as an occupational risk for nephrology nurses and technicians.	No data on HBV serological markers prevalence
593	No author listed, 1980	Acute hepatitis B associated with gynaecological surgery. Report of a collaborative study by the Communicable Disease Surveillance Centre and the Epidemiological Research Laboratory of the Public Health Laboratory Service together with a District Control-of-Infection Service.	No data on HBV serological markers prevalence
594	No author listed, 1980	Hepatitis B virus infections among surgeons.	No data on HBV serological markers prevalence
595	No author listed, 1983	The hepatitis B carrier in hospital.	No data on HBV serological markers prevalence
596	No author listed, 1984	Hepatitis B vaccine. Health and Public Policy Committee, American College of Physicians.	No abstract and full text available
597	No author listed, 1985	Acquired immune deficiency syndrome: recommendations of a working party of the Hospital Infection Society.	No data on HBV serological markers prevalence
598	No author listed, 1986	Dentists found at small risk to AIDS: LA task force. Virus may be killed easily; autoclaving, sterilization recommended.	No data on HBV serological markers prevalence

599	No author listed, 1986	Guidelines for the protection of health care workers in caring for persons who have some form of HTLV-III/LAV infection.	No data on HBV serological markers prevalence
600	No author listed, 1987	Leads from the MMWR. Outbreak of hepatitis B associated with an oral surgeon--New Hampshire.	No abstract and full text available
601	No author listed, 1987	An outbreak of hepatitis B in a nursing home.	Case report
602	No author listed, 1990	Healthcare in crisis. Reducing the risk of HIV and other bloodborne diseases in the healthcare setting. Presentations from a roundtable discussion at the 16th annual conference and international meeting of the Association for Practitioners in Infection Control (APIC). Reno, Nevada, May 21-26, 1989. Proceedings.	No abstract and full text available
603	No author listed, 1990	Lichen planus and liver diseases: a multicentre case-control study. Gruppo Italiano Studi Epidemiologici in Dermatologia (GISED).	No data on HBV serological markers prevalence
604	No author listed, 1990	One of man's most deadly viruses is most alarming to healthcare workers.	No abstract and full text available
605	No author listed, 1991	HIV testing: patients, health care workers and physicians.	No abstract and full text available
606	No author listed, 1991	ICN: European conference alerts nurses to hepatitis B danger in the workplace.	No data on HBV serological markers prevalence
607	No author listed, 1991	Preliminary analysis: HIV serosurvey of orthopedic surgeons, 1991.	No data on HBV serological markers prevalence
608	No author listed, 1991	Recommendations for preventing transmission of human immunodeficiency virus and hepatitis B virus to patients during exposure-prone invasive procedures.	No data on HBV serological markers prevalence
609	No author listed, 1992	Anal intercourse risk of HBV in women.	No data on HBV serological markers prevalence
610	No author listed, 1992	CLMA position on HIV/HBV testing of health-care workers. Clinical Laboratory Management Association.	No data on HBV serological markers prevalence
611	No author listed, 1992	HBV risk from fingersticks.	No abstract and full text available
612	No author listed, 1992	Hepatitis B and health care workers.	No Laboratory-Confirmed data
613	No author listed, 1992	HIV and hep. B and C code of practice.	No data on HBV serological markers prevalence
614	No author listed, 1992	'Look-back' notifications for HIV/HBV-positive healthcare workers. AIDS Committee of the Society for Hospital Epidemiology of America.	No data on HBV serological markers prevalence
615	No author listed, 1993	APIC position paper: prevention of device-mediated blood-borne infections to health care workers. 1992 Governmental Affairs Committee of the Association for Practitioners in Infection Control, Inc.	No data on HBV serological markers prevalence
616	No author listed, 1994	Suture cuts may be cause of surgeon-to-patient transmission of hepatitis B infection.	Not possible to extract data on HBV serological markers prevalence
617	No author listed, 1994	Transmission of hepatitis B from surgeon to patients continues.	No data on HBV serological markers prevalence
618	No author listed, 1997	From the Centers for Disease Control and Prevention. Nosocomial hepatitis B virus infection associated with reusable fingerstick blood sampling devices--Ohio and New York City, 1996.	No data on HBV serological markers prevalence
619	No author listed, 1997	Management of healthcare workers infected with hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or other bloodborne pathogens. AIDS/TB Committee of the Society for Healthcare Epidemiology of America.	No data on HBV serological markers prevalence

620	No author listed, 1997	Recommendations of the Academy of Surgery: Viral transmission from the surgeon to the patient.	No data on HBV serological markers prevalence
621	No author listed, 1998	SHEA proposes separate HIV, HBV strategies. Society for Health Care Epidemiology of America.	No data on HBV serological markers prevalence
622	No author listed, 1998	Surveillance of health care workers with occupational exposure to bloodborne viruses.	No data on HBV serological markers prevalence
623	No author listed, 1999	Chance finding of hepatitis B e antigen carriage in pregnant woman highlights need for antenatal screening, and vaccination of health care workers.	No data on HBV serological markers prevalence
624	No author listed, 2000	Surveillance of health care workers exposed to bloodborne viruses at work: July 1997 to June 2000.	No data on HBV serological markers prevalence
625	No author listed, 2001	From the Centers for Disease Control and Prevention. Injection practices among nurses--Valcea, Romania, 1998.	No data on HBV serological markers prevalence
626	No author listed, 2001	Injection practices among nurses--Vâlcea, Romania, 1998.	No data on HBV serological markers prevalence
627	No author listed, 2003	Injection safety.	No data on HBV serological markers prevalence
628	No author listed, 2006	Hepatitis B and hepatitis C virus infections in obstetrician-gynecologists.	No data on HBV serological markers prevalence
629	No author listed, 2008	Agreement reached on virus testing and protections for doctors.	No abstract and full text available
630	No author listed, 2011	Committee opinion no. 489: Hepatitis B, hepatitis C, and human immunodeficiency virus infections in obstetrician-gynecologists.	No abstract and full text available
631	Noble, 1991	Hepatitis B and HIV infections in dental professionals: effectiveness of infection control procedures.	Review
632	Norrgren, 1992	Prevalence of antibodies against hepatitis B and C viruses among different groups of medical staff.	No data on HBV serological markers prevalence among HCWs
633	Noubiap, 2013	Occupational exposure to blood, hepatitis B vaccine knowledge and uptake among medical students in Cameroon.	No data on HBV serological markers prevalence
634	Nouetchognou, 2016	Accidental exposures to blood and body fluids among health care workers in a Referral Hospital of Cameroon.	No data on HBV serological markers prevalence
635	Nunn, 2018	Occupational exposure during emergency department thoracotomy: A prospective, multi-institution study.	No data on HBV serological markers prevalence
636	Nworie, 2018	Hepatitis B virus (HBV) infection amongst staff of a Nigerian university.	No data on HBV serological markers prevalence among HCWs
637	O'Connell, 2006	Occupational sharps injuries in a Dublin teaching hospital.	No abstract and full text available
638	Odimayo, 2018	Prevalence and status of hepatitis B viral Infection among healthcare workers in a tertiary health institution in south western Nigeria.	No data on HBV serological markers prevalence
639	Öge, 1998	Occupational risk of hepatitis B and C infections in urologists.	No data on HBV serological markers prevalence among HCWs
640	Ogoina, 2014	Prevalence of hepatitis B vaccination among health care workers in Nigeria in 2011-12.	No data on HBV serological markers prevalence
641	Ogundele, 2018	Reducing the risk of nosocomial Hepatitis B virus infections among healthcare workers in Nigeria: A need for policy directive on pre-employment screening and vaccination.	No data on HBV serological markers prevalence
642	Ogunnowo, 2012	Exposure to blood among mortuary workers in teaching hospitals in south-west Nigeria.	No data on HBV serological markers prevalence
643	Oh, 2005	Epidemiological characteristics of occupational blood exposures of healthcare workers in a university hospital in South Korea for 10 years.	Not possible to extract data on HBV serological markers prevalence

644	Oh, 2016	Occupational exposure to infection risk and use of personal protective equipment by emergency medical personnel in the Republic of Korea.	No data on HBV serological markers prevalence
645	Oh, 2019	5 year survey on sharp injuries among healthcare workers in an acute care hospital in Singapore.	No abstract and full text available
646	Okeke, 2008	Hepatitis B vaccination status and needle stick injuries among medical students in a Nigerian university.	No data on HBV serological markers prevalence
647	Okoh, 2017	Assessment of knowledge, attitude and practice of post-exposure prophylaxis against blood-borne viral infection among dental surgeons in a teaching hospital.	No data on HBV serological markers prevalence
648	Okulicz, 2013	Occupational exposures and the prevalence of blood-borne pathogens in a deployed setting: Data from a US military trauma center in Afghanistan.	No data on HBV serological markers prevalence
649	Ola, 2009	Anti-HBC and HBsAg screening among nigerian health care workers.	No abstract and full text available
650	Oladeinde, 2014	Uptake of HIV, HBV and HCV testing services among medical laboratory scientists in Nigeria.	No data on HBV serological markers prevalence
651	Olaitan, 2012	Sharp injuries among hospital waste handlers.	No data on HBV serological markers prevalence
652	Olatosi, 2016	HEPATITIS B VACCINATION STATUS AND NEEDLE STICK INJURY EXPOSURE AMONG OPERATING ROOM STAFF IN LAGOS, NIGERIA.	No data on HBV serological markers prevalence
653	Olubuyide, 1996	Doctors at risk of hepatitis B and HIV infection from patients in Nigeria.	No data on HBV serological markers prevalence
654	Olubuyide, 1997	Prevalence and epidemiological characteristics of hepatitis B and C infections among doctors and dentists in Nigeria.	Duplicate study
655	Omar, 2015	Occupational injuries prone to infectious risks amongst healthcare personnel in Kuwait: A retrospective study.	No data on HBV serological markers prevalence
656	Omotowo, 2018	Uptake of hepatitis B vaccination and its determinants among health care workers in a tertiary health facility in Enugu, South-East, Nigeria.	No Laboratory-Confirmed data
657	Osazuwa-Peters, 2012	Occupational health issues of oral health care workers in Edo State, Nigeria.	No Laboratory-Confirmed data
658	Osterholm, 1979	Viral hepatitis in hospital personnel in Minnesota. Report of a statewide survey.	No abstract and full text available
659	Osterholm, 1985	Clinical viral hepatitis B among Minnesota hospital personnel. Results of a ten-year statewide survey.	No abstract and full text available
660	Othman, 2018	Hepatitis B seroepidemiology and booster vaccination in pre-clinical medical students in a Malaysian university.	No data on HBV serological markers prevalence among HCWs
661	Ouédraogo, 2013	Hepatitis B vaccination status and associated factors among health care workers in Burkina Faso.	Not possible to extract data on HBV serological markers prevalence
662	Paiva, 2013	Conducts following occupational accidents involving exposure to biological material among emergency medical services personnel.	No data on HBV serological markers prevalence
663	Palmer, 2000	The management of occupational exposures to blood and saliva in dental practice.	No data on HBV serological markers prevalence
664	Panlilio, 1995	Serosurvey of human immunodeficiency virus, hepatitis B virus, and hepatitis C virus infection among hospital-based surgeons.	No abstract and full text available
665	Pantelick, 1981	Hepatitis B infection in hospital personnel during an eight-year period; policies for screening and pregnancy in high risk areas.	No data on HBV serological markers prevalence
666	Papagiannis, 2016	Hepatitis B virus vaccination coverage in medical, nursing, and paramedical students: A cross-sectional, multi-centered study in Greece.	No data on HBV serological markers prevalence

667	Park , 2008	Needlestick and sharps injuries in a tertiary hospital in the Republic of Korea.	No data on HBV serological markers prevalence
668	Pastakia , 1975	Hepatitis-B antigen in professional blood donors at AIIMS hospital.	No abstract and full text available
669	Patel , 2009	Infection control practices in assisted living facilities: A response to hepatitis B virus infection outbreaks.	No data on HBV serological markers prevalence
670	Pathoumthong , 2014	Vaccination status, knowledge and awareness towards hepatitis B among students of health professions in Vientiane, Lao PDR.	No data on HBV serological markers prevalence
671	Patil , 2013	Awareness and risk perception of hepatitis B infection among auxiliary healthcare workers.	No data on HBV serological markers prevalence
672	Paya, 2013	Vaccination status of family physicians in the Loire district, France.	No data on HBV serological markers prevalence
673	Perrin, 1982	Hepatitis in dentistry.	No abstract and full text available
674	Pervez, 2005	Prevalence of hepatitis B surface antigenaemia amongst nursing staff of Tertiray Care Hospital.	No abstract and full text available
675	Petrosillo, 1995	Hepatitis B virus, hepatitis C virus and human immunodeficiency virus infection in health care workers: a multiple regression analysis of risk factors.	No data on HBV serological markers prevalence
676	Pettit, 1997	Epidemiology of sharp object injuries in a children's hospital.	No data on HBV serological markers prevalence
677	Pezzoli, 2010	Can we know the immunization status of healthcare workers? Results of a feasibility study in hospital trusts, England, 2008.	No data on HBV serological markers prevalence
678	Phillips, 2007	Bloodborne pathogen exposure risk among surgeons in sub-Saharan Africa.	No data on HBV serological markers prevalence
679	Phillips, 2012	Risk of bloodborne pathogen exposure among Zambian healthcare workers.	No data on HBV serological markers prevalence
680	Phukan, 2014	Compliance to occupational safety measures among the paramedical workers in a tertiary hospital in Karnataka, South India.	No data on HBV serological markers prevalence
681	Pinquier, 2008	Vaccine prevention in perinatal health care: parents, children and professionals.	No data on HBV serological markers prevalence
682	Playford, 2002	Intradermal recombinant hepatitis B vaccine for healthcare workers who fail to respond to intramuscular vaccine.	No data on HBV serological markers prevalence
683	Polesky, 1982	Surveillance and prevention of hepatitis in health care personnel.	No data on HBV serological markers prevalence
684	Polz, 1989	Viral hepatitis among the hospital staff.	No abstract and full text available
685	Poole, 1994	Immunity to hepatitis B among health care workers performing exposure prone procedures.	No data on HBV serological markers prevalence
686	Porter, 1994	Viral hepatitis. Current concepts for dental practice.	Review
687	Porter, 1996	Compliance with infection control procedures in dentistry [2].	No data on HBV serological markers prevalence
688	Poujol, 2008	Hepatitis B virus transmission from a nurse to a patient, France, 2005.	No data on HBV serological markers prevalence
689	Powell, 1975	The incidence of Australia antigen in hospital staff members.	No data on HBV serological markers prevalence
690	Powers, 1994	Epidemiology and prevention of blood and body fluid exposures among emergency department staff.	No data on HBV serological markers prevalence
691	Prabhakar, 2014	Prevalence of needle-stick injuries in interventional radiology.	No data on HBV serological markers prevalence
692	Prasad, 1988	Hepatitis B viral infections amongst hospital personnel: Chandigarh.	No abstract and full text available
693	Prasetya, 1986	Intradermal vaccination against hepatitis B in Immanuel Hospital personnel--a preliminary report.	No data on HBV serological markers prevalence

694	Prasuna, 2015	OCCURRENCE AND KNOWLEDGE ABOUT NEEDLE STICK INJURY IN NURSING STUDENTS.	No data on HBV serological markers prevalence
695	Prati, 2000	Screening of health care workers for hepatitis B virus and hepatitis C virus: criteria for fitness for work.	No abstract and full text available
696	Prendergast jr, 1991	Transmission of hepatitis B by a surgeon [3].	No data on HBV serological markers prevalence
697	Prendergast, 1995	Hepatitis B immunisation among invasive cardiologists: Poor compliance with united kingdom guidelines.	No data on HBV serological markers prevalence
698	Psarrou, 2018	Hepatitis B vaccination coverage of healthcare professionals in Greece.	No data on HBV serological markers prevalence
699	Puro, 2005	European recommendations for the management of healthcare workers occupationally exposed to hepatitis B virus and hepatitis C virus.	No data on HBV serological markers prevalence
700	Qayyum, 2012	Prevalence of blood borne diseases (hepatitis B & C) and strategy to protect health care workers.	No data on HBV serological markers prevalence among HCWs
701	Qudeimat, 2006	Infection control knowledge and practices among dentists and dental nurses at a Jordanian University Teaching Center.	No data on HBV serological markers prevalence
702	Quraishi, 1985	Risk of transmission of hepatitis B to hospital personnel exposed to a chronic HBsAg carrier.	Case report
703	Rabaud, 2000	Occupational exposure to blood: Search for a relation between personality and behavior.	No data on HBV serological markers prevalence
704	Rachiotis, 2005	Vaccination against hepatitis B virus in workers of a general hospital in Athens.	No abstract and full text available
705	Radcliffe, 2013	Hepatitis B virus transmissions associated with a portable dental clinic, West Virginia, 2009.	No data on HBV serological markers prevalence
706	Radvan, 1984	Hepatitis B markers in health care workers. The Newcastle study.	No abstract and full text available
707	Raeside, 1996	Hepatitis A & B: the nurse's role (continuing education credit).	No abstract and full text available
708	Ramos-Gomez, 1997	Accidental exposures to blood and body fluids among health care workers in dental teaching clinics: a prospective study.	No data on HBV serological markers prevalence
709	Ramrich, 2017	Work-related infections in dentistry: risk perception and preventive measures.	No data on HBV serological markers prevalence
710	Ramsey, 1996	Nurses' body fluid exposure reporting, HIV testing, and hepatitis B vaccination rates: before and after implementing universal precautions regulations.	No data on HBV serological markers prevalence
711	Rapisarda, 2019	Incidence of sharp and needle-stick injuries and mucocutaneous blood exposure among healthcare workers.	No abstract and full text available
712	Rapparini, 2007	Occupational exposures to bloodborne pathogens among healthcare workers in Rio de Janeiro, Brazil.	No data on HBV serological markers prevalence among HCWs
713	Rathi, 2018	Assessment of knowledge, attitude, and practices toward prevention of hepatitis B infection among medical students in a high-risk setting of a newly established medical institution.	No data on HBV serological markers prevalence
714	Rathinavelu, 2015	Assessment of knowledge on occupational exposure to hepatitis B infection and vaccine among undergraduate students in a private dental college, Chennai.	No data on HBV serological markers prevalence
715	Raven, 2016	Fluctuation of Viremia in Hepatitis B Virus-Infected Healthcare Workers Performing Exposure-Prone Procedures in the Netherlands.	Not possible to extract data on HBV serological markers prevalence
716	Ream, 2016	Biological risk among hospital housekeepers.	No data on HBV serological markers prevalence
717	Reddy, 2014	Prevalence of hepatitis B vaccination among oral health care personnel in Mysore city, India.	No data on HBV serological markers prevalence

718	Redeker, 1975	Hepatitis B. Risk of infection from antigen-positive medical personnel and patients.	Comment on an article
719	Reingold, 1982	Transmission of hepatitis B by an oral surgeon.	No data on HBV serological markers prevalence
720	Reis, 2004	Accidents with biological material among undergraduate nursing students in a public Brazilian university.	No Laboratory-Confirmed data
721	Resende, 2010	Concerns regarding hepatitis B vaccination and post-vaccination test among Brazilian dentists.	No Laboratory-Confirmed data
722	Reynolds, 2008	Possible risks of transmission of bloodborne infection via acupuncture needles in Guizhou province, southwest China.	No data on HBV serological markers prevalence
723	Rhodes, 2008	Immunisation status of dental practice staff in Kent.	No Laboratory-Confirmed data
724	Ribero, 1986	Hepatitis B virus infection in dentists and dental students.	No abstract and full text available
725	Ribero, 1986	A hepatitis B vaccination programme in a group of dental practitioners.	No abstract and full text available
726	Rice, 2015	Sharp truth: health care workers remain at risk of bloodborne infection.	Not possible to extract data on HBV serological markers prevalence
727	Rimkuviene, 2011	Percutaneous injuries and hepatitis B vaccination among Lithuanian dentists.	No data on HBV serological markers prevalence
728	Rioche, 1987	Prevalence of markers of the HBs system of hepatitis B among hospital personnel in Morocco: evaluation of the risk of hepatitis B infection.	No abstract and full text available
729	Rishi, 2017	Needle stick injuries in a tertiary eye-care hospital: Incidence, management, outcomes, and recommendations.	No data on HBV serological markers prevalence
730	Rivoalen, 1992	Behaviour of the hospital staff concerning prevention. The case for hepatitis B.	No abstract and full text available
731	Rogowska-Szadkowska, 2010	Risk of needle stick injuries in health care workers: bad habits (recapping needles) last long.	No data on HBV serological markers prevalence
732	Ropac, 2001	The prevalence of hepatitis B virus infection among medical workers prior to vaccination.	No abstract and full text available
733	Rosen, 1999	Ten-year follow-up study of hepatitis B virus infection and vaccination status in hospital employees.	No data on HBV serological markers prevalence
734	Rosenberg, 1973	Viral hepatitis: an occupational hazard to surgeons.	No data on HBV serological markers prevalence
735	Rossouw, 2014	Blood-borne infections in healthcare workers in South Africa.	Review
736	Roupa, 2019	Vaccination Coverage and Awareness of Hepatitis B Virus Among Healthcare Students at a University in Cyprus.	No data on HBV serological markers prevalence among HCWs
737	Roush, 1991	Availability and use of hepatitis B vaccine in laboratory and nursing schools in the United States.	No data on HBV serological markers prevalence
738	Ruben, 1983	Epidemiology of accidental needle-puncture wounds in hospital workers.	No data on HBV serological markers prevalence
739	Russo, 1992	A second look at the cost of mandatory human immunodeficiency virus and hepatitis B virus testing for healthcare workers performing invasive procedures.	No data on HBV serological markers prevalence
740	Rybacki, 2013	Work safety among Polish health care workers in respect of exposure to bloodborne pathogens.	No data on HBV serological markers prevalence
741	Rybacki, 2013	Survey of hepatitis B exposure and sharps injuries in dental health-care professionals.	No data on HBV serological markers prevalence
742	Rymer, 2016	Risk of occupational exposure to the HBV infection in non-clinical healthcare personnel.	Not possible to extract data on HBV serological markers prevalence
743	Sabău, 1977	Hepatitis B antibodies in hospital personnel.	No abstract and full text available

744	Sabermoghaddam, 2015	Incidence of occupational exposure to blood and body fluids and measures taken by health care workers before and after exposure in regional hospitals of a developing country: a multicenter study.	No data on HBV serological markers prevalence
745	Said, 2014	Hepatitis B vaccination and screening awareness in primary care practitioners.	No data on HBV serological markers prevalence
746	Samaranayake, 1989	'Dramatic reduction in hepatitis B incidence among dentists in England and Wales'.	No abstract and full text available
747	Samuel, 2017	Occupational risk of hepatitis B among dental professionals by estimation of the anti-HBs.	Not possible to extract data on HBV serological markers prevalence
748	Saraux, 1985	Viral hepatitis B in health personnel.	No abstract and full text available
749	Saridi, 2011	Occupational exposure to blood in workers in a Greek hospital.	No data on HBV serological markers prevalence
750	Scatigna, 2017	Attitudinal variables and a possible mediating mechanism for vaccination practice in health care workers of a local hospital in L'Aquila (Italy).	No data on HBV serological markers prevalence
751	Schaffer, 2001	Adolescent immunization practices: a national survey of US physicians.	No data on HBV serological markers prevalence
752	Scheckler, 1988	A creative method for determining the immunization status of a community hospital medical staff.	No data on HBV serological markers prevalence
753	Schenkel, 2008	Viral hepatitis in Germany: poor vaccination coverage and little knowledge about transmission in target groups.	No data on HBV serological markers prevalence
754	Scheutz, 1985	Viral hepatitis among Danish oral surgeons.	Not possible to extract data on HBV serological markers prevalence
755	Scheutz, 1986	Drug addiction and viral hepatitis in the dental patient. Studies on various aspects of providing dental care for drug addicts and their consequences for patients and dental personnel.	Review
756	Scheutz, 1988	Hepatitis B virus infection in Danish dentists. A case-control and follow-up study.	Duplicate study
757	Schiff, 1986	Veterans Administration cooperative study on hepatitis and dentistry.	Not possible to extract data on HBV serological markers prevalence
758	Schmid, 2007	Needlestick injuries and other occupational exposures to body fluids amongst employees and medical students of a German university: incidence and follow-up.	No data on HBV serological markers prevalence
759	Schneider, 1979	Hepatitis B: An occupational hazard of health care facilities.	No abstract and full text available
760	Schoub, 1991	Exposure to hepatitis B virus among South African health care workers--implications for pre-immunisation screening.	No abstract and full text available
761	Scully, 1990	Increasing acceptance of hepatitis B vaccine by dental personnel but reluctance to accept hepatitis B carrier patients.	No data on HBV serological markers prevalence among HCWs
762	Scully, 2007	Infection control: a survey of UK special care dentists and dental care professionals.	No data on HBV serological markers prevalence
763	Segal, 1979	Hepatitis B antigen and antibody in the United States Army: Two-year follow-up of health care personnel.	Not possible to extract data on HBV serological markers prevalence
764	Seiz, 2015	Studies of nosocomial outbreaks of hepatitis B in nursing homes in Germany suggest a major role of hepatitis B e antigen expression in disease severity and progression.	No data on HBV serological markers prevalence
765	Semaille, 2004	Vaccination of general practitioners.	Review
766	Seña, 2013	Acute hepatitis b outbreaks in 2 skilled nursing facilities and possible sources of transmission: North Carolina, 2009-2010.	No data on HBV serological markers prevalence

767	Sepkowitz, 1996	Occupationally acquired infections in health care workers. Part II.	Review
768	Septimus, 1984	Seroprevalence of hepatitis B markers in health-care workers at a teaching medical center and two community hospitals.	No abstract and full text available
769	Serdar, 2013	Occupational exposures in healthcare workers in University Hospital Dubrava--10 year follow-up study.	No data on HBV serological markers prevalence
770	Seycková, 1984	Prevalence of viral hepatitis among the hospital staff in CSR between 1980 and 1982.	No abstract and full text available
771	Shah, 2005	Workers' compensation claims for needlestick injuries among healthcare workers in Washington State, 1996-2000.	No data on HBV serological markers prevalence
772	Shah, 2006	The epidemiology of needle stick injuries among health care workers in a newly developed country.	No Laboratory-Confirmed data
773	Shah, 2006	Percutaneous injuries among dental professionals in Washington State.	No data on HBV serological markers prevalence
774	Shah, 2012	Screening for hepatitis B and hepatitis C in hospital staff of tertiary care hospital in Mumbai.	No abstract and full text available
775	Shanks, 1995	Occupation risk of needlestick injuries among health care personnel in Saudi Arabia.	No data on HBV serological markers prevalence
776	Shapiro, 1996	Use of the hepatitis-B vaccine and infection with hepatitis B and C among orthopaedic surgeons. The American Academy of Orthopaedic Surgeons Serosurvey Study Committee.	No data on HBV serological markers prevalence
777	Shapiro, 1996	Use of the hepatitis-B vaccine and infection with hepatitis B and C among orthopaedic surgeons.	Duplicate study
778	Sharavanan, 2011	Prevalence of hepatitis B surface antigen among health care workers.	No abstract and full text available
779	Shariati, 2007	Accidental exposure to blood in medical interns of Tehran University of Medical Sciences.	No data on HBV serological markers prevalence
780	Sharma, 1976	Prevalence of Australia antigen amongst pediatric medical hospital admissions.	No abstract and full text available
781	Sharma, 2012	Study on prevalence of needle stick injury among health care workers in a tertiary care hospital in New Delhi: a two-year review.	No data on HBV serological markers prevalence
782	Shaw, 1986	Lethal outbreak of hepatitis B in a dental practice.	Case report
783	Sheikh Ali, 2010	Persistence of protective antibodies against Hepatitis B virus among vaccinated health workers, Al-Hussein Hospital, Salt, Jordan, 2008.	No data on HBV serological markers prevalence
784	Sherman, 2017	Assessment of professional activities and needed resources of hiv-specialist pharmacists.	No data on HBV serological markers prevalence
785	Shiao, 1999	Prevalence of nonreporting behavior of sharps injuries in Taiwanese health care workers.	No data on HBV serological markers prevalence
786	Shiao, 2002	Estimation of the risk of bloodborne pathogens to health care workers after a needlestick injury in Taiwan.	No data on HBV serological markers prevalence
787	Shiao, 2002	Student nurses in Taiwan at high risk for needlestick injuries.	No data on HBV serological markers prevalence
788	Shiao, 2008	National incidence of percutaneous injury in Taiwan healthcare workers.	No data on HBV serological markers prevalence
789	Shiva, 2011	Survey of needle-stick injuries in paediatric health personnel of 5 University Hospitals in Tehran.	No data on HBV serological markers prevalence
790	Shoaei, 2015	Seroprevalence of hepatitis B virus infection and hepatitis B surface antibody status among laboratory health care workers in Isfahan, Iran.	Duplicate study
791	Shou-Dong, 1985	Hepatitis B virus infection in hospital personnel in Taiwan: Is immunoprophylaxis necessary?	No abstract and full text available
792	Shriyan, 2012	Incidence of occupational exposures in a tertiary health care center.	No data on HBV serological markers prevalence

793	Sienko, 1988	Hepatitis B vaccination programs for hospital workers: results of a statewide survey.	No Laboratory-Confirmed data
794	Siew, 1988	Screening dentists for HIV and hepatitis B.	Comment on an article
795	Simard, 2007	Hepatitis B vaccination coverage levels among healthcare workers in the United States, 2002-2003.	No Laboratory-Confirmed data
796	Sin, 2016	Management of health care workers following occupational exposure to hepatitis B, hepatitis C, and human immunodeficiency virus.	Case series
797	Singhal, 1985	A comparison of the prevalence of hepatitis-B surface antigen (HBsAg) positivity among hospital and non-hospital personnel.	No abstract and full text available
798	Skinhoj, 1980	Viral hepatitis in Danish clinical chemical laboratories 1968-1978: Incidence rates, aetiology and risk factors.	No Laboratory-Confirmed data
799	Skinhøj, 1980	Viral hepatitis in Danish clinical chemical laboratories 1968--1978: incidence rates, aetiology and risk factors.	Duplicate study
800	Skinhoj, 1981	Viral hepatitis in Danish health care personnel, 1974-78.	No Laboratory-Confirmed data
801	Smith, 1985	Voluntary hepatitis-B serological screening of Indiana dentist.	No abstract and full text available
802	Smith, 1986	Hepatitis B in a general psychiatric hospital.	No data on HBV serological markers prevalence
803	Smith, 1993	An audit of uptake of hepatitis B immunization amongst hospital doctors.	No Laboratory-Confirmed data
804	Smith, 1996	Hepatitis B vaccine uptake among surgeons at a London teaching hospital: how well are we doing?	No Laboratory-Confirmed data
805	Smith, 2004	Management of hepatitis B immunizations and blood exposure incidents in primary care.	No Laboratory-Confirmed data
806	Smith, 2005	Needlestick and sharps injuries among nursing students.	No data on HBV serological markers prevalence
807	Snyder, 1988	Management of health care workers remotely vaccinated for hepatitis B who sustain significant blood and body fluid exposures.	No abstract and full text available
808	Snydman, 1976	Nosocomial viral hepatitis B; a cluster among staff with subsequent transmission to patients.	Sample with already known result
809	Sofola, 2003	Assessment of the compliance of Nigerian dentists with infection control: A preliminary study.	No Laboratory-Confirmed data
810	Solomon, 1991	Issues in the dental care management of patients with bloodborne infectious diseases: an opinion survey of dental school seniors.	No data on HBV serological markers prevalence
811	Spradling, 2012	Serologic testing for protection against hepatitis B virus infection among students at a health sciences university in the United States.	No Laboratory-Confirmed data
812	Staff, 2002	Vaccination among household contacts of chronic hepatitis B carriers by general practitioners.	No data on HBV serological markers prevalence
813	Stanford, 1995	Hepatitis B vaccination rates among staff at a district general hospital.	No data on HBV serological markers prevalence
814	Stefanati, 2019	Long-term persistency of hepatitis B immunity: An observational cross-sectional study on medical students and resident doctors.	No Laboratory-Confirmed data
815	Stein, 2003	A survey of doctors' and nurses' knowledge, attitudes and compliance with infection control guidelines in Birmingham teaching hospitals.	No data on HBV serological markers prevalence among HCWs
816	Steinbuch, 1986	Risk of hepatitis B in hospital personnel.	Not possible to extract data on HBV serological markers prevalence
817	Steketee, 1988	Seroresponse to hepatitis B vaccine in patients and staff of renal dialysis centers, Wisconsin.	Sample with already known result

818	Stevenson, 1989	Infection control in general dental practice. Results of a postal survey of 600 registered dental practitioners in New South Wales.	Not possible to extract data on HBV serological markers prevalence
819	Stewardson, 2002	Occupational exposures occurring in students in a UK dental school.	Not possible to extract data on HBV serological markers prevalence
820	Stoetter, 2013	Prevalence of Hepatitis B and C among health care professionals in a tertiary hospital in Tanzania.	No abstract and full text available
821	Storch, 1985	Prevalence of hepatitis B antibodies in personnel at a children's hospital.	Duplicate study
822	Street, 1990	Persistence of antibody in healthcare workers vaccinated against hepatitis B.	Sample with already known result
823	Strickler, 1987	Prevalence of hepatitis B markers in occupational health nurses.	No abstract and full text available
824	Stroffolini, 1994	Hepatitis B in health workers in Italy.	Not possible to extract data on HBV serological markers prevalence
825	Stroffolini, 1998	Hepatitis B vaccination coverage among healthcare workers in Italy.	No abstract and full text available
826	Stroffolini, 2008	Increasing hepatitis B vaccination coverage among healthcare workers in Italy 10 years apart.	Not possible to extract data on HBV serological markers prevalence
827	Stuart, 1994	Hepatitis B immunization: A survey of orthopaedic surgeons.	Sample with already known result
828	Suárez, 1998	Serological markers of hepatitis A, B and C in first year student nurses.	No data on HBV serological markers prevalence
829	Suckling, 2006	Susceptibility of healthcare workers in Kenya to hepatitis B: new strategies for facilitating vaccination uptake.	Sample with already known result
830	Sugauchi, 2000	Hepatitis B virus infection among residents of a nursing home for the elderly. Seroepidemiological study and molecular evolutionary analysis.	No data on HBV serological markers prevalence among HCWs
831	Suljak, 1999	The occupational risk to dental anesthesiologists of acquiring 3 bloodborne pathogens.	No data on HBV serological markers prevalence among HCWs
832	Surdan, 1974	Investigations on the presence of hepatitis antigen and of the homologous antibodies in veterinarians and workers attending to animals.	No abstract and full text available
833	Sureshkumar, 2011	Needle stick unjuries among health care workers - A report from India.	No data on HBV serological markers prevalence
834	Symington, 1983	Prevalence of hepatitis B among staff in a mental subnormality hospital.	No data on HBV serological markers prevalence
835	Tabibian, 2008	Hepatitis B and C among veterans on a psychiatric ward.	Only HBV positive samples included
836	Tabor, 1978	Prevalence of hepatitis B in a high-risk setting: A serologic study of patients and staff in a pediatric oncology unit.	No abstract and full text available
837	Tadakamadla, 2012	Occupational hazards and preventive practices among students and faculty at a private dental institution in India.	No abstract and full text available
838	Taegtmeyer, 2008	Working with risk: occupational safety issues among healthcare workers in Kenya.	No abstract and full text available
839	Tafuri, 2009	An audit of vaccination coverage among vaccination service workers in Puglia, Italy.	No abstract and full text available
840	Taghavi-Ardakani, 2012	The survey on immunization response against hepatitis b virus vaccination and related factors in health care workers in kashan university of medical sciences.	No abstract and full text available
841	Tait, 1994	Prevention of occupational transmission of human immunodeficiency virus and hepatitis B virus among anesthesiologists: A survey of anesthesiology practice.	No data on HBV serological markers prevalence

842	Taiwo, 2002	Assessing cross infection prevention measures at the Dental Clinic, University College Hospital, Ibadan.	No abstract and full text available
843	Takahashi, 1990	Sporadic acute hepatitis in hospital employees: mainly non-A, non-B type.	No abstract and full text available
844	Talaat, 2003	Occupational exposure to needlestick injuries and hepatitis B vaccination coverage among health care workers in Egypt.	No data on HBV serological markers prevalence
845	Talas, 2009	Occupational exposure to blood and body fluids among Turkish nursing students during clinical practice training: frequency of needlestick/sharp injuries and hepatitis B immunisation.	No data on HBV serological markers prevalence
846	Tamkus, 2014	Risk of needle-stick injuries associated with the use of subdermal needle electrodes during intraoperative neurophysiologic monitoring.	Not possible to extract data on HBV serological markers prevalence
847	Tangney, 1991	Hepatitis B vaccine uptake amongst general practitioners in the Republic of Ireland.	No data on HBV serological markers prevalence
848	Tarantola, 2006	Assessment of preventive measures for accidental blood exposure in operating theaters: A survey of 20 hospitals in Northern France.	No data on HBV serological markers prevalence
849	Tareen, 2005	Prevalence of hepatitis B & C virus in health care worker (paramedical staff) of tertiary care hospital.	Not possible to extract data on HBV serological markers prevalence
850	Tarhan, 2006	Accelerated versus classical hepatitis B virus vaccination programs in healthcare workers accelerated vs. classical HBV vaccination.	No data on HBV serological markers prevalence
851	Tatum, 1991	Changing attitudes and behavior of dentists towards hepatitis B vaccinations for infectious disease control: an epidemiological review.	No abstract and full text available
852	Taty-Taty, 1990	Carrier state for HBs antigen and HBc antibody in Brazzaville (congo): sero-epidemiological study in the hospital and non-hospital environment.	Not possible to extract data on HBV serological markers prevalence
853	Tavoschi, 2019	Hepatitis B and C among healthcare workers and patient groups at increased risk of iatrogenic transmission in the European Union/European Economic Area.	Review
854	Tavoschi, 2019	Risk of transmission of vaccine-preventable diseases in healthcare settings.	Comment on an article
855	Taylor, 2009	Evaluation of a hepatitis B lay health worker intervention for Chinese Americans and Canadians.	No data on HBV serological markers prevalence
856	Taylor, 2013	Evaluation of a hepatitis B lay health worker intervention for Cambodian Americans.	No data on HBV serological markers prevalence
857	Techapaitoon, 1987	Hepatitis-B virus infection in hospital personnel: an epidemiological study.	No abstract and full text available
858	Tedder, 1980	Hepatitis B in hospitals.	No abstract and full text available
859	Templeton, 2010	Aboriginal health worker screening for sexually transmissible infections and blood-borne viruses in a rural Australian juvenile correctional facility.	No data on HBV serological markers prevalence
860	Thakur, 2010	Efficacy of Shanvac-B recombinant DNA hepatitis B vaccine in health care workers of Northern India.	No data on HBV serological markers prevalence
861	Thomas, 1193	Viral hepatitis in health care personnel at The Johns Hopkins Hospital: The seroprevalence of and risk factors for hepatitis B virus and hepatitis C virus infection.	Duplicate study
862	Thomas, 2015	Prevalence of non-responsiveness to an indigenous recombinant hepatitis B vaccine: A study among South Indian health care workers in a tertiary hospital.	No data on HBV serological markers prevalence
863	Thompson, 1999	Hepatitis B vaccination of personnel employed in Victorian hospitals: are those at risk adequately protected?	No data on HBV serological markers prevalence

864	Thomson, 1989	Low prevalence of hepatitis B in mental handicap hospital.	No data on HBV serological markers prevalence
865	Tian, 2019	Anesthesiologists' acquisition of hepatitis B virus infection Risk and prevention.	No data on HBV serological markers prevalence
866	Tirounilacandin, 2009	Hepatitis-B infection: Awareness among medical, dental interns in India.	No data on HBV serological markers prevalence
867	Toska, 2011	Hepatitis B vaccination coverage levels among nurses in Greece: need for improvement.	No data on HBV serological markers prevalence
868	Tosti, 2007	Incidence of parenterally transmitted acute viral hepatitis among healthcare workers in Italy.	Not possible to extract data on HBV serological markers prevalence
869	Tosun, 2016	Evaluation of needle stick and sharp injuries among healthcare personnel.	No abstract and full text available
870	Treloar, 1994	Hospital administrators' tolerance of staff needlestick injuries.	No data on HBV serological markers prevalence
871	Tsega, 1989	Do hospital personnel in hyperendemic areas require immunization against hepatitis B virus (HBV) infection? Is vertical transmission of HBV infection common in this group?	Not possible to extract data on HBV serological markers prevalence
872	Tsetsegsaikhan, 2010	Prevalence of serologic markers of bloodborne viral infections among health care workers in Mongolia.	No abstract and full text available
873	Tuckerman, 2015	Factors affecting uptake of recommended immunizations among health care workers in South Australia.	No Laboratory-Confirmed data
874	Tullman, 1980	The threat of hepatitis B from dental school patients. A one-year study.	No data on HBV serological markers prevalence
875	Turner, 1991	Aspects of 'safe' surgery.	No abstract and full text available
876	Ukena, 1987	Immune response of hospital workers to hepatitis B vaccine.	Not possible to extract data on HBV serological markers prevalence
877	Unahalekhaka, 2014	Prevention of needlestick and sharp injuries among hospitals in thailand: A national survey.	No data on HBV serological markers prevalence
878	Urata, 2007	Serological status and vaccination for hepatitis B virus in nursing students during 1990-2006.	No data on HBV serological markers prevalence among HCWs
879	Valats, 2010	Investigation of memory B cell responses to hepatitis B surface antigen in health care workers considered as non-responders to vaccination.	No data on HBV serological markers prevalence
880	Van Laer, 2019	Occupational risk of blood-borne viruses in healthcare workers: A 20-year surveillance.	Not possible to extract data on HBV serological markers prevalence
881	Van Ommen, 2017	Assessing maternity care providers' knowledge of the management of hepatitis B in pregnancy.	Duplicate study
882	Van Ommen, 2019	Assessing Maternity Care Providers’ Knowledge of the Management of Hepatitis B in Pregnancy.	No data on HBV serological markers prevalence
883	vanWijk, 2010	Occupational blood exposure accidents in the Netherlands.	No data on HBV serological markers prevalence
884	Varghese, 2003	Post-exposure prophylaxis for blood borne viral infections in healthcare workers.	No data on HBV serological markers prevalence
885	Veini, 2011	Epidemiology of blood and body fluid exposures among healthcare workers, in a Greek tertiary hospital.	No abstract and full text available
886	Veronesi, 2004	Health hazard evaluation in private dental practices: a survey in a province of northen Italy.	No data on HBV serological markers prevalence
887	Veronesi, 2018	A multicentre study on epidemiology and prevention of needle stick injuries among students of nursing schools.	No data on HBV serological markers prevalence
888	Veyre, 1975	Viral hepatis B in the medical staff of a hospital (author's transl).	No abstract and full text available
889	Veyre, 1975	Viral hepatitis B in the medical staff of a hospital.	Duplicate study

890	Villasís-Keever, 2001	Prevalence of serological markers against measles, rubella, varicella, hepatitis B, hepatitis C, and human immunodeficiency virus among medical residents in mexico.	Not possible to extract data on HBV serological markers prevalence
891	Volpato, 2017	Occupational accident with biological material in the state of São Paulo 2007-2016.	No data on HBV serological markers prevalence
892	Vos, 2006	Needlestick injury and accidental exposure to blood: the need for improving the hepatitis B vaccination grade among health care workers outside the hospital.	Case report
893	Vranckx, 2004	Hepatitis B vaccination coverage in Belgian health care workers.	Not possible to extract data on HBV serological markers prevalence
894	Vranckx, 2004	Hepatitis B vaccination coverage in Belgian heath care workers.	Duplicate study
895	Vukadinovic, 1999	Needlestick and sharp injuries and recommended protective measures.	No abstract and full text available
896	Wagenheim, 2013	Assessment of liberal physician's occupational risks management on the exposure to biological fluids.	No data on HBV serological markers prevalence
897	Wakayama, 2019	Hepatitis B Immunization Analysis: Tracking of Antibody Levels among Dental Patients.	No data on HBV serological markers prevalence
898	Wakibi, 2016	Level of hepatitis b virus protection of first year medicine and nursing students in Mbarara university.	No data on HBV serological markers prevalence
899	Wall, 1995	Irish report urges mandatory HBV tests for doctors.	No data on HBV serological markers prevalence
900	Wang, 1985	Occupational exposure to hepatitis B virus among hospital personnel.	No abstract and full text available
901	Warner, 1984	Hepatitis B immune status of health workers: Survey of a regional hospital in New Brunswick.	No abstract and full text available
902	Wasnich, 1979	Prevalence of antibodies to hepatitis A and hepatitis B in a hospital population.	No abstract and full text available
903	Watson, 2006	A survey of pharmacy assistants in Grampian on prevention of HIV and hepatitis B and C.	No Laboratory-Confirmed data
904	Weber, 2001	Low prevalence of hepatitis c virus antibody among swiss dental health care workers [1].	No data on HBV serological markers prevalence
905	Weil, 1975	Viral hepatitis: its importance to dentists.	No abstract and full text available
906	Weil, 1977	A hepatitis serosurvey of New York dentists.	No abstract and full text available
907	Weiss, 1973	Viral hepatitis. A complication of extracorporeal circulations that does not spare the medical staff.	No abstract and full text available
908	Weiss, 2005	Prevalence of blood-borne pathogens in an urban, university-based general surgical practice.	No data on HBV serological markers prevalence
909	Werner, 1982	Accidental hepatitis-B-surface-antigen-positive inoculations. Use of e antigen to estimate infectivity.	Sample with already known result
910	Werner, 2013	The hepatitis B vaccine protects re-exposed health care workers, but does not provide sterilizing immunity.	No data on HBV serological markers prevalence
911	West, 1984	The risk of hepatitis B infection among health professionals in the United States: A review.	Review
912	Westmoreland, 1990	Immunization against hepatitis B--what can we expect? Results of a survey of antibody response to immunization in persons 'at risk' of occupational exposure to hepatitis B.	No data on HBV serological markers prevalence
913	Whelan, 1979	Prevalence of hepatitis B in a general hospital: screening of patients and staff.	Not possible to extract data on HBV serological markers prevalence
914	Wicker, 2008	Prevalence and prevention of needlestick injuries among health care workers in a German university hospital.	No data on HBV serological markers prevalence

915	Wicker, 2010	Occupational exposures to bloodborne viruses among German dental professionals and students in a clinical setting.	No Laboratory-Confirmed data
916	Wilcox, 1990	Incidence of hepatitis B exposure among USAF dental laboratory technicians.	No data on HBV serological markers prevalence
917	Williams, 1993	Assessing statistics for the measurement of workload at a genitourinary medicine clinic.	No data on HBV serological markers prevalence
918	Williams, 1993	Hepatitis B immunization and exposure to blood among surgical staff.	No data on HBV serological markers prevalence
919	Wilson, 2020	Vaccine hesitancy and self-vaccination behaviors among nurses in southeastern France.	No data on HBV serological markers prevalence
920	Winchester, 2010	A pilot survey to identify barriers to the reporting and management of occupational exposures to blood borne viruses in healthcare workers.	No data on HBV serological markers prevalence
921	Wisnom, 1993	Increased seroprevalence of hepatitis B in dental personnel necessitates awareness of revised pediatric hepatitis B vaccine recommendations.	No data on HBV serological markers prevalence
922	Wittmann, 2007	Needle stick injuries--risk from blood contact in dialysis.	No data on HBV serological markers prevalence
923	Wiwanitkit, 2002	An overview of hepatitis B serology screening check-up program among Thai workers.	No data on HBV serological markers prevalence among HCWs
924	Woldesonbet, 2016	Epidemiology of needle stick-sharp injuries (NSSIs) and potential high risk exposures among health professionals in Ethiopia: Neglected public health concern.	No data on HBV serological markers prevalence
925	Wong, 2005	A hospital clinic-based survey on traditional Chinese medicine usage among chronic hepatitis B patients.	No data on HBV serological markers prevalence
926	Wongpaitoon, 1986	Prevalence of hepatitis B virus markers in hospital personnel.	No abstract and full text available
927	Woo, 1992	Compliance with infection control procedures among California orthodontists.	No data on HBV serological markers prevalence
928	Wood, 1989	Hepatitis B vaccination and GPs.	No data on HBV serological markers prevalence
929	Wood, 1993	Risk factors for lack of detectable antibody following hepatitis B vaccination of Minnesota health care workers.	Not possible to extract data on HBV serological markers prevalence
930	Wruble, 1977	Hepatitis-B surface antigen (HBsAg) and antibody (anti-HBs) prevalence among laboratory and nonlaboratory hospital personnel.	Not possible to extract data on HBV serological markers prevalence
931	Wu, 2010	Health Care-Associated Transmission of Hepatitis B and C Viruses in Endoscopy Units.	Not possible to extract data on HBV serological markers prevalence
932	Wu, 2013	Estimation of the national incidence of needlestick injury in Taiwan healthcare workers.	No data on HBV serological markers prevalence
933	Wu, 2015	Incidence of percutaneous injury in Taiwan healthcare workers.	No data on HBV serological markers prevalence
934	Xu, 2013	A cross-sectional survey on the incidence of sharps injuries among healthcare workers at 26 hospitals in China.	No data on HBV serological markers prevalence
935	Yaacob, 1989	Awareness and acceptance of the hepatitis B vaccine by dental practitioners in Malaysia.	No data on HBV serological markers prevalence
936	Yacoub, 2010	Hepatitis B vaccination status and needlestick injuries among healthcare workers in syria.	Not possible to extract data on HBV serological markers prevalence
937	Yacovone, 1985	Acceptance of hepatitis B vaccine by Rhode Island dental practitioners.	No data on HBV serological markers prevalence
938	Yamazhan, 2011	Nursing students' immunisation status and knowledge about viral hepatitis in Turkey: a multi-centre cross-sectional study.	No Laboratory-Confirmed data

939	Yana-Victor, 1998	Fitness for work and health care workers carriers of hepatitis virus B/C.	No abstract and full text available
940	Yasin, 2019	Occupational exposure to blood and body fluids and associated factors among health care workers at the University of Gondar Hospital, Northwest Ethiopia.	No data on HBV serological markers prevalence
941	Yavuz, 2005	Seroprevalence of varicella, measles and hepatitis B among female health care workers of childbearing age.	Not possible to extract data on HBV serological markers prevalence
942	Yen, 2005	Study of hepatitis B (HB) vaccine non-responsiveness among health care workers from an endemic area (Taiwan).	Not possible to extract data on HBV serological markers prevalence
943	Yengopal, 2001	Infection control among dentists in private practice in Durban.	No data on HBV serological markers prevalence
944	Younai, 2001	Occupational exposures to blood in a dental teaching environment: results of a ten-year surveillance study.	No data on HBV serological markers prevalence among HCWs
945	Younai, 2010	Health Care-Associated Transmission of Hepatitis B & C Viruses in Dental Care (Dentistry).	Not possible to extract data on HBV serological markers prevalence
946	Younossi, 2000	Viral hepatitis guide for practicing physicians. Cleveland Clinic of Medicine.	No abstract and full text available
947	Yousafzai, 2014	Hepatitis B vaccination among primary health care workers in Northwest Pakistan.	No data on HBV serological markers prevalence
948	Yuan, 2019	Hepatitis B vaccination coverage among health care workers in China.	No data on HBV serological markers prevalence
949	Zaffina, 2014	Repeated vaccinations do not improve specific immune defenses against Hepatitis B in non-responder health care workers.	Not possible to extract data on HBV serological markers prevalence
950	Zarra, 2013	Percutaneous injuries amongst Greek endodontists: A national questionnaire survey.	No data on HBV serological markers prevalence
951	Zeesham, 2007	Evaluation of immune response to Hepatitis B vaccine in health care workers at a tertiary care hospital in Pakistan: an observational prospective study.	No data on HBV serological markers prevalence
952	Zeinali, 2017	Hepatitis B in exposed healthcare workers: Prevalence, HBS antibody and reason of injury.	No abstract and full text available
953	Zhang, 2009	Occupational exposure to blood and body fluids among health care workers in a general hospital, China.	No data on HBV serological markers prevalence
954	Zheng, 2013	Status of HBV infection and vaccination among health care workers in a public general hospital : A retrospective cohort study.	No abstract and full text available
955	Ziglam, 2013	Hepatitis B vaccination status among healthcare workers in a tertiary care hospital in Tripoli, Libya.	No data on HBV serological markers prevalence
956	Zogheib, 2011	Epidemiological study of accidents with biological material involving healthcare workers exposed to hepatitis B, C and HIV.	No data on HBV serological markers prevalence
957	Zoulek, 1986	Vaccination against hepatitis B. An overview with consideration of the epidemiology of hepatitis B among medical personnel.	No abstract and full text available
958	Zourbas, 1985	Immunization of dental surgeons against hepatitis B virus infection.	No abstract and full text available
959	Zourbas, 1985	Vaccination of dental surgeons against viral hepatitis B.	Sample with already known result
960	Zourbas, 1985	Sero-epidemiologic study of markers for hepatitis B in dentists in Ille-et-Vilaine.	No abstract and full text available
961	Zourbas, 1985	Seroepidemiology of hepatitis B markers in dentists in Ille-et-Vilaine.	Duplicate study
962	Zourbas, 1985	Serological and epidemiological study of hepatitis B markers in dentists from the Ille-and Vilaine department.	Duplicate study

963	Zuberi, 2000	Prevalence of hepatitis-B core antibodies amongst health care workers [2] (multiple letters).	No abstract and full text available

Supplementary Table 5. Risk of bias assessment

Author	Was the study's target population a close representation of the national population in relation to HBVprevalence?	Was the sampling frame a true or close representation of the target population?	Was some form of random selection used to select the sample, OR was acensus undertaken?	Were data collected directly from the subjects (as opposed to a proxy)?	Was an acceptable inclusion criteria definition used in the study?	Was the response rate ≥ 70 % or not significant different inrelevantdemographic characteristics between responders and nonresponders?	Was the HBV detection assay shown to have reliability and validity?	Was the same mode of data collection used for all subjects?	Was the length of the study period > or = 1 year?	Were the numerator(s) and denominator(s) for the HBV prevalence appropriate?	Risk of bias
Abbas, 1985	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Abdul Mujeeb, 1994	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Abdul Mujeeb, 1994	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Abdul Mujeeb, 1994	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Abiola, 2016	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Ahmad Akhoundi, 2015	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ahmad Akhoundi, 2015	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ajayi, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Al-Sohaibani, 1995	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Al-Sohaibani, 1995	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Aldershvile, 1978	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Moderate risk of bias
Alese, 2016	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Alese, 2016	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Alqahtani, 2014	No	Yes	No	Yes	No	Yes	Yes	Yes	Unclear	Yes	Moderate risk of bias
Alqahtani, 2014	No	Yes	No	Yes	No	Yes	Yes	Yes	Unclear	Yes	Moderate risk of bias
Alqahtani, 2014	No	Yes	No	Yes	No	Yes	Yes	Yes	Unclear	Yes	Moderate risk of bias
Ammon, 2000	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ammon, 2000	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ammon, 2000	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ammon, 2000	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Amsalu, 2016	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Anderson, 1983	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Andrew, 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Antoniello, 1989	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Bacârea, 2017	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bahmani, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Baldinger, 1986	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Baldo, 2002	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Barash, 1999	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Bass, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Bass, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Batista, 2006	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Batista, 2006	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Batra, 2015	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Bellissimo-Rodrigues, 2006	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Bellissimo-Rodrigues, 2006	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Belo, 2000	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Berris, 1978	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Berris, 1978	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Berry, 1984	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Bhattacharya, 2014	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Bianchini, 2019	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Bianchini, 2020	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Bidivale, 1992	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Bilounga Ndongo, 2018	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Moderate risk of bias
Bini, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Birguel, 2011	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Blanloeil, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Blanloeil, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Braka, 2006	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Butsashvili, 2012	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Cardell, 1999	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Carneiro, 2003	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chaudhari, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Chernesky, 1984	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias

Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Chiarakul, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Ciorla, 2005	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Daw, 2000	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Daw, 2000	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
de Liefde, 1987	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
de Paiva, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Deby, 2015	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Deby, 2015	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Deby, 2015	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Demsiss, 2018	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Dentico, 1991	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Di Nardo, 1995	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Dienstag, 1982	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Djeriri, 2008	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Domínguez, 2017	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Domínguez, 2017	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Donchin, 1992	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Dorkenoo, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Dorkenoo, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Dorkenoo, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Duseja, 2002	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Elavia, 1992	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Elavia, 1992	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Elavia, 1992	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Elduma, 2011	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Elduma, 2011	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Elduma, 2011	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
El-Hazmi, 2008	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
El-Hazmi, 2008	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
El-Hazmi, 2008	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmaghloub, 2017	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elmukashfi, 2012	No	Yes	Yes	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Elmukashfi, 2012	No	Yes	Yes	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Elmukashfi, 2012	No	Yes	Yes	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Elmukashfi, 2012	No	Yes	Yes	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Elmukashfi, 2012	No	Yes	Yes	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Elzouki, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elzouki, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elzouki, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elzouki, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elzouki, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Elzouki, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Erhabor, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Eskandarani, 2014	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Favero, 1981	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Feldman, 1975	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Ferreira, 1999	No	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Moderate risk of bias
Figueroa, 1994	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Fisker, 2003	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Fligner, 1989	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Fligner, 1989	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Fritzche, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Fritzche, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Fritzche, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Fritzche, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Fritzche, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Froesner, 1975	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Fukumoto, 1989	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Funderburke, 2000	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Ganczak, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Ganczak, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Ganju, 2000	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Low risk of bias
Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias

Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Garzillo, 2020	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Gebremariam, 2019	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Gershon, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Gershon, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Gibas, 1992	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Goel, 2017	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Goh, 1988	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Goldberg, 1999	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Goldsmith, 1989	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Gourbran, 1976	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Grady, 1975	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Grady, 1982	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Gutierrez, 2005	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Hadler, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Hakre, 1995	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Hansson, 1977	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Hardt, 1979	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Hebo, 2019	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Low risk of bias
Henderson, 2000	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Himmelreich, 2013	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Hirschowitz, 1980	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Hofmann, 1988	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Hollinger, 1977	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Hollinger, 1977	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Holt, 1986	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Hovig, 1985	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Hurlen, 1980	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Ingerslev, 1988	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Ingerslev, 1988	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Ingerslev, 1988	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Irmark, 2010	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Iserson, 1984	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Iserson, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Ivanova, 2013	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Janzen, 1978	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Jha, 2012	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Jha, 2012	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Kardam, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Kardam, 2014	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Kashiwagi, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Kashiwagi, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Kashiwagi, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Kashiwagi, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Kateera, 2015	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kefenie, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kessler, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kessler, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kessler, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kessler, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kessler, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
King, 1987	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kisangau, 2019	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Kisangau, 2019	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Klimek, 1985	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Kondili, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kondili, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kondili, 2007	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Köse, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Kosgeroglu, 2004	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kosgeroglu, 2004	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kuhls, 1987	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Kunches, 1983	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Kunst, 1973	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Kuruuzum, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Kuruuzum, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Kyelem, 2015	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Lanphear, 1993	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Levy, 1977	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Lewis, 1973	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Leyden, 1985	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Locquet, 2007	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Luksamijarulkul, 2001	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Lule, 1989	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias

Lungosi, 2019	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Ly, 2014	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Ly, 2014	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Malm, 1986	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Malm, 1986	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Malm, 1986	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Marena, 1996	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Marinho, 1999	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Martin, 1986	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Massaquoi, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Massaquoi, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Memon, 2012	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Méndez-Sánchez, 2006	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Meriki, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Mosendane, 2012	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Mosendane, 2012	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Mosendane, 2012	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Mosendane, 2012	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Mosley, 1975	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Mueller, 2015	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Mueller, 2015	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Mujeeb, 1998	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Nagao, 2008	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Nagashima, 2019	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Nayyar, 2017	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Nayyar, 2017	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Nayyar, 2017	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Nayyar, 2017	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Noah, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Noah, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Obiri-Yeboah, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Odemuyiwa, 2001	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Okwesili, 2015	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Ola, 2012	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Olubuyide, 1997	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Olubuyide, 1997	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Ozsoy, 2003	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Ozsoy, 2003	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Ozsoy, 2003	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Palmer, 1983	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Panhotra, 2005	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Panhotra, 2005	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Panis, 1986	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	Low risk of bias
Pattison, 1975	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Pavlopoulou, 2009	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Pećenková, 1978	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Pellissier, 2012	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	Low risk of bias
Pepe, 1986	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Platkov, 2003	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Qin, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Rapisarda, 2019	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Rapisarda, 2019	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Rehman, 1996	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Reingold, 1988	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Romieu, 1989	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Rybacki, 2013	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Saberifiroozi, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Saç, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Saç, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Saç, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Sacchetto, 2013	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Sangfelt, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Sangfelt, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Saqib, 2016	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Low risk of bias
Saqib, 2016	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Low risk of bias
Saqib, 2016	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Low risk of bias
Saqib, 2016	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Low risk of bias
Sarwar, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Sarwar, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Savage, 1984	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shabanah, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shah, 2017	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Shao, 2018	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Shao, 2018	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Shao, 2018	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Shao, 2018	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Shidrawi, 2004	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shim, 2011	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shin, 2006	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Shoaei, 2013	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Low risk of bias
Shrestha, 2006	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	Low risk of bias
Siew, 1987	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Sinclair, 1987	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias

Singh, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Singh, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Singh, 2010	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Skinhøj, 1984	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	Low risk of bias
Skinhøj, 1984	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Unclear	Yes	Low risk of bias
Slusarczyk, 2012	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Smith, 1976	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Smith, 1976	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Smith, 1987	No	Yes	No	Yes	No	Yes	Yes	Yes	Unclear	Yes	Moderate risk of bias
Snydman, 1984	No	Yes	No	Yes	No	Yes	Yes	Yes	Unclear	Yes	Moderate risk of bias
Sondlane, 2016	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Sondlane, 2016	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Song, 1999	No	Yes	No	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Spada, 2016	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Srichomkwum, 2009	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Storch, 1985	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Struve , 1992	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Sukriti, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Sukriti, 2008	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Taishete , 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Taishete , 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Taishete , 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tan, 1992	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tatsilong, 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Tatsilong, 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Tatsilong, 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Tatsilong, 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Tatsilong, 2016	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Taylor, 1991	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Taylor, 1991	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Taylor, 1991	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Taylor, 1991	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Taylor, 1991	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Techasathit, 2005	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Techasathit, 2005	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Techasathit, 2005	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Thomas, 1993	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Tong, 1987	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Tong, 1988	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Unclear	Yes	Low risk of bias
Topka, 2012	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Topka, 2012	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Topuridze, 2010	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Low risk of bias
Tufa, 2016	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Tufon, 2016	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Vardas, 2002	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Vedeo, 2013	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Moderate risk of bias
Verso, 2017	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Verso, 2017	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Weiss, 1994	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Werman, 1997	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Wickliffe, 1978	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Wijayadi, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Wijayadi, 2018	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Low risk of bias
Williams, 1974	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Williams, 1984	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Windsor, 1984	No	Yes	No	Yes	Yes	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Woodfield, 1976	No	Yes	No	Yes	No	No	Yes	Yes	Unclear	Yes	Moderate risk of bias
Yizengaw, 2018	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Yizengaw, 2018	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Yizengaw, 2018	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zayet, 2019	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Moderate risk of bias
Zibara, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Zibara, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Zibara, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias

Zibara, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Zibara, 2010	No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	Moderate risk of bias
Zuhaib Khan, 2016	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias
Zuhaib Khan, 2016	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Low risk of bias

Supplementary Table 6. Characteristics of included studies

Characteristics	**N = 448**	**%**
Year of publication; range	1970-2020	
Period of inclusion of participants; range	1964-2019	
Age (years); Median; IQR	34.6	[30.5-38.9]
%Male. range	[0.0-99.7]	
Study Design		
Case control	3	0.7
Cohort (Baseline data)	6	1.3
Cross sectional	439	98.0
Sampling		
Non probabilistic	386	86.2
Probabilistic	62	13.8
Sampling method		
Consecutive sampling	377	84.2
Convenience sampling	7	1.6
Multistage sampling	1	0.2
Simple random sampling	44	9.8
Stratified sampling	19	4.2
Number of sites		
Monocenter	275	61.4
Multicenter	171	38.2
Unclear/ Not reported	2	0.5
Timing of data collection		
Prospetively	420	93.8
Retroprospectively	7	1.6
Retrospectively	21	4.7
Country		
Albania	3	0.7
Australia	2	0.5
Austria	1	0.2
Belize	1	0.2
Brazil	10	2.2
Bulgaria	1	0.2
Burkina Faso	1	0.2
Cameroon	16	3.6
Canada	7	1.6
China	1	0.2
Czech Republic	1	0.2
Democratic Republic of the Congo	1	0.2
Denmark	9	2.0
Egypt	11	2.5
Ethiopia	17	3.8
Fiji	5	1.1
France	3	0.7
Georgia	2	0.5
Germany	6	1.3

Characteristics	**N = 448**	**%**
Ghana	1	0.2
Greece	4	0.9
India	26	5.8
Indonesia	2	0.5
Iran	16	3.6
Israel	3	0.7
Italy	20	4.5
Jamaïca	1	0.2
Japan	7	1.6
Kenya	3	0.7
Libya	8	1.8
Malaysia	8	1.8
Mexico	2	0.5
Morocco	10	2.2
Multiple countries	1	0.2
Nepal	1	0.2
Netherlands	1	0.2
New Zealand	2	0.5
Niger	1	0.2
Nigeria	17	3.8
North Korea	8	1.8
Norway	2	0.5
Pakistan	14	3.1
Papua New Guinea	1	0.2
Poland	4	0.9
Portugal	1	0.2
Republic of the Congo	3	0.7
Romania	1	0.2
Rwanda	1	0.2
saudi arabia	3	0.7
Saudi arabia	2	0.5
Saudi Arabia	6	1.3
Senegal	1	0.2
Sierra Leone	3	0.7
South Africa	8	1.8
South Korea	2	0.5
Spain	2	0.5
Sudan	8	1.8
Sweden	5	1.1
Tanzania	6	1.3
Thailand	16	3.6
Thaïland	1	0.2
Togo	3	0.7
Tunisia	15	3.4
Turkey	12	2.7
Uganda	13	2.9
United Kingdom	6	1.3

Characteristics	**N = 448**	**%**
United States of America	68	15.2
Yemen	1	0.2
Country income level		
High-income economies	176	39.3
Low-income economies	49	10.9
Lower-middle income economies	125	27.9
Upper-middle-income economies	97	21.7
Unclear/ Not reported	1	0.2
WHO Region		
Africa	95	21.2
America	89	19.9
Eastern Mediterranean	93	20.8
Europe	88	19.6
South-East Asia	46	10.3
Western Pacific	36	8.0
Unclear/ Not reported	1	0.2
UNSD Region		
Caribbean	1	0.2
Central Africa	20	4.5
Central America	15	3.4
Central Asia	11	2.5
Eastern Africa	40	8.9
Eastern Asia	18	4.0
Eastern Europe	7	1.6
Northern Africa	52	11.6
Northern America	63	14.1
Northern Europe	21	4.7
Oceania	10	2.2
South America	10	2.2
Southeastern Asia	30	6.7
Southern Africa	8	1.8
Southern Asia	48	10.7
Southern Europe	30	6.7
West Africa	27	6.0
Western Asia	24	5.4
Western Europe	12	2.7
Unclear/ Not reported	1	0.2
UNSD Continent		
Africa	147	32.8
Americas	89	19.9
Asia	131	29.2
Europe	70	15.6
Oceania	10	2.2
Unclear/ Not reported	1	0.2
Recrutment setting		
Rural	14	3.1
Unclear/ Not reported	156	34.8

Characteristics	**N = 448**	**%**
Urban	212	47.3
Urban/rural	66	14.7
HCWs Classificiation		
HCWs not specified	172	38.4
Health associate professionals	47	10.5
Health management and support personnel	40	8.9
Health professionals	140	31.3
Other health service providers not elsewhere classified	34	7.6
Personal care workers in health services	15	3.4
Study population		
Administrative staff	39	8.7
Ambulance driver	2	0.5
Ambulance officer	1	0.2
Anaesthesia technician	1	0.2
Anaesthetists	6	1.3
Assistant nurse	3	0.7
Dental aide	1	0.2
Dental assistant	2	0.5
Dentist	23	5.1
Dentists	1	0.2
Emergency medical technician	2	0.5
HCWs not specified	171	38.2
Hospital pharmacist	4	0.9
Medical assistant	3	0.7
Medical doctor	17	3.8
Medical laboratory technician	35	7.8
Medical student intern, Hospital volunteer	34	7.6
Midwife	8	1.8
Nurse	48	10.7
Nursing aide	11	2.5
Patient care assistant	3	0.7
Physician	27	6.0
Radiology	1	0.2
Surgeons	5	1.1
Detection assay		
Agar gel diffusion, Complement fixation test	1	0.2
Agglutination test kits	7	1.6
Auszyme Assay	10	2.2
Chemiluminescent enzyme immunoassay (CLEIA)	38	8.5
Counter-immunoelectrophoresis test	1	0.2
Direct ELISA	126	28.1
Direct passive haemagglutination	1	0.2
Electro-chemiluminescence immunoassay (ECLIA)	7	1.6
Enzyme-linked fluorescence assay (ELFA)	6	1.3

Characteristics	**N = 448**	**%**
Enzyme-linked fluorescence assay (ELFA), Microparticle Enzyme Immunoassay (MEIA)	5	1.1
Enzyme immunoassay (EIA)	48	10.7
Enzyme immunoassay (EIA), Radioimmunoassay	2	0.5
Haemagglutination techniques	1	0.2
Immunoassay kit	4	0.9
Immunochromatographic test	11	2.5
Immunodiffusion, countercurrent electrophoresis	1	0.2
Immunoelectroosmophoresis (IEOP)	1	0.2
Immunoenzymatic assay	10	2.2
Indirect ELISA	35	7.8
Lateral flow assay (LFA)	2	0.5
Microparticle direct chemiluminometric immunoassay	3	0.7
Microparticle Enzyme Immunoassay (MEIA)	13	2.9
Neutralisation Assay	1	0.2
Radioimmunoassay	80	17.9
Radioimmunoassay, Immunoelectroosmophoresis, Neutralization test	1	0.2
Rapid Diagnostic test	7	1.6
Reverse passive hemagglutination assay	4	0.9
Sandwich ELISA technique	3	0.7
Serological test	6	1.3
Solid-phase radioimmunoassay	2	0.5
Unclear/ Not reported	11	2.5
Target detected		
Ac anti-HBs (> 10 UI/l)	84	18.8
Ac anti-HBs + Ac anti- HBc	57	12.7
Ag HBe	3	0.7
Ag HBs	292	65.2
Ag HBs + IgM anti-HBc	12	2.7
Infection Status		
Acutely infected (Ag HBs + IgM anti-HBc +)	12	2.7
Current HBV infection (Ag HBe +)	3	0.7
Current HBV infection (Ag HBs +)	292	65.2
Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	57	12.7
Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	84	18.8
Sample types		
Serum	435	97.1
Unclear/Not reported	13	2.9
Risk of bias		
Low risk of bias	169	37.7
Moderate risk of bias	279	62.3

Supplementary Table 7. Individual characteristics of included studies

Author	Study Design	Sampling	Sampling method	Number of sites	Timing of data collection	Country	Study period	Mean or Median age (Years)	Male percentage	Recruitment setting	Risk of bias	HCWs Classification	Study population	Detection assay	Target detected	Infection Status	Sample types
Alshaa, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	United Kingdom	May/1983-Jun/1983	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	HCWs not specified	Indirect ELISA	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Abdul Mujeeb, 1994	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Pakistan	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Unclear/Not reported
Abdul Mujeeb, 1994	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Pakistan	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Unclear/Not reported
Abdul Mujeeb, 1994	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Pakistan	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health professionals	Medical doctor	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Unclear/Not reported
Abiola, 2016	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	May/2014-Jun/2014	35.86	37.61	Urban	Moderate risk of bias	Health professionals	Medical doctor	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ahmad Alkhundi, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	May/2011	40.4	85.7	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ahmad Alkhundi, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	May/2011	40.4	85.7	Urban	Moderate risk of bias	Health professionals	Dentist	Indirect ELISA	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Health professionals	Hospital pharmacist	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Personal care workers in health services	Patient care assistant	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Health professionals	Physician	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ajaie, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Apr/2003	Unclear/ Not reported	40	Urban	Moderate risk of bias	Health professionals	Radiology	Agglutination test kits	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Al- Sohaibani, 1995	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Saudi arabia	1992-1994	36.2	63.4; 16.6	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Al- Sohaibani, 1995	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Saudi arabia	1992-1994	36.2	63.4; 16.6	Urban	Moderate risk of bias	Health professionals	Physician	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Aldeshulte, 1978	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Denmark	Jan/1976	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health professionals	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Alese, 2016	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	June/2015- Sep/2015	Unclear/ Not reported	48.7	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Alese, 2016	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	June/2015- Sep/2015	Unclear/ Not reported	48.7	Urban	Moderate risk of bias	Health professionals	Medical doctor	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Alsharhan, 2014	Cross sectional	Non probabilistic	Stratified sampling	Monocenter	Prospectively	saudi arabia	Unclear/ Not reported	20.9	66.3	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Alsharhan, 2014	Cross sectional	Non probabilistic	Stratified sampling	Monocenter	Prospectively	saudi arabia	Unclear/ Not reported	34.5	27	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Alsharhan, 2014	Cross sectional	Non probabilistic	Stratified sampling	Monocenter	Prospectively	saudi arabia	Unclear/ Not reported	20.9	66.3	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ammon, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Germany	Feb/1997	Unclear/ Not reported	32.5	Urban	Moderate risk of bias	Health associate professionals	Dental assistant	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ammon, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Germany	Feb/1997	Unclear/ Not reported	32.5	Urban	Moderate risk of bias	Health professionals	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ammon, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Germany	Feb/1997	Unclear/ Not reported	32.5	Urban	Moderate risk of bias	Health associate professionals	Dental assistant	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ammon, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Germany	Feb/1997	Unclear/ Not reported	32.5	Urban	Moderate risk of bias	Health professionals	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Amsalu, 2016	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Ethiopia	Dec/2014-Jan/2015	31.6	10.5	Urban	Low risk of bias	Health management and support personnel	Administrative staff	Immunochromatographic test	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Anderson, 1983	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	United States of America	1982	Unclear/ Not reported	Unclear/ Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Andrew, 2016	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Retrospectively	Australia	Jan/2012-Dec/2013	50	28	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Antonello, 1999	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Italy	Jan/1982-Sep/1982	Unclear/ Not reported	Unclear/ Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Arac&iteq, 2017	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Retrospectively	Romania	Jan/2013-Dec/2014	31.9	14.9	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health professionals	Midwife	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health professionals	Nurse	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Personal care workers in health services	Nursing aide	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health professionals	Physician	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health professionals	Midwife	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health professionals	Nurse	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Personal care workers in health services	Nursing aide	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bahmani, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Iran	Nov/2007-Jun/2008	Unclear/ Not reported	32.9	Urban	Moderate risk of bias	Health professionals	Physician	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Ballmoser, 1996	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	United States of America	1994	41	Unclear/ Not reported	Urban	Low risk of bias	Health professionals	Surgeons	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Balzo, 2002	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Retrospectively	Italy	Unclear/ Not reported	37	58.7	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Banash, 1999	Cross sectional	Non probabilistic	Convenience sampling	Monocenter	Prospectively	United States of America	Jul/1995-Mar/1996	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Raso, 1962	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	United States of America	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Raso, 1962	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	United States of America	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Batista, 2006	Cross sectional	Probabilistic	Simple random sampling	Monocenter	Prospectively	Brazil	Aug/2003-Nov/2004	38.5	38.3	Urban	Low risk of bias	Health professionals	Dentist	Enzyme immunoassay (EIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Batista, 2006	Cross sectional	Probabilistic	Simple random sampling	Monocenter	Prospectively	Brazil	Aug/2003-Nov/2004	38.5	38.3	Urban	Low risk of bias	Health professionals	Dentist	Enzyme immunoassay (EIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Batra, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	India	Unclear/ Not reported	30.2	63.4	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bellissimo-Rodrigues, 2006	Case control	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Brazil	Aug/2001-Apr/2002	34.5	37	Urban	Low risk of bias	Health professionals	Dentist	Indirect ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bellissimo-Rodrigues, 2006	Case control	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Brazil	Aug/2001-Apr/2002	34.5	37	Urban	Low risk of bias	Health professionals	Dentist	Indirect ELISA	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Reto, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Nigeria	Unclear/ Not reported	32.3	72.5	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Remis, 1978	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Canada	1977	40.5	Unclear/ Not reported	Urban	Low risk of bias	Health professionals	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Remis, 1978	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Multiple countries	1977	40.5	Unclear/ Not reported	Urban	Low risk of bias	Health professionals	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Berry, 1984	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Moderate risk of bias	Health professionals	Anaesthetists	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Bhattacharya, 2014	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	India	May/2011-Jun/2014	29.3	Unclear/ Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Unclear/Not reported
Bianchini, 2019	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Italy	Apr/2014- Jun/2017	24.65	35.0	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Chemiluminescent enzyme immunoassay (CLEIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bianchini, 2020	Cohort (Registry data)	Non probabilistic	Consecutive sampling	Monocenter	Retrospectively	Italy	Jan/2017- Apr/2019	28.6	36	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Bidrude, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Malaysia	1988	35.0	11.4	Unclear/ Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bilounga Ndongo, 2018	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Cameroon	Jul/2016-Aug/2016	36	54.7	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Rapid Diagnostic test	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Bini, 2018	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Italy	Jan/2014-Dec/2015	Unclear/ Not reported	Unclear/ Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Microparticle direct chemiluminomitic immunoassay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Binyaei, 2011	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Cameroon	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Rural	Moderate risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Blanksell, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	France	Jun/1981- Jun/1982	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health professionals	Nurse	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Blanksell, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	France	Jun/1981- Jun/1982	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health professionals	Anaesthetists	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	Health associate professionals	Medical laboratory technician	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	Health professionals	Midwife	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	Health professionals	Nurse	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	Personal care workers in health services	Nursing aide	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Braka, 2006	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Uganda	2003	36.9	43	Rural	Low risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Buruschelli, 2012	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Georgia	2006-2007	Unclear/ Not reported	20	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Neutralisation Assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Cadell, 1995	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Sweden	Sep/1991-May/1993	36	47.1	Unclear/ Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Carneiro, 2003	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Brazil	Jan/1999-Jan/2000	37.6	88.9	Urban	Moderate risk of bias	Health professionals	Anaesthetists	Electro-chemiluminescence immunoassay (ECLIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Chaudhari, 2008	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	India	Unclear/ Not reported	Unclear/ Not reported	52.7	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Chernesky, 1984	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Canada	1978-1982	Unclear/ Not reported	Unclear/ Not reported	Urban	Moderate risk of bias	Health professionals	Anaesthetists	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme-linked fluorescence assay (ELFA), Microparticle Enzyme Immunoassay (MEIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Enzyme-linked fluorescence assay (ELFA), Microparticle Enzyme Immunoassay (MEIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health professionals	Nurse	Enzyme-linked fluorescence assay (ELFA), Microparticle Enzyme Immunoassay (MEIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health professionals	Physician	Enzyme-linked fluorescence assay (ELFA), Microparticle Enzyme Immunoassay (MEIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	HCWs not specified	Microparticle Enzyme Immunoassay (MEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Microparticle Enzyme Immunoassay (MEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health professionals	Nurse	Microparticle Enzyme Immunoassay (MEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Microparticle Enzyme Immunoassay (MEIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health professionals	Nurse	Microparticle Enzyme Immunoassay (MEIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Chiarakul, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Thailand	2004-2005	40.4	14.4	Unclear/ Not reported	Moderate risk of bias	Health professionals	Physician	Microparticle Enzyme Immunoassay (MEIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV (Ac anti-HBs (> 10 UI/l))	Serum
Cirrita, 2005	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Brazil	Jan/1994-Dec/1999	Unclear/ Not reported	Unclear/ Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Daw, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Libya	Jan/1999-Dec/1999	40	60	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Daw, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Libya	Jan/1999-Dec/1999	40	60	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
de Lettre, 1987	Cross sectional	Non probabilistic	Consecutive sampling	Unclear/ Not reported	Prospectively	New Zealand	1985	Unclear/ Not reported	Unclear/ Not reported	Unclear/ Not reported	Moderate risk of bias	Personal care workers in health services	Dental aide	Unclear/ Not reported	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
de Paiva, 2008	Probabilistic	Simple random sampling	Monocenter	Prospectively	Brazil	2006	37.2	44	Low risk of bias	Health professionals	Dentist	Indirect ELISA	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Deby, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Republic of the Congo	Mar/2013-Sep/2013	41	31.9	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Deby, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Republic of the Congo	Mar/2013-Sep/2013	41	31.9	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Deby, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Republic of the Congo	Mar/2013-Sep/2013	41	31.9	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Demissi, 2018	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Ethiopia	Jan/2017-Sep/2017	26.3	64.7	Urbanrrural	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Dentico, 1991	Cross sectional	Non probabilistic	Consecutive sampling	Monocenter	Prospectively	Italy	Unclear/ Not reported	37	53.25	Urbanrrural	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer

Garzillo, 2020	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Italy	Jan2016-Dec2016		47	54	Urban	Low risk of bias	Health professionals	Medical doctor	Immunocromatic assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Garzillo, 2020	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Italy	Jan2016-Dec2016		47	54	Urban	Low risk of bias	Health professionals	Nurse	Immunocromatic assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Garzillo, 2020	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Italy	Jan2016-Dec2016		47	54	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Immunocromatic assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Garzillo, 2020	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Italy	Jan2016-Dec2016		47	54	Urban	Low risk of bias	Health professionals	Medical doctor	Immunocromatic assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Garzillo, 2020	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Italy	Jan2016-Dec2016		47	54	Urban	Low risk of bias	Health professionals	Nurse	Immunocromatic assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Garzillo, 2020	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Italy	Jan2016-Dec2016		47	54	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Immunocromatic assay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Gebremariam, 2019	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Ethiopia	Jan2015-Fev2015		27	59.6	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Gershon, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	1999-2000		44	27	Unclear! Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Gershon, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	1999-2000		44	27	Unclear! Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Gibas, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	1977-1992	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Goel, 2017	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	India	Jan2013-Dec2013	28.4	59.8	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme-linked fluorescence assay (ELFA), Microparticle Enzyme Immunoassay (MEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Goh, 1988	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	China	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Goldberg, 1999	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	1995-1997	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Low risk of bias	Health professionals	Physician	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Goldsmith, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Kenya	1986-1987	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Goustian, 1976	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United Kingdom	Apr1975-Sep1975		96	65	Unclear! Not reported	Moderate risk of bias	Health professionals	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Grady, 1976	Cross sectional	Non probabilistic	Simple random sampling	Multicenter	Prospectively	United States of America	Unclear! Not reported		28	43	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health management and support personnel	Administrative staff	Auxzyme Assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health associate professionals	Medical laboratory technician	Auxzyme Assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health professionals	Nurse	Auxzyme Assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health professionals	Physician	Auxzyme Assay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health management and support personnel	Administrative staff	Auxzyme Assay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health professionals	Nurse	Auxzyme Assay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Grady, 1992	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America		1970	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health professionals	Physician	Auxzyme Assay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Gutierrez, 2005	Cohort (Baseline data)	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Brazil	Aug1999-Jan2002		38	22.5	Unclear! Not reported	Low risk of bias	HCWs not specified	HCWs not specified	Immunocromatic assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hadler, 1995	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	33.5	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hajos, 1995	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Belize	Jul1993-Sep1993		53	15	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Auxzyme Assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hansson, 1977	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Sweden		1975	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	HCWs not specified	HCWs not specified	Immunoelectroimmunosmophoresis (IEOP)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hardt, 1979	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Denmark		1977	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health professionals	Surgeons	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hebo, 2018	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Ethiopia	Nov2015-Jan2016		290	50.4	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Henderson, 2000	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Canada	Jan1992-Aug1992	Unclear! Not reported	Unclear! Not reported	13.9	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Microparticle Enzyme Immunoassay (MEIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Himmelreich, 2013	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Germany	Oct2010-Apr2012	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Unclear! Not reported	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hirschowitz, 1980	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United Kingdom	Jan1975-Mar1978	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hofmann, 1988	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Austria	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hollinger, 1977	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Hollinger, 1977	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Radioimmunoassay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Holt, 1986	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	New Zealand	May1984-Jun1984	Unclear! Not reported	Unclear! Not reported	22.1	Unclear! Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Hoyer, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Norway	Mar1982-Jun1982	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Hurlen, 1990	Cross sectional	Non probabilistic	Simple random sampling	Moncenter	Prospectively	Norway		1979	Unclear! Not reported	Unclear! Not reported	69	Unclear! Not reported	Moderate risk of bias	Dentist	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ingoesley, 1988	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Denmark		1987	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health associate professionals	Medical laboratory technician	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ingoesley, 1988	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Denmark		1987	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health associate professionals	Medical laboratory technician	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Ingoesley, 1988	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Denmark		1987	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Low risk of bias	Health management and support personnel	Administrative staff	Radioimmunoassay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Irmak, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Turkey	Apr2006-May2006		21.12	40.6	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Isersen, 1984	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Unclear! Not reported		33.6	88	Urban	Moderate risk of bias	HCWs not specified	Physician	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Isersen, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Oct1983	Unclear! Not reported	Unclear! Not reported	89	Urban	Moderate risk of bias	HCWs not specified	Physician	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ivanova, 2013	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Bulgaria	Unclear! Not reported		16.12		Unclear! Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Iversen, 1978	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Germany	Jun1974-Oct1975		30.1	35.89	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Solid-phase radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Jha, 2012	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	India	Unclear! Not reported		31.5	56.6	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Jha, 2012	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	India	Unclear! Not reported		31.5	56.6	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kardam, 2014	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	India	Sep2012-Oct2012	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Dentist	Rapid Diagnostic test	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kardam, 2014	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	India	Sep2012-Oct2012	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Rapid Diagnostic test	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kashiwagi, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Japan	Oct1980-Sep1983	34.1	27.78	Unclear! Not reported	Urbanirural	Moderate risk of bias	Health management and support personnel	Administrative staff	Reverse passive hemagglutination assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kashiwagi, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Japan	Oct1980-Sep1983	34.1	27.78	Urbanirural	Moderate risk of bias	HCWs not specified	HCWs not specified	Reverse passive hemagglutination assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kashiwagi, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Japan	Oct1980-Sep1983	34.1	27.78	Urbanirural	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Reverse passive hemagglutination assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kashiwagi, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Japan	Oct1980-Sep1983	34.1	27.78	Urbanirural	Moderate risk of bias	Health professionals	Physician	Reverse passive hemagglutination assay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kateeva, 2015	Cross sectional	Non probabilistic	Simple random sampling	Moncenter	Prospectively	Rwanda	Oct2013-Dec2013	54.08	45.5	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Enzyme immunoassay (EIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health associate professionals	Medical assistant	Enzyme immunoassay (EIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Enzyme immunoassay (EIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health professionals	Nurse	Enzyme immunoassay (EIA)	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health associate professionals	Medical assistant	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health professionals	Nurse	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kelleire, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Ethiopia	Sep1987	30.5	48.6	Urban	Moderate risk of bias	Health professionals	Physician	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kessler, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Jan1983-Feb/1983; Mar1983-Nov/1983	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kessler, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Jan1983-Feb/1983; Mar1983-Nov/1983	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban/rural	Moderate risk of bias	Health professionals	Physician	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kessler, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Jan1983-Feb/1983; Mar1983-Nov/1983	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health associate professionals	Medical laboratory technician	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kessler, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Jan1983-Feb/1983; Mar1983-Nov/1983	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Nurse	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kessler, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	United States of America	Jan1983-Feb/1983; Mar1983-Nov/1983	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Physician	Radioimmunoassay	Ac anti-HBs + Ac anti- HBc	Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	Serum
Kine, 1987	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Canada	Mar1985-Aug1985		Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kisangau, 2019	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Kenya	May2017-Jun2017		31	35.2	Unclear! Not reported	Low risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kisangau, 2019	Cross sectional	Probabilistic	Simple random sampling	Multicenter	Prospectively	Kenya	May2017-Jun2017		31	35.2	Unclear! Not reported	Low risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Klimek, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Poland	Jul1982	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban/rural	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kondli, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Albania	Jan2004	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health management and support personnel	Administrative staff	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kondli, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Albania	Jan2004	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kondli, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Albania	Jan2004	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Physician	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kosa, 2010	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Turkey	Jan2007-Dec2008		41.3		Urban	Low risk of bias	HCWs not specified	HCWs not specified	Indirect ELISA	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Kroegeroglu, 2004	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Turkey	Aug2002-Jan2003	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Nurse	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kroegeroglu, 2004	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Prospectively	Turkey	Aug2002-Jan2003	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Nurse	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kuhl, 1987	Cohort (Baseline data)	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	Mar1984-Nov1984		0.6		Unclear! Not reported	Moderate risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kunches, 1983	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America		1982	Unclear! Not reported	90.8	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kunst, 1973	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Netherlands	1969 -1972		Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Immunodiffusion, Countercurrent electrophoresis	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kunuzum, 2008	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Turkey	Jan2001-Jan2007	30.1	29.7	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ag HBs + IgM anti-HBc	Acutely infected (Ag HBs + IgM anti-HBc +)	Serum
Kunuzum, 2008	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Turkey	Jan2001-Jan2007	30.1	29.7	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Kvelien, 2015	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Burkina Faso	Mar2012-jan2012	43.6	46.6	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Lanphear, 1993	Cross sectional	Non probabilistic	Consecutive sampling	Multicenter	Retrospectively	United States of America	1985-1989	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA), Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Lavy, 1977	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	Dec1974-Feb1975	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Lewis, 1976	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Low risk of bias	HCWs not specified	HCWs not specified	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Lieshin, 1985	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Canada	Dec1983	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Health professionals	Medical doctor	Radioimmunoassay	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Locquet, 2007	Cross sectional	Non probabilistic	Consecutive sampling	Retrospectively	France	Jan1997-Dec2000		35	0	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ac anti-HBs (> 10 UI/l)	Immunity against HBV [Ac anti-HBs (> 10 UI/l)]	Serum
Lubumbashi, 2001	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Thailand	Oct1997-Mar1998	35.8	35.8	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Enzyme immunoassay (EIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Lule, 1989	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Kenya	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	Urban	Moderate risk of bias	Other health service providers not elsewhere classified	Medical student intern, Hospital volunteer	Unclear! Not reported	Ag HBs	Current HBV infection (Ag HBs +)	Unclear!Not reported
Lunegoli, 2019	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	Democratic Republic of the Congo	Oct2015-Jan2016		41.2	58.7	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Direct ELISA	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ly, 2014	Cross sectional	Non probabilistic	Consecutive sampling	Moncenter	Prospectively	United States of America	Unclear! Not reported	Unclear! Not reported	Unclear! Not reported	23.1	Urban	Moderate risk of bias	HCWs not specified	HCWs not specified	Chemiluminescent enzyme immunoassay (CLEIA)	Ag HBs	Current HBV infection (Ag HBs +)	Serum
Ly

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Supplementary Table 8. Subgroup analyses of worldwide prevalence of Hepatitis B virus in health care workers.

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I^2 (95%CI)	P heterogeneity	P difference subtypes
Current HBV infection								
Study Design								< 0.001
Case control	0.4 [0.1-0.7]	NA	2	2244	1	0	0.501	
Cohort (Baseline data)	0.3 [0-1.8]	NA	2	566	1.7 [1-3.6]	65.9 [0-92.3]	0.087	
Cross sectional	2.4 [2-2.8]	[0-11.1]	274	154924	4.2 [4-4.3]	94.3 [93.8-94.7]	< 0.001	
Sampling								0.522
Non probabilistic	2.3 [1.9-2.8]	[0-10.9]	231	149078	4.4 [4.3-4.6]	94.9 [94.5-95.3]	< 0.001	
Probabilistic	2.3 [1.5-3.4]	[0-10]	47	8656	2.2 [2-2.6]	80.2 [74.2-84.8]	< 0.001	
Timing of data collection								0.763
Prospetively	2.4 [2-2.8]	[0-11]	269	151711	4.2 [4-4.3]	94.3 [93.8-94.7]	< 0.001	
Retrospectively	1.8 [0.2-4.3]	[0-12.9]	9	6023	3 [2.3-3.9]	89 [81.4-93.5]	< 0.001	
Country								< 0.001
Albania	7.6 [5.2-10.2]	[0-29.9]	3	480	1 [1-1.5]	0 [0-58.2]	0.78	
Austria	0.6 [0.5-0.7]	NA	1	36000	NA	NA	1	
Belize	0.9 [0.1-2.3]	NA	1	330	NA	NA	1	
Brazil	0.3 [0-1.2]	[0-7.3]	4	4874	2.8 [1.8-4.3]	87.1 [69.1-94.6]	< 0.001	
Burkina Faso	12.6 [9-16.8]	NA	1	285	NA	NA	1	
Cameroon	6.4 [4.1-9.2]	[0.9-15.3]	14	2570	1.5 [1.1-2]	56.2 [20.4-75.9]	0.005	
Canada	0.1 [0-0.6]	[0-1.7]	4	786	1 [1-1]	0 [0-0]	0.972	
China	4.5 [3-6.1]	NA	1	693	NA	NA	1	
Czech Republic	4.9 [3.1-7]	NA	1	473	NA	NA	1	
Democratic Republic of the Congo	18.6 [11.4-27]	NA	1	97	NA	NA	1	
Denmark	0.1 [0-0.6]	[0-2.8]	7	5785	2.5 [1.8-3.5]	83.9 [68.5-91.8]	< 0.001	
Egypt	1.9 [0.7-3.5]	[0-10.2]	4	1301	1.5 [1-2.5]	53.4 [0-84.6]	0.092	
Ethiopia	4.3 [2.7-6.1]	[0.4-11.1]	13	2551	1.8 [1.3-2.4]	68.3 [43.6-82.2]	< 0.001	
Fiji	5 [4.1-5.9]	[3.5-6.8]	5	2632	1 [1-2.2]	5 [0-80.2]	0.378	
France	0.2 [0-0.7]	NA	1	863	NA	NA	1	
Georgia	2 [1.4-2.7]	NA	2	1683	1	0	0.893	
Germany	1.7 [0.7-3.1]	[0-9.3]	4	4542	1.8 [1-3]	67.9 [6.9-89]	0.025	
Ghana	1 [0.4-1.9]	NA	1	711	NA	NA	1	
Greece	0.8 [0.2-1.7]	NA	2	632	1	0	0.602	

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I² (95%CI)	P heterogeneity	P difference subtypes
India	1.9 [1.1-3.1]	[0-7.6]	15	10187	3.1 [2.5-3.7]	89.3 [84-92.8]	< 0.001	
Indonesia	6.2 [4.2-8.6]	NA	1	467	NA	NA	1	
Iran	0.6 [0-2.7]	[0-8.7]	7	1974	1.6 [1.1-2.5]	62.2 [13.9-83.4]	0.015	
Israel	1.2 [0.4-2.5]	[0-32.7]	3	1411	1.6 [1-3]	60.3 [0-88.7]	0.081	
Italy	0.4 [0-1.5]	[0-6.9]	8	2492	2.7 [2-3.7]	86.6 [75.7-92.6]	< 0.001	
Jamaïca	5.3 [3.6-7.4]	NA	1	562	NA	NA	1	
Japan	2.4 [1.1-4.2]	[0-10]	6	2023	2 [1.3-3]	75.6 [44.9-89.2]	0.001	
Kenya	10.1 [0.9-27.2]	NA	2	455	4.6 [2.7-8]	95.3 [86.2-98.4]	< 0.001	
Libya	1.4 [0.6-2.4]	[0.4-2.8]	7	950	1 [1-1.6]	0 [0-59.5]	0.634	
Malaysia	2.5 [1.3-4.2]	[0-8.6]	8	2258	1.8 [1.3-2.7]	70.6 [39-85.8]	0.001	
Mexico	0.1 [0-0.4]	NA	2	1143	1	0	0.571	
Morocco	0.2 [0-1.7]	[0-2.7]	6	267	1 [1-1.1]	0 [0-22.8]	0.896	
Nepal	1.4 [0-4.1]	NA	1	145	NA	NA	1	
Netherlands	1.6 [0.8-2.6]	NA	1	768	NA	NA	1	
Niger	14.5 [10-19.6]	NA	1	207	NA	NA	1	
Nigeria	9.8 [4.6-16.5]	[0-39.2]	11	1316	3.2 [2.5-4]	90.1 [84.3-93.8]	< 0.001	
North Korea	1.5 [0.3-3.5]	[0-24.4]	3	282	1 [1-3]	0 [0-88.6]	0.402	
Norway	0.3 [0-1.1]	NA	1	388	NA	NA	1	
Pakistan	2 [0.7-3.8]	[0-10]	14	3069	2.2 [1.7-2.8]	79.5 [66.4-87.5]	< 0.001	
Papua New Guinea	5.6 [1.9-10.9]	NA	1	107	NA	NA	1	
Poland	0.8 [0.3-1.5]	NA	2	1110	1.2	26.3	0.244	
Portugal	0 [0-0.1]	NA	1	3513	NA	NA	1	
Republic of the Congo	5.3 [1.8-10.3]	NA	1	113	NA	NA	1	
Romania	1.3 [0.5-2.5]	NA	1	524	NA	NA	1	
Rwanda	3 [1.4-5.1]	NA	1	336	NA	NA	1	
saudi arabia	0.1 [0-0.4]	[0-6.2]	3	900	1 [1-2.5]	0 [0-84.4]	0.513	
Saudi arabia	5.3 [3.3-7.7]	NA	2	430	1	0	0.388	
Saudi Arabia	0 [0-0.8]	NA	2	255	1	0	0.949	
Senegal	17.8 [15.2-20.6]	NA	1	775	NA	NA	1	
Sierra Leone	8.6 [6.6-10.9]	NA	2	658	1	0	0.407	
South Africa	4.5 [1.2-9.6]	[0-98.8]	3	907	3 [1.8-4.9]	88.7 [68.8-95.9]	< 0.001	
South Korea	2 [0.4-4.6]	NA	2	2139	2.5 [1.2-5.1]	84.3 [35.6-96.2]	0.012	
Sudan	2.8 [1-5.3]	[0-10.7]	8	833	1.4 [1-2.2]	52.3 [0-78.6]	0.04	
Sweden	0 [0-10.5]	NA	1	16	NA	NA	1	

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I² (95%CI)	P heterogeneity	P difference subtypes
Tanzania	6.7 [5.1-8.5]	[4.2-9.7]	5	902	1 [1-1.5]	0 [0-55.7]	0.758	
Thailand	3.1 [1.1-5.9]	[0-13.6]	6	2087	2.2 [1.5-3.2]	78.5 [52.6-90.2]	< 0.001	
Togo	42.7 [34.8-50.7]	NA	1	150	NA	NA	1	
Tunisia	1.8 [1.1-2.6]	[0.9-2.8]	7	1497	1 [1-1.8]	0 [0-69.9]	0.443	
Turkey	1.6 [0.7-2.9]	[0-6.8]	8	2568	2 [1.4-2.9]	75.3 [50.2-87.7]	< 0.001	
Uganda	7.5 [5.1-10.3]	[2.9-13.6]	10	629	1.1 [1-1.6]	21 [0-61.2]	0.25	
United Kingdom	2.1 [0.2-5.5]	[0-21.5]	5	1152	2.9 [2-4.2]	88.2 [75.1-94.4]	< 0.001	
United States of America	1.1 [0.4-2]	[0-9.3]	35	37812	5.9 [5.4-6.5]	97.2 [96.6-97.6]	< 0.001	
Yemen	9.9 [7.6-12.6]	NA	1	543	NA	NA	1	
Country income level								< 0.001
Low-income economies	6.6 [4.8-8.6]	[0-20.7]	39	6289	2.7 [2.4-3.1]	86.3 [82.2-89.4]	< 0.001	
Lower-middle income economies	3.7 [2.7-4.8]	[0-15.7]	83	23415	3.5 [3.2-3.8]	91.7 [90.4-92.9]	< 0.001	
Upper-middle-income economies	2.2 [1.5-3]	[0-9.7]	59	23608	3.2 [2.9-3.5]	90.3 [88.3-92]	< 0.001	
High-income economies	0.9 [0.6-1.3]	[0-5.9]	96	104296	4.5 [4.2-4.8]	95 [94.4-95.6]	< 0.001	
WHO Region								< 0.001
Africa	7.5 [6-9.2]	[0.1-22.7]	68	12662	3 [2.7-3.3]	88.9 [86.6-90.8]	< 0.001	
America	0.9 [0.4-1.6]	[0-8]	47	45507	5.4 [5-5.9]	96.6 [96.1-97.1]	< 0.001	
Eastern Mediterranean	1.3 [0.8-1.9]	[0-6.2]	60	11476	1.9 [1.7-2.2]	72.3 [64.3-78.6]	< 0.001	
Europe	1.1 [0.7-1.5]	[0-5.3]	53	64943	3.7 [3.3-4]	92.5 [91-93.8]	< 0.001	
South-East Asia	2.3 [1.4-3.3]	[0-8.3]	23	12886	3 [2.5-3.5]	88.7 [84.4-91.8]	< 0.001	
Western Pacific	3 [2.3-3.8]	[0.5-7]	26	10134	1.9 [1.6-2.3]	73.1 [60.4-81.8]	< 0.001	
Recrutment setting								0.116
Rural	5.2 [1.7-10.2]	[0-28.5]	9	1736	3.4 [2.6-4.3]	91.3 [85.7-94.7]	< 0.001	
Urban	2.3 [1.7-3]	[0-13]	132	54113	4.3 [4-4.5]	94.5 [93.9-95.1]	< 0.001	
HCWs Classificiation								0.091
Health associate professionals	2.5 [1.3-4.1]	[0-11.8]	28	2938	2 [1.6-2.4]	74.1 [62.5-82.1]	< 0.001	
Health management and support personnel	4.5 [2.5-6.9]	[0-18.8]	23	3056	2.6 [2.2-3.1]	85.3 [79.2-89.7]	< 0.001	
Health professionals	1.9 [1.1-2.8]	[0-15.2]	91	23085	4 [3.8-4.3]	93.9 [93-94.6]	< 0.001	
Other health service providers not elsewhere classified	2.6 [1-4.9]	[0-16.6]	18	5333	3.9 [3.4-4.6]	93.5 [91.2-95.3]	< 0.001	
Personal care workers in health services	4.4 [1.8-7.9]	[0-18]	9	1375	2.1 [1.5-2.9]	76.7 [55.6-87.8]	< 0.001	
Acute HBV infection								

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I^2 (95%CI)	P heterogeneity	P difference subtypes
Sampling								0.002
Non probabilistic	7.3 [1.9-15.5]	[0-47.2]	10	2882	6.5 [5.5-7.6]	97.6 [96.7-98.2]	< 0.001	
Probabilistic	0.5 [0.1-1.2]	NA	2	783	1	0	0.64	
Timing of data collection								< 0.001
Prospetively	6.4 [1.8-13.1]	[0-40.7]	11	3345	6.2 [5.3-7.2]	97.4 [96.4-98.1]	< 0.001	
Retrospectively	0 [0-0.5]	NA	1	320	NA	NA	1	
Country								< 0.001
Brazil	0.6 [0.1-1.6]	NA	1	474	NA	NA	1	
India	0 [0-0.3]	NA	2	687	1	0	0.846	
South Africa	0.6 [0-2.5]	NA	1	170	NA	NA	1	
Sweden	2.3 [1.3-3.4]	NA	1	797	NA	NA	1	
Thailand	23.8 [14.6-34.4]	[0-69.3]	4	542	2 [1.2-3.3]	75.3 [31.5-91.1]	0.007	
Turkey	5.4 [0-36.4]	NA	2	686	11 [7.9-15.1]	99.2 [98.4-99.6]	< 0.001	
Uganda	0.3 [0-1.4]	NA	1	309	NA	NA	1	
Country income level								< 0.001
High-income economies	2.3 [1.3-3.4]	NA	1	797	NA	NA	1	
Low-income economies	0.3 [0-1.4]	NA	1	309	NA	NA	1	
Lower-middle income economies	0 [0-0.3]	NA	2	687	1	0	0.846	
Upper-middle-income economies	11.1 [3-23]	[0-62.5]	8	1872	6.4 [5.4-7.7]	97.6 [96.5-98.3]	< 0.001	
WHO Region								0.032
Africa	0.4 [0-1.3]	NA	2	479	1	0	0.617	
America	0.6 [0.1-1.6]	NA	1	474	NA	NA	1	
Europe	4.2 [0-17.2]	[0-100]	3	1483	8.2 [6.2-10.9]	98.5 [97.4-99.2]	< 0.001	
South-East Asia	12.7 [1.8-30]	[0-82.5]	6	1229	6.8 [5.6-8.3]	97.8 [96.8-98.6]	< 0.001	
Recrutment setting								0.28
Rural	0.3 [0-1.4]	NA	1	309	NA	NA	1	
Urban	6.8 [0-33.7]	NA	2	840	10.4 [7.4-14.5]	99.1 [98.2-99.5]	< 0.001	
HCWs Classificiation								< 0.001
Health associate professionals	38.1 [18.3-60]	NA	1	21	NA	NA	1	
Health professionals	9.5 [0.1-27.7]	[0-98.8]	4	839	5.9 [4.4-7.8]	97.1 [94.9-98.4]	< 0.001	
Other health service providers not elsewhere classified	0 [0-0.3]	NA	2	570	1	0	0.931	
Immunity against HBV								
Study Design								0.639

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I² (95%CI)	P heterogeneity	P difference subtypes
Cohort (Baseline data)	61.6 [40.5-80.6]	[0-100]	4	1311	7.7 [6-9.8]	98.3 [97.3-99]	< 0.001	
Cross sectional	56.3 [48.8-63.7]	[2.4-100]	80	36311	14.2 [13.8-14.7]	99.5 [99.5-99.5]	< 0.001	
Sampling								0.683
Non probabilistic	57 [49.2-64.6]	[2.5-100]	75	35909	14.7 [14.3-15.2]	99.5 [99.5-99.6]	< 0.001	
Probabilistic	54.1 [42.3-65.8]	[15.6-90.1]	9	1713	4.3 [3.5-5.4]	94.7 [91.8-96.5]	< 0.001	
Timing of data collection								< 0.001
Prospetively	54.1 [46.7-61.5]	[2.8-99.5]	74	30643	12.9 [12.4-13.3]	99.4 [99.4-99.4]	< 0.001	
Retrospectively	80.5 [69.2-89.8]	[33.5-100]	9	6154	10.1 [8.9-11.5]	99 [98.7-99.2]	< 0.001	
Country								< 0.001
Australia	80 [78.1-81.9]	NA	1	1758	NA	NA	1	
Bulgaria	73.2 [68.2-78]	NA	1	314	NA	NA	1	
Cameroon	16 [9.4-23.9]	NA	1	100	NA	NA	1	
Denmark	0 [0-9.3]	NA	1	18	NA	NA	1	
France	92 [90.2-93.7]	NA	1	880	NA	NA	1	
Germany	55.9 [50-61.8]	NA	2	323	1.1	12.8	0.284	
Greece	77 [72.7-81]	NA	2	395	1	0	0.851	
India	72.1 [52-88.4]	[4.9-100]	9	1513	7.9 [6.9-9.2]	98.4 [97.9-98.8]	< 0.001	
Iran	82.8 [76.5-88.2]	[62.3-96.6]	8	1035	2 [1.4-2.8]	74.7 [48.9-87.5]	< 0.001	
Italy	74.9 [62.2-85.7]	[26-100]	6	9370	12.8 [11.2-14.6]	99.4 [99.2-99.5]	< 0.001	
Japan	88.6 [85.6-91.3]	NA	1	491	NA	NA	1	
Kenya	47.1 [41.4-52.8]	NA	1	295	NA	NA	1	
Morocco	44.4 [24.7-65]	[0-100]	4	98	1.8 [1.1-3.1]	69.2 [11.3-89.3]	0.021	
North Korea	52.3 [7.7-94.6]	[0-100]	4	571	11.8 [9.9-14.2]	99.3 [99-99.5]	< 0.001	
Norway	5 [4.2-5.9]	NA	1	2546	NA	NA	1	
Poland	53.7 [49.7-57.7]	NA	1	590	NA	NA	1	
Saudi Arabia	66.2 [40-88]	NA	2	683	7 [4.6-10.8]	98 [95.3-99.1]	< 0.001	
South Africa	44.1 [29.1-59.7]	NA	2	572	3.5 [1.9-6.5]	91.7 [71.3-97.6]	< 0.001	
Spain	60.2 [47.1-72.7]	NA	2	271	2.1 [1-4.3]	76.3 [0-94.6]	0.04	
Sweden	73.9 [51.2-91.3]	[0-100]	3	4077	14.5 [12-17.6]	99.5 [99.3-99.7]	< 0.001	
Tanzania	56.9 [52.9-60.8]	NA	1	598	NA	NA	1	
Thailand	29 [15-45.2]	[0-86.8]	5	1707	5.1 [3.9-6.7]	96.1 [93.3-97.7]	< 0.001	
Thaïland	11.4 [7.6-15.8]	NA	1	237	NA	NA	1	
Togo	66.7 [58.9-74]	NA	1	150	NA	NA	1	
Tunisia	51.4 [35-67.8]	[3.4-97.6]	7	1497	6.3 [5.2-7.7]	97.5 [96.3-98.3]	< 0.001	

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I^2 (95%CI)	P heterogeneity	P difference subtypes
Turkey	93.9 [91-96.3]	NA	2	381	1	7.6	0.298	
Uganda	38.6 [33.2-44.1]	NA	1	311	NA	NA	1	
United States of America	31.1 [18.2-45.8]	[0-88.3]	13	6841	12.1 [11.1-13.3]	99.3 [99.2-99.4]	< 0.001	
Country income level								0.678
High-income economies	53.1 [42-64.1]	[0.5-100]	40	28814	18.9 [18.2-19.6]	99.7 [99.7-99.7]	< 0.001	
Low-income economies	52.6 [25.7-78.6]	NA	2	461	5.7 [3.5-9.3]	96.9 [92-98.8]	< 0.001	
Lower-middle income economies	57.3 [46.9-67.5]	[10.4-97]	23	4101	6.5 [5.9-7.2]	97.6 [97.1-98.1]	< 0.001	
Upper-middle-income economies	63.7 [50.3-76.2]	[7.7-100]	19	4246	8.4 [7.6-9.2]	98.6 [98.3-98.8]	< 0.001	
WHO Region								0.001
Africa	44.7 [34.7-54.8]	[12.7-79.4]	7	2026	4.5 [3.6-5.7]	95.1 [92.1-97]	< 0.001	
America	31.1 [18.2-45.8]	[0-88.3]	13	6841	12.1 [11.1-13.3]	99.3 [99.2-99.4]	< 0.001	
Eastern Mediterranean	65 [55.7-73.8]	[21.9-97.2]	21	3313	5.1 [4.5-5.8]	96.2 [95.1-97]	< 0.001	
Europe	67.4 [53.9-79.6]	[6.4-100]	22	19165	18.9 [18-19.8]	99.7 [99.7-99.7]	< 0.001	
South-East Asia	53.8 [38.2-69]	[1.7-99.9]	15	3457	8.7 [7.8-9.6]	98.7 [98.4-98.9]	< 0.001	
Western Pacific	64.1 [33.5-89.6]	[0-100]	6	2820	13.8 [12.2-15.7]	99.5 [99.3-99.6]	< 0.001	
Recrutment setting								< 0.001
Rural	38.6 [33.2-44.1]	NA	1	311	NA	NA	1	
Urban	68.4 [57.3-78.6]	[3.8-100]	42	15580	14 [13.4-14.7]	99.5 [99.4-99.5]	< 0.001	
HCWs Classificiation								0.001
Health associate professionals	72.1 [60.3-82.6]	[26.1-99.8]	11	1160	4.1 [3.3-4.9]	93.9 [90.9-95.9]	< 0.001	
Health management and support personnel	29.8 [12.9-50]	[0-96.9]	5	863	5.7 [4.4-7.3]	96.9 [94.9-98.1]	< 0.001	
Health professionals	54 [40.3-67.4]	[1.8-99.9]	21	5679	9.7 [8.9-10.5]	98.9 [98.7-99.1]	< 0.001	
Other health service providers not elsewhere classified	62.7 [47.8-76.5]	[10.4-99.6]	10	9136	13.6 [12.4-15]	99.5 [99.3-99.6]	< 0.001	
Personal care workers in health services	73 [63.1-81.9]	[0-100]	3	299	1.7 [1-3.1]	63.4 [0-89.5]	0.065	
Immunity against HBV due to natural infection								
Study Design								0.817
Case control	8.1 [4-13.4]	NA	1	135	NA	NA	1	
Cross sectional	8.8 [6.5-11.3]	[0-34.3]	61	25102	6.5 [6.1-6.9]	97.6 [97.3-97.9]	< 0.001	
Sampling								0.005
Non probabilistic	9.5 [7.1-12.2]	[0-35.9]	57	23243	6.5 [6.1-6.9]	97.6 [97.3-97.9]	< 0.001	

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I² (95%CI)	P heterogeneity	P difference subtypes
Probabilistic	2.7 [0.4-6.7]	[0-26.7]	5	1994	4.3 [3.2-5.8]	94.6 [90.2-97]	< 0.001	
Timing of data collection								0.001
Prospetively	8.7 [6.4-11.4]	[0-34.6]	54	24312	6.8 [6.4-7.3]	97.8 [97.6-98.1]	< 0.001	
Retrospectively	20.5 [13.1-29]	NA	2	102	1	0	0.485	
Country								< 0.001
Australia	1.4 [0-5.8]	NA	1	73	NA	NA	1	
Brazil	5.4 [1.9-10.4]	[0-29.1]	5	1480	3.1 [2.1-4.4]	89.4 [78.1-94.9]	< 0.001	
Cameroon	2.6 [0-7.7]	NA	1	77	NA	NA	1	
Canada	3.5 [0-17.7]	[0-100]	3	861	3.9 [2.5-6]	93.3 [83.8-97.2]	< 0.001	
Denmark	8.2 [3.2-15.2]	NA	1	85	NA	NA	1	
Ethiopia	45.3 [36.7-54]	[14.4-78.3]	4	385	1.6 [1-2.7]	60.2 [0-86.7]	0.056	
France	18.8 [10-29.3]	NA	1	64	NA	NA	1	
India	0 [0-0.4]	NA	1	437	NA	NA	1	
Indonesia	14.6 [11.5-17.9]	NA	1	467	NA	NA	1	
Iran	2 [1.4-2.8]	NA	1	1628	NA	NA	1	
Italy	0 [0-0.4]	[0-1.7]	5	1284	1.2 [1-2]	35.3 [0-75.7]	0.186	
Libya	25.9 [22-30]	NA	1	459	NA	NA	1	
New Zealand	12.8 [1-34.6]	NA	2	1454	9.3 [6.5-13.4]	98.9 [97.7-99.4]	< 0.001	
North Korea	20.7 [17.4-24.1]	NA	1	571	NA	NA	1	
Poland	15.5 [13.3-17.9]	NA	1	961	NA	NA	1	
Saudi Arabia	20.5 [13.1-29]	NA	2	102	1	0	0.485	
Sierra Leone	1.6 [0.6-3]	NA	1	447	NA	NA	1	
South Africa	11.3 [1.7-27.5]	NA	2	484	4.5 [2.6-7.7]	95 [84.8-98.3]	< 0.001	
Sweden	2.3 [1.3-3.4]	NA	1	797	NA	NA	1	
Thailand	8.4 [0.4-24.8]	NA	2	1491	7.4 [4.9-11.2]	98.2 [95.8-99.2]	< 0.001	
Tunisia	15.3 [13.5-17.2]	NA	1	1497	NA	NA	1	
Turkey	18.6 [14.8-22.7]	NA	1	366	NA	NA	1	
Uganda	1.3 [0-4.9]	NA	2	620	2.7 [1.3-5.3]	85.9 [43.3-96.5]	0.008	
United Kingdom	0.6 [0.1-1.5]	NA	1	507	NA	NA	1	
United States of America	10.1 [7.2-13.5]	[0.5-28.6]	20	8640	4.4 [3.8-5]	94.8 [93.2-96.1]	< 0.001	
Country income level								0.419
High-income economies	7.6 [5.1-10.5]	[0-31.7]	39	15399	6 [5.6-6.5]	97.3 [96.8-97.7]	< 0.001	
Low-income economies	20 [4.9-41.5]	[0-94.4]	7	1452	8.7 [7.4-10.2]	98.7 [98.2-99]	< 0.001	
Lower-middle income economies	3.8 [0-21.7]	[0-100]	3	2011	10 [7.8-12.8]	99 [98.4-99.4]	< 0.001	

	Prevalence. % (95%CI)	95% Prediction interval	N Studies	N Participants	H (95%CI)	I^2 (95%CI)	P heterogeneity	P difference subtypes
Upper-middle-income economies	9.2 [5.1-14.3]	[0-35.1]	13	6375	6.1 [5.3-7.1]	97.3 [96.5-98]	< 0.001	
WHO Region								0.163
Africa	15.8 [5.6-29.7]	[0-75.4]	10	2013	7.4 [6.4-8.5]	98.2 [97.5-98.6]	< 0.001	
America	8.5 [6-11.4]	[0-27.8]	28	10981	4.7 [4.2-5.3]	95.5 [94.4-96.4]	< 0.001	
Eastern Mediterranean	15 [4.9-29.2]	[0-76.9]	5	3686	9.2 [7.6-11]	98.8 [98.3-99.2]	< 0.001	
Europe	3.3 [0.5-8.4]	[0-32.7]	11	4064	6.7 [5.8-7.7]	97.8 [97-98.3]	< 0.001	
South-East Asia	6.1 [0.7-16.2]	[0-75]	4	2395	7.7 [6.1-9.8]	98.3 [97.3-99]	< 0.001	
Western Pacific	11.2 [3.7-21.9]	[0-74.6]	4	2098	6.2 [4.7-8.2]	97.4 [95.5-98.5]	< 0.001	
Recrutment setting								0.005
Rural	2.7 [0.4-6.7]	[0-33.5]	4	1640	3.8 [2.7-5.5]	93.2 [85.8-96.7]	< 0.001	
Urban	10.4 [6.8-14.7]	[0-40.4]	29	13179	7.2 [6.6-7.8]	98.1 [97.7-98.4]	< 0.001	
HCWs Classificiation								< 0.001
Health associate professionals	21.5 [9.8-36]	[0-76.7]	6	847	4.5 [3.4-5.8]	95 [91.6-97.1]	< 0.001	
Health management and support personnel	27.5 [7.1-54.4]	[0-100]	4	337	5.1 [3.7-6.9]	96.1 [92.7-97.9]	< 0.001	
Health professionals	7.1 [4.1-10.7]	[0-29.2]	20	9126	5.7 [5.1-6.4]	96.9 [96.1-97.6]	< 0.001	
Other health service providers not elsewhere classified	0.6 [0-4.3]	[0-98.3]	3	1351	2.4 [1.4-4.2]	82.8 [47.4-94.4]	0.003	
Personal care workers in health services	18.3 [8.9-30]	NA	2	1059	1.9 [1-3.9]	71.4 [0-93.6]	0.062	

HBV: Hepatitis B virus; CI: confidence interval; NA: not applicable; UNSD: United Nations Statistics Division, WHO: World Health Organization.

Supplementary Table 9. Univariable and multivariable meta-regression analysis on the prevalence of Hepatitis B virus serological markers in health care workers.

Variables	Bivariate Model				Multivariable Model			
	Estimate	P-Value	P-Value Global	OR(95% CI)	Estimate	P-Value	OR [95% CI]	R2
Current HBV infection								**26.84%**
Study Design			0.129					
Case control	1			1				
Cohort (Baseline data)	-0.019 [-0.201-0.164]	0.84		0.98 [0.82 - 1.18]				
Cross sectional	0.085 [-0.044-0.215]	0.198		1.09 [0.96 - 1.24]				
Sampling			0.508					
Non probabilistic	1			1				
Probabilistic	0.011 [-0.021-0.043]	0.508		1.01 [0.98 - 1.04]				
Timing of data collection			0.805					
Prospetively	1			1				
Retrospectively	-0.009 [-0.078-0.06]	0.805		0.99 [0.92 - 1.06]				
Country income level			**0**					
High-income economies	1			1				
Low-income economies	0.163 [0.129-0.198]	**0**		1.18 [1.14 - 1.22]				
Lower-middle income economies	0.101 [0.074-0.128]	**0**		1.11 [1.08 - 1.14]				
Upper-middle-income economies	0.059 [0.03-0.088]	**0**		1.06 [1.03 - 1.09]				
WHO Region			**0**					
Africa	1			1	1		1	
America	-0.181 [-0.213--0.148]	**0**		0.83 [0.81 - 0.86]	-0.181[-0.213--0.148]	**0**	0.83 [0.81 - 0.86]	
Eastern Mediterranean	-0.139 [-0.171--0.106]	**0**		0.87 [0.84 - 0.9]	-0.139[-0.171--0.106]	**0**	0.87 [0.84 - 0.9]	
Europe	-0.172 [-0.203--0.141]	**0**		0.84 [0.82 - 0.87]	-0.172[-0.203--0.141]	**0**	0.84 [0.82 - 0.87]	
South-East Asia	-0.12 [-0.161--0.079]	**0**		0.89 [0.85 - 0.92]	-0.12[-0.161--0.079]	**0**	0.89 [0.85 - 0.92]	
Western Pacific	-0.108 [-0.147--0.069]	**0**		0.9 [0.86 - 0.93]	-0.108[-0.147--0.069]	**0**	0.9 [0.86 - 0.93]	
Recrutment setting			0.082					
Rural	1			1				
Urban	-0.071 [-0.15-0.009]	0.082		0.93 [0.86 - 1.01]				
HCWs Classificiation			0.109					
Health associate professionals	1			1				
Health management and support personnel	0.037 [-0.036-0.109]	0.319		1.04 [0.96 - 1.12]				
Health professionals	-0.033 [-0.089-0.024]	0.257		0.97 [0.91 - 1.02]				
Other health service providers not elsewhere classified	-0.014 [-0.09-0.062]	0.718		0.99 [0.91 - 1.06]				
Personal care workers in health services	0.047 [-0.053-0.147]	0.358		1.05 [0.95 - 1.16]				
Infection Status			0.032					
Current HBV infection (Ag HBe +)	1			1				
Current HBV infection (Ag HBs +)	0.112 [0.009-0.214]	0.032		1.12 [1.01 - 1.24]				
Mean or Median age Years	0.0008 [-0.0024-0.0039]	0.6267						
Gender	0.0009 [0.0001-0.0017]	0.027						
Acute HBV infection								**12.08%**
Sampling			0.145					
Non probabilistic	1			1			1	
Probabilistic	-0.207 [-0.485-0.071]	0.145		0.81 [0.62 - 1.07]	-1.6609[-3.0221--0.2997]	0.0168	0.19 [0.05 - 0.74]	
Timing of data collection			0.205					
Prospetively	1			1				
Retrospectively	-0.24 [-0.612-0.131]	0.205		0.79 [0.54 - 1.14]				
Country income level			0.139					
High-income economies	1			1				
Low-income economies	-0.084 [-0.627-0.459]	0.761		0.92 [0.53 - 1.58]				
Lower-middle income economies	-0.125 [-0.595-0.345]	0.602		0.88 [0.55 - 1.41]				
Upper-middle-income economies	0.195 [-0.213-0.603]	0.35		1.22 [0.81 - 1.83]				
WHO Region			0.294					
Africa	1			1				
America	0.005 [-0.504-0.514]	0.984		1.01 [0.6 - 1.67]				
Europe	0.129 [-0.251-0.509]	0.507		1.14 [0.78 - 1.66]				
South-East Asia	0.289 [-0.056-0.633]	0.1		1.34 [0.95 - 1.88]				
Recrutment setting			0.528					
Rural	1			1				
Urban	0.197 [-0.416-0.811]	0.528		1.22 [0.66 - 2.25]				
HCWs Classificiation			0.025					
Health associate professionals	1			1			1	
Health professionals	-0.354 [-0.805-0.097]	0.124		0.7 [0.45 - 1.1]	-0.0704[-0.5973-0.4565]	0.7934	0.93 [0.55 - 1.58]	
Other health service providers not elsewhere classified	-0.641 [-1.122--0.16]	0.009		0.53 [0.33 - 0.85]	-1.4122[-2.3521--0.4723]	0.0032	0.24 [0.1 - 0.62]	
Mean or Median age Years	0.0171 [-0.0033-0.0376]	0.1002		1.02 [1 - 1.04]				
Gender	-0.0104 [-0.0189--0.0019]	0.016		0.99 [0.98 - 1]	0.0523[0.002-0.1027]	0.0416	1.05 [1 - 1.11]	
Immunity against HBV								
Study Design			0.753					
Cohort (Baseline data)	1			1				
Cross sectional	-0.054 [-0.392-0.283]	0.753		0.95 [0.68 - 1.33]				
Sampling			0.754					
Non probabilistic	1			1				
Probabilistic	-0.038 [-0.275-0.2]	0.754		0.96 [0.76 - 1.22]				
Timing of data collection			0.008					
Prospetively	1			1				
Retrospectively	0.287 [0.075-0.499]	0.008		1.33 [1.08 - 1.65]				
Country income level			0.743					
High-income economies	1			1				
Low-income economies	-0.005 [-0.488-0.479]	0.985		1 [0.61 - 1.61]				
Lower-middle income economies	0.04 [-0.136-0.215]	0.659		1.04 [0.87 - 1.24]				
Upper-middle-income economies	0.105 [-0.083-0.293]	0.272		1.11 [0.92 - 1.34]				
WHO Region			0.009					
Africa	1			1				
America	-0.137 [-0.417-0.143]	0.337		0.87 [0.66 - 1.15]				
Eastern Mediterranean	0.204 [-0.058-0.466]	0.128		1.23 [0.94 - 1.59]				
Europe	0.232 [-0.027-0.492]	0.079		1.26 [0.97 - 1.64]				
South-East Asia	0.092 [-0.182-0.367]	0.509		1.1 [0.83 - 1.44]				
Western Pacific	0.197 [-0.135-0.53]	0.245		1.22 [0.87 - 1.7]				
Recrutment setting			0.427					
Rural	1			1				
Urban	0.301 [-0.442-1.044]	0.427		1.35 [0.64 - 2.84]				
HCWs Classificiation			0.029					
Health associate professionals	1			1	1		1	
Health management and support personnel	-0.43 [-0.715--0.145]	0.003		0.65 [0.49 - 0.87]	-0.43[-0.715--0.145]	0.003	0.65 [0.49 - 0.87]	
Health professionals	-0.183 [-0.381-0.014]	0.069		0.83 [0.68 - 1.01]	-0.183[-0.381-0.014]	0.069	0.83 [0.68 - 1.01]	
Other health service providers not elsewhere classified	-0.093 [-0.322-0.136]	0.425		0.91 [0.72 - 1.15]	-0.093[-0.322-0.136]	0.425	0.91 [0.72 - 1.15]	
Personal care workers in health services	0.033 [-0.313-0.378]	0.853		1.03 [0.73 - 1.46]	0.033[-0.313-0.378]	0.853	1.03 [0.73 - 1.46]	
Mean or Median age Years	-0.0086 [-0.0199-0.0028]	0.1382		0.99 [0.98 - 1]				
Gender	0.0024 [-0.0021-0.0068]	0.2919		1 [1 - 1.01]				
Immunity against HBV due to natural infection								**0.00%**
Study Design			0.947					
Case control	1			1				
Cross sectional	0.011 [-0.315-0.337]	0.947		1.01 [0.73 - 1.4]				
Sampling			0.043					
Non probabilistic	1			1				
Probabilistic	-0.151 [-0.298--0.005]	0.043		0.86 [0.74 - 1]				
Timing of data collection			0.177					
Prospetively	1			1				
Retrospectively	0.17 [-0.077-0.416]	0.177		1.19 [0.93 - 1.52]				
Country income level			0.07					
High-income economies	1			1				
Low-income economies	0.173 [0.033-0.312]	0.015		1.19 [1.03 - 1.37]				
Lower-middle income economies	-0.082 [-0.282-0.119]	0.423		0.92 [0.75 - 1.13]				

Upper-middle-income economies	0.027 [-0.08-0.134]	0.625		1.03 [0.92 - 1.14]				
WHO Region			0.046					
Africa	1			1	1		1	
America	-0.105 [-0.226-0.016]	0.09		0.9 [0.8 - 1.02]	-0.105[-0.226-0.016]	0.09	0.9 [0.8 - 1.02]	
Eastern Mediterranean	-0.006 [-0.186-0.174]	0.945		0.99 [0.83 - 1.19]	-0.006[-0.186-0.174]	0.945	0.99 [0.83 - 1.19]	
Europe	-0.217 [-0.36--0.074]	0.003		0.8 [0.7 - 0.93]	-0.217[-0.36--0.074]	0.003	0.8 [0.7 - 0.93]	
South-East Asia	-0.155 [-0.346-0.035]	0.11		0.86 [0.71 - 1.04]	-0.155[-0.346-0.035]	0.11	0.86 [0.71 - 1.04]	
Western Pacific	-0.065 [-0.257-0.127]	0.506		0.94 [0.77 - 1.14]	-0.065[-0.257-0.127]	0.506	0.94 [0.77 - 1.14]	
Recrutment setting			0.065					
Rural	1			1				
Urban	0.165 [-0.01-0.34]	0.065		1.18 [0.99 - 1.4]				
HCWs Classificiation			**0**					
Health associate professionals	1			1				
Health management and support personnel	0.068 [-0.129-0.266]	0.497		1.07 [0.88 - 1.3]				
Health professionals	-0.211 [-0.351--0.07]	0.003		0.81 [0.7 - 0.93]				
Other health service providers not elsewhere classified	-0.378 [-0.594--0.162]	0.001		0.69 [0.55 - 0.85]				
Personal care workers in health services	-0.049 [-0.297-0.199]	0.699		0.95 [0.74 - 1.22]				
Infection Status			0.212					
Acutely infected (Ag HBs + IgM anti-HBc +)	1			1				
Immune due to natural infection (Ac anti-HBs + Ac anti- HBc +)	0.093 [-0.053-0.24]	0.212		1.1 [0.95 - 1.27]				
Mean or Median age Years	-0.0088 [-0.0206-0.0029]	0.1415		0.99 [0.98 - 1]				
Gender	-0.0016 [-0.0048-0.0017]	0.3454		1 [1 - 1]				

Supplementary Figure 1: Global seroprevalence of Hepatitis B Virus current infections (HBsAg) among Healthcare Workers

Study	Positive	Total	Prevalence (%)	95% CI	Weight
Africa (68 Studies)					
Abiola, 2016 − Nigeria	1	48	2.08	[0.05; 11.07]	0.3%
Ajayi, 2007 − Nigeria	18	420	4.29	[2.56; 6.69]	0.4%
Alese, 2016 − Nigeria	0	30	0.00	[0.00; 11.57]	0.2%
Alese, 2016 − Nigeria	1	80	1.25	[0.03; 6.77]	0.3%
Amsalu, 2016 − Ethiopia	2	152	1.32	[0.16; 4.67]	0.4%
Belo, 2000 − Nigeria	43	167	25.75	[19.30; 33.08]	0.4%
Bilounga Ndongo, 2018 − Cameroon	108	1824	5.92	[4.88; 7.10]	0.5%
Birguel, 2011 − Cameroon	17	93	18.28	[11.02; 27.65]	0.3%
Braka, 2006 − Uganda	8	94	8.51	[3.75; 16.08]	0.3%
Braka, 2006 − Uganda	3	27	11.11	[2.35; 29.16]	0.2%
Braka, 2006 − Uganda	4	59	6.78	[1.88; 16.46]	0.3%
Braka, 2006 − Uganda	4	49	8.16	[2.27; 19.60]	0.3%
Braka, 2006 − Uganda	7	55	12.73	[5.27; 24.48]	0.3%
Deby, 2015 − Republic of the Congo	6	113	5.31	[1.97; 11.20]	0.4%
Demsiss, 2018 − Ethiopia	17	408	4.17	[2.45; 6.59]	0.4%
Dorkenoo, 2014 − Togo	64	150	42.67	[34.64; 50.99]	0.4%
Erhabor, 2007 − Nigeria	0	13	0.00	[0.00; 24.71]	0.1%
Fritzche, 2013 − Cameroon	2	48	4.17	[0.51; 14.25]	0.3%
Fritzche, 2013 − Cameroon	1	16	6.25	[0.16; 30.23]	0.2%
Fritzche, 2013 − Cameroon	1	37	2.70	[0.07; 14.16]	0.2%
Fritzche, 2013 − Cameroon	4	40	10.00	[2.79; 23.66]	0.3%
Fritzche, 2013 − Cameroon	7	96	7.29	[2.98; 14.45]	0.3%
Gebremariam, 2019 − Ethiopia	15	332	4.52	[2.55; 7.34]	0.4%
Hebo, 2019 − Ethiopia	6	240	2.50	[0.92; 5.36]	0.4%
Kateera, 2015 − Rwanda	10	336	2.98	[1.44; 5.41]	0.4%
Kefenie, 1989 − Ethiopia	6	80	7.50	[2.80; 15.61]	0.3%
Kefenie, 1989 − Ethiopia	8	86	9.30	[4.10; 17.51]	0.3%
Kefenie, 1989 − Ethiopia	19	188	10.11	[6.20; 15.33]	0.4%
Kefenie, 1989 − Ethiopia	2	31	6.45	[0.79; 21.42]	0.2%
Kefenie, 1989 − Ethiopia	3	34	8.82	[1.86; 23.68]	0.2%
Kisangau, 2019 − Kenya	13	295	4.41	[2.37; 7.42]	0.4%
Kyelem, 2015 − Burkina Faso	36	285	12.63	[9.01; 17.06]	0.4%
Lule, 1989 − Kenya	29	160	18.12	[12.49; 24.98]	0.4%
Lungosi, 2019 − Democratic Republic of the Congo	18	97	18.56	[11.38; 27.73]	0.3%
Massaquoi, 2018 − Sierra Leone	36	447	8.05	[5.70; 10.98]	0.4%
Mosendane, 2012 − South Africa	3	170	1.76	[0.37; 5.07]	0.4%
Mueller, 2015 − Tanzania	43	598	7.19	[5.25; 9.56]	0.4%
Noah, 2013 − Cameroon	0	21	0.00	[0.00; 16.11]	0.2%
Noah, 2013 − Cameroon	9	178	5.06	[2.34; 9.38]	0.4%
Obiri−Yeboah, 2019 − Ghana	7	711	0.98	[0.40; 2.02]	0.4%
Odemuyiwa, 2001 − Nigeria	26	234	11.11	[7.39; 15.86]	0.4%
Okwesili, 2015 − Nigeria	25	186	13.44	[8.89; 19.20]	0.4%
Ola, 2012 − Nigeria	11	88	12.50	[6.41; 21.27]	0.3%
Olubuyide, 1997 − Nigeria	10	22	45.45	[24.39; 67.79]	0.2%
Olubuyide, 1997 − Nigeria	8	28	28.57	[13.22; 48.67]	0.2%
Pellissier, 2012 − Niger	30	207	14.49	[10.00; 20.04]	0.4%
Qin, 2018 − Sierra Leone	21	211	9.95	[6.27; 14.81]	0.4%
Romieu, 1989 − Senegal	138	775	17.81	[15.18; 20.69]	0.4%
Shao, 2018 − Tanzania	5	81	6.17	[2.03; 13.82]	0.3%
Shao, 2018 − Tanzania	5	56	8.93	[2.96; 19.62]	0.3%
Shao, 2018 − Tanzania	7	130	5.38	[2.19; 10.78]	0.4%
Shao, 2018 − Tanzania	4	37	10.81	[3.03; 25.42]	0.2%
Sondlane, 2016 − South Africa	30	314	9.55	[6.54; 13.36]	0.4%
Tatsilong, 2016 − Cameroon	0	17	0.00	[0.00; 19.51]	0.2%
Tatsilong, 2016 − Cameroon	6	24	25.00	[9.77; 46.71]	0.2%
Tatsilong, 2016 − Cameroon	2	21	9.52	[1.17; 30.38]	0.2%
Tatsilong, 2016 − Cameroon	3	28	10.71	[2.27; 28.23]	0.2%
Tufa, 2016 − Ethiopia	41	643	6.38	[4.61; 8.55]	0.4%
Tufon, 2016 − Cameroon	6	127	4.72	[1.75; 10.00]	0.4%
Windsor, 1984 − South Africa	14	423	3.31	[1.82; 5.49]	0.4%
Yizengaw, 2018 − Ethiopia	1	120	0.83	[0.02; 4.56]	0.4%
Yizengaw, 2018 − Ethiopia	4	214	1.87	[0.51; 4.72]	0.4%
Yizengaw, 2018 − Ethiopia	1	23	4.35	[0.11; 21.95]	0.2%
Zibara, 2010 − Uganda	3	79	3.80	[0.79; 10.70]	0.3%
Zibara, 2010 − Uganda	1	22	4.55	[0.12; 22.84]	0.2%
Zibara, 2010 − Uganda	1	25	4.00	[0.10; 20.35]	0.2%
Zibara, 2010 − Uganda	13	196	6.63	[3.58; 11.07]	0.4%
Zibara, 2010 − Uganda	6	23	26.09	[10.23; 48.41]	0.2%
Random effect meta−analysis		**12662**	**7.51**	**[5.98; 9.17]**	**22.2%**

Heterogeneity: I^2 = 88.9% [86.6%; 90.8%], τ^2 = 0.0110, p < 0.0001

America (47 Studies)					
Baldinger, 1986 − United States of America	0	70	0.00	[0.00; 5.13]	0.3%
Bass, 1982 − United States of America	7	83	8.43	[3.46; 16.61]	0.3%
Bass, 1982 − United States of America	2	15	13.33	[1.66; 40.46]	0.1%
Bellissimo−Rodrigues, 2006 − Brazil	1	135	0.74	[0.02; 4.06]	0.4%
Berris, 1978 − Canada	1	288	0.35	[0.01; 1.92]	0.4%
Carneiro, 2003 − Brazil	0	2000	0.00	[0.00; 0.18]	0.5%
Ciorla, 2005 − Brazil	13	2419	0.54	[0.29; 0.92]	0.5%
Favero, 1981 − United States of America	275	11745	2.34	[2.08; 2.63]	0.5%
Feldman, 1975 − United States of America	3	236	1.27	[0.26; 3.67]	0.4%
Figueroa, 1994 − Jamaïca	30	562	5.34	[3.63; 7.53]	0.4%
Fligner, 1989 − United States of America	0	85	0.00	[0.00; 4.25]	0.3%
Froesner, 1975 − United States of America	6	470	1.28	[0.47; 2.76]	0.4%
Gershon, 2007 − United States of America	0	588	0.00	[0.00; 0.63]	0.4%
Gibas, 1992 − United States of America	8	837	0.96	[0.41; 1.87]	0.4%
Grady, 1975 − United States of America	47	757	6.21	[4.60; 8.17]	0.4%
Grady, 1982 − United States of America	7	1377	0.51	[0.20; 1.04]	0.5%
Gutierrez, 2005 − Brazil	3	320	0.94	[0.19; 2.72]	0.4%
Hadler, 1985 − United States of America	33	5697	0.58	[0.40; 0.81]	0.5%
Hakre, 1995 − Belize	3	330	0.91	[0.19; 2.63]	0.4%
Hollinger, 1977 − United States of America	8	304	2.63	[1.14; 5.12]	0.4%
Iserson, 1984 − United States of America	0	300	0.00	[0.00; 1.22]	0.4%
Iserson, 1985 − United States of America	316	1253	25.22	[22.84; 27.72]	0.5%
Kessler, 1985 − United States of America	5	301	1.66	[0.54; 3.83]	0.4%
Kessler, 1985 − United States of America	0	244	0.00	[0.00; 1.50]	0.4%
King, 1987 − Canada	2	388	0.52	[0.06; 1.85]	0.4%
Kuhls, 1987 − United States of America	0	246	0.00	[0.00; 1.49]	0.4%
Kunches, 1983 − United States of America	1	87	1.15	[0.03; 6.24]	0.3%
Lanphear, 1993 − United States of America	16	4718	0.34	[0.19; 0.55]	0.5%
Levy, 1977 − United States of America	2	259	0.77	[0.09; 2.76]	0.4%
Lewis, 1973 − United States of America	8	1052	0.76	[0.33; 1.49]	0.4%
Leyden, 1985 − United States of America	3	584	0.51	[0.11; 1.49]	0.4%
Ly, 2014 − United States of America	3	158	1.90	[0.39; 5.45]	0.4%
Malm, 1986 − Canada	0	83	0.00	[0.00; 4.35]	0.3%
Malm, 1986 − Canada	0	27	0.00	[0.00; 12.77]	0.2%
Méndez−Sánchez, 2006 − Mexico	0	376	0.00	[0.00; 0.98]	0.4%
Mosley, 1975 − United States of America	9	1245	0.72	[0.33; 1.37]	0.5%
Palmer, 1983 − Mexico	1	767	0.13	[0.00; 0.72]	0.4%
Pattison, 1975 − United States of America	6	513	1.17	[0.43; 2.53]	0.4%
Pepe, 1986 − United States of America	2	338	0.59	[0.07; 2.12]	0.4%
Reingold, 1988 − United States of America	9	434	2.07	[0.95; 3.90]	0.4%
Smith, 1976 − United States of America	3	174	1.72	[0.36; 4.96]	0.4%
Smith, 1976 − United States of America	1	125	0.80	[0.02; 4.38]	0.4%
Snydman, 1984 − United States of America	11	2109	0.52	[0.26; 0.93]	0.5%
Thomas, 1993 − United States of America	1	943	0.11	[0.00; 0.59]	0.4%
Werman, 1997 − United States of America	0	107	0.00	[0.00; 3.39]	0.4%
Wickliffe, 1978 − United States of America	0	54	0.00	[0.00; 6.60]	0.3%
Williams, 1974 − United States of America	2	304	0.66	[0.08; 2.36]	0.4%
Random effect meta−analysis		**45507**	**0.89**	**[0.39; 1.56]**	**19.0%**

Heterogeneity: I^2 = 96.6% [96.1%; 97.1%], τ^2 = 0.0081, p < 0.0001

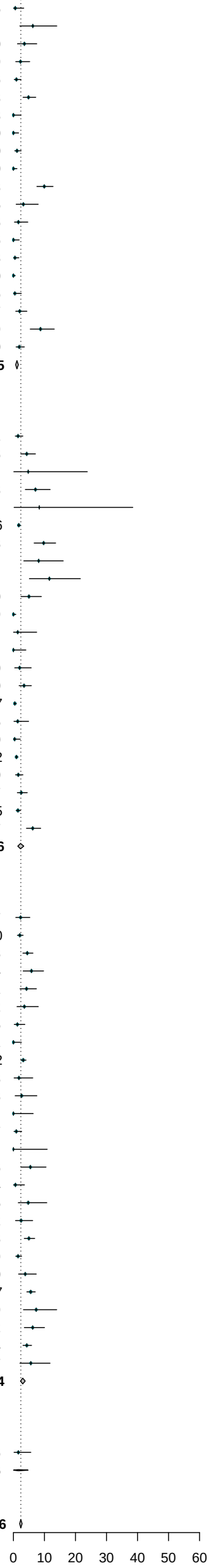
Eastern Mediterranean (59 Studies)					
Abdul Mujeeb, 1994 − Pakistan	7	35	20.00	[8.44; 36.94]	0.2%
Abdul Mujeeb, 1994 − Pakistan	1	20	5.00	[0.13; 24.87]	0.2%
Abdul Mujeeb, 1994 − Pakistan	10	145	6.90	[3.36; 12.32]	0.4%
Ahmad Akhoundi, 2015 − Iran	7	1628	0.43	[0.17; 0.88]	0.5%
Al− Sohaibani, 1995 − Saudi arabia	10	225	4.44	[2.15; 8.02]	0.4%
Al− Sohaibani, 1995 − Saudi arabia	13	205	6.34	[3.42; 10.60]	0.4%
Alqahtani, 2014 − saudi arabia	1	300	0.33	[0.01; 1.84]	0.4%
Alqahtani, 2014 − saudi arabia	0	300	0.00	[0.00; 1.22]	0.4%
Bahmani, 2010 − Iran	7	160	4.38	[1.78; 8.81]	0.4%
Bahmani, 2010 − Iran	1	37	2.70	[0.07; 14.16]	0.2%
Bahmani, 2010 − Iran	0	18	0.00	[0.00; 18.53]	0.2%
Bahmani, 2010 − Iran	1	92	1.09	[0.03; 5.91]	0.3%
Bahmani, 2010 − Iran	0	25	0.00	[0.00; 13.72]	0.2%
Bahmani, 2010 − Iran	0	14	0.00	[0.00; 23.16]	0.1%
Daw, 2000 − Libya	10	459	2.18	[1.05; 3.97]	0.4%
Djeriri, 2008 − Morocco	0	21	0.00	[0.00; 16.11]	0.2%
Djeriri, 2008 − Morocco	0	11	0.00	[0.00; 28.49]	0.1%
Djeriri, 2008 − Morocco	0	54	0.00	[0.00; 6.60]	0.3%
Djeriri, 2008 − Morocco	0	12	0.00	[0.00; 26.46]	0.1%
Djeriri, 2008 − Morocco	2	133	1.50	[0.18; 5.33]	0.4%
Djeriri, 2008 − Morocco	1	36	2.78	[0.07; 14.53]	0.2%
El−Hazmi, 2008 − Saudi Arabia	0	116	0.00	[0.00; 3.13]	0.4%
Elduma, 2011 − Sudan	4	106	3.77	[1.04; 9.38]	0.4%
Elduma, 2011 − Sudan	6	73	8.22	[3.08; 17.04]	0.3%

Elduma, 2011 − Sudan	0	23	0.00	[0.00; 14.82]	0.2%
Elmaghloub, 2017 − Egypt	3	263	1.14	[0.24; 3.30]	0.4%
Elmaghloub, 2017 − Egypt	2	34	5.88	[0.72; 19.68]	0.2%
Elmaghloub, 2017 − Egypt	3	239	1.26	[0.26; 3.62]	0.4%
Elmukashfi, 2012 − Sudan	10	180	5.56	[2.70; 9.98]	0.4%
Elmukashfi, 2012 − Sudan	0	72	0.00	[0.00; 4.99]	0.3%
Elmukashfi, 2012 − Sudan	0	42	0.00	[0.00; 8.41]	0.3%
Elmukashfi, 2012 − Sudan	1	15	6.67	[0.17; 31.95]	0.1%
Elmukashfi, 2012 − Sudan	15	322	4.66	[2.63; 7.57]	0.4%
Elzouki, 2014 − Libya	1	70	1.43	[0.04; 7.70]	0.3%
Elzouki, 2014 − Libya	1	13	7.69	[0.19; 36.03]	0.1%
Elzouki, 2014 − Libya	1	25	4.00	[0.10; 20.35]	0.2%
Elzouki, 2014 − Libya	1	134	0.75	[0.02; 4.09]	0.4%
Elzouki, 2014 − Libya	4	188	2.13	[0.58; 5.36]	0.4%
Elzouki, 2014 − Libya	2	61	3.28	[0.40; 11.35]	0.3%
Goldsmith, 1989 − Egypt	24	765	3.14	[2.02; 4.63]	0.4%
Memon, 2012 − Pakistan	10	1051	0.95	[0.46; 1.74]	0.4%
Mujeeb, 1998 − Pakistan	3	65	4.62	[0.96; 12.90]	0.3%
Rehman, 1996 − Pakistan	5	95	5.26	[1.73; 11.86]	0.3%
Saqib, 2016 − Pakistan	0	36	0.00	[0.00; 9.74]	0.2%
Saqib, 2016 − Pakistan	0	122	0.00	[0.00; 2.98]	0.4%
Saqib, 2016 − Pakistan	0	42	0.00	[0.00; 8.41]	0.3%
Saqib, 2016 − Pakistan	2	91	2.20	[0.27; 7.71]	0.3%
Sarwar, 2008 − Pakistan	7	100	7.00	[2.86; 13.89]	0.3%
Sarwar, 2008 − Pakistan	0	15	0.00	[0.00; 21.80]	0.1%
Shabanah, 2019 − Saudi Arabia	0	139	0.00	[0.00; 2.62]	0.4%
Zayet, 2019 − Tunisia	2	190	1.05	[0.13; 3.75]	0.4%
Zayet, 2019 − Tunisia	8	382	2.09	[0.91; 4.08]	0.4%
Zayet, 2019 − Tunisia	0	45	0.00	[0.00; 7.87]	0.3%
Zayet, 2019 − Tunisia	1	160	0.62	[0.02; 3.43]	0.4%
Zayet, 2019 − Tunisia	11	442	2.49	[1.25; 4.41]	0.4%
Zayet, 2019 − Tunisia	6	161	3.73	[1.38; 7.93]	0.4%
Zayet, 2019 − Tunisia	2	117	1.71	[0.21; 6.04]	0.4%
Zuhaib Khan, 2016 − Pakistan	4	626	0.64	[0.17; 1.63]	0.4%
Zuhaib Khan, 2016 − Pakistan	4	626	0.64	[0.17; 1.63]	0.4%
Random effect meta−analysis		**11176**	**1.39**	**[0.86; 2.01]**	**18.9%**

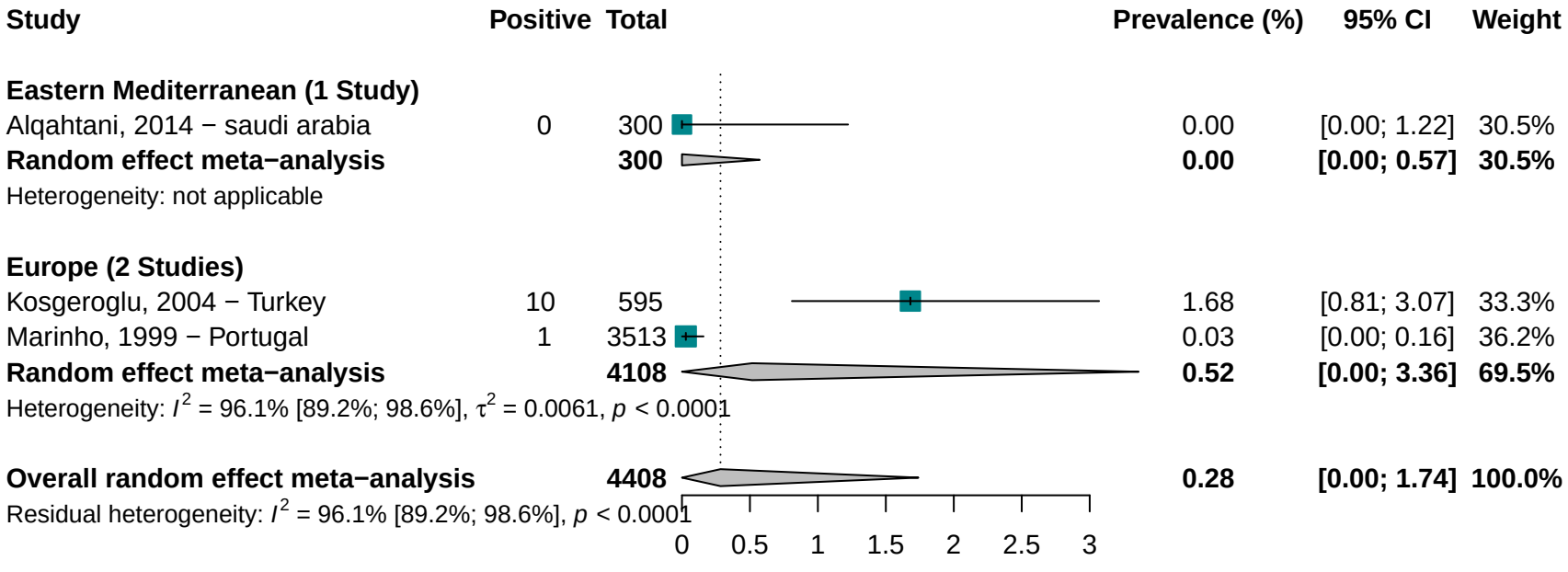
Heterogeneity: I^2 = 71.2% [62.6%; 77.8%], τ^2 = 0.0034, p < 0.0001

Europe (51 Studies)					
Aldershvile, 1978 − Denmark	0	1338	0.00	[0.00; 0.28]	0.5%
Ammon, 2000 − Germany	0	108	0.00	[0.00; 3.36]	0.4%
Ammon, 2000 − Germany	2	215	0.93	[0.11; 3.32]	0.4%
Antoniello, 1989 − Italy	16	335	4.78	[2.75; 7.64]	0.4%
Bacârea, 2017 − Romania	7	524	1.34	[0.54; 2.73]	0.4%
Blanloeil, 1985 − France	2	863	0.23	[0.03; 0.83]	0.4%
Butsashvili, 2012 − Georgia	28	1386	2.02	[1.35; 2.91]	0.5%
Dentico, 1991 − Italy	4	176	2.27	[0.62; 5.72]	0.4%
Donchin, 1992 − Israel	14	783	1.79	[0.98; 2.98]	0.4%
Eskandarani, 2014 − Denmark	0	2274	0.00	[0.00; 0.16]	0.5%
Fisker, 2003 − Denmark	13	1439	0.90	[0.48; 1.54]	0.5%
Ganczak, 2010 − Poland	3	590	0.51	[0.10; 1.48]	0.4%
Garzillo, 2020 − Italy	0	158	0.00	[0.00; 2.31]	0.4%
Garzillo, 2020 − Italy	0	288	0.00	[0.00; 1.27]	0.4%
Garzillo, 2020 − Italy	0	510	0.00	[0.00; 0.72]	0.4%
Gourbran, 1976 − United Kingdom	0	80	0.00	[0.00; 4.51]	0.3%
Hansson, 1977 − Sweden	0	16	0.00	[0.00; 20.59]	0.2%
Hardt, 1979 − Denmark	0	224	0.00	[0.00; 1.63]	0.4%
Himmelreich, 2013 − Germany	16	449	3.56	[2.05; 5.72]	0.4%
Hirschowitz, 1980 − United Kingdom	5	310	1.61	[0.53; 3.72]	0.4%
Hofmann, 1988 − Austria	210	36000	0.58	[0.51; 0.67]	0.5%
Hurlen, 1980 − Norway	1	388	0.26	[0.01; 1.43]	0.4%
Ingerslev, 1988 − Denmark	0	128	0.00	[0.00; 2.84]	0.4%
Irmark, 2010 − Turkey	1	223	0.45	[0.01; 2.47]	0.4%
Janzen, 1978 − Germany	83	3770	2.20	[1.76; 2.72]	0.5%
Kondili, 2007 − Albania	1	22	4.55	[0.12; 22.84]	0.2%
Kondili, 2007 − Albania	32	366	8.74	[6.06; 12.12]	0.4%
Kondili, 2007 − Albania	6	92	6.52	[2.43; 13.66]	0.3%
Kosgeroglu, 2004 − Turkey	16	595	2.69	[1.54; 4.33]	0.4%
Kunst, 1973 − Netherlands	12	768	1.56	[0.81; 2.71]	0.4%
Kuruuzum, 2008 − Turkey	5	366	1.37	[0.45; 3.16]	0.4%

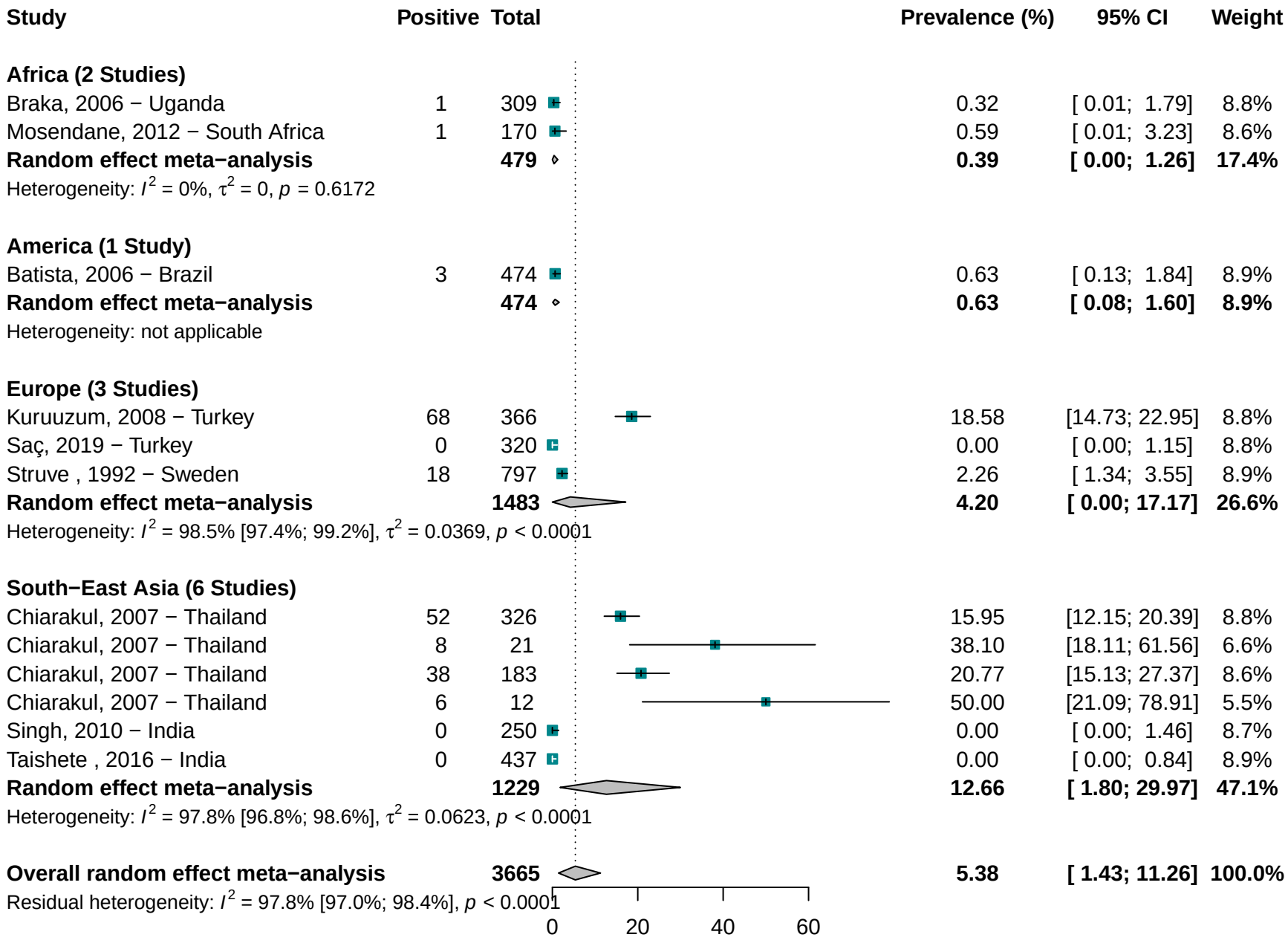
Marena, 1996 − Italy	1	165	0.61	[0.02; 3.33]	0.4%
Ozsoy, 2003 − Turkey	5	80	6.25	[2.06; 13.99]	0.3%
Ozsoy, 2003 − Turkey	6	170	3.53	[1.31; 7.52]	0.4%
Ozsoy, 2003 − Turkey	5	219	2.28	[0.75; 5.25]	0.4%
Panis, 1986 − Greece	4	416	0.96	[0.26; 2.44]	0.4%
Pecenková, 1978 − Czech Republic	23	473	4.86	[3.11; 7.21]	0.4%
Platkov, 2003 − Israel	0	148	0.00	[0.00; 2.46]	0.4%
Rapisarda, 2019 − Italy	0	220	0.00	[0.00; 1.66]	0.4%
Rybacki, 2013 − Poland	6	520	1.15	[0.42; 2.49]	0.4%
Saç, 2019 − Turkey	0	320	0.00	[0.00; 1.15]	0.4%
Shidrawi, 2004 − Yemen	54	543	9.94	[7.56; 12.78]	0.4%
Sinclair, 1987 − United Kingdom	4	125	3.20	[0.88; 7.99]	0.4%
Skinhøj, 1984 − Denmark	3	186	1.61	[0.33; 4.64]	0.4%
Skinhøj, 1984 − Denmark	0	196	0.00	[0.00; 1.86]	0.4%
Smith, 1987 − United Kingdom	2	408	0.49	[0.06; 1.76]	0.4%
Spada, 2016 − Italy	0	640	0.00	[0.00; 0.57]	0.4%
Topka, 2012 − Greece	1	216	0.46	[0.01; 2.55]	0.4%
Topuridze, 2010 − Georgia	6	297	2.02	[0.74; 4.35]	0.4%
Vedeo, 2013 − United Kingdom	20	229	8.73	[5.42; 13.17]	0.4%
Weiss, 1994 − Israel	9	480	1.88	[0.86; 3.53]	0.4%
Random effect meta−analysis		**60835**	**1.12**	**[0.72; 1.59]**	**20.6%**
Heterogeneity: I^2 = 92% [90.3%; 93.4%], τ^2 = 0.0037, p < 0.0001					
South−East Asia (23 Studies)					
Batra, 2015 − India	7	471	1.49	[0.60; 3.04]	0.4%
Chiarakul, 2007 − Thailand	14	326	4.29	[2.37; 7.10]	0.4%
Chiarakul, 2007 − Thailand	1	21	4.76	[0.12; 23.82]	0.2%
Chiarakul, 2007 − Thailand	13	183	7.10	[3.84; 11.84]	0.4%
Chiarakul, 2007 − Thailand	1	12	8.33	[0.21; 38.48]	0.1%
Duseja, 2002 − India	61	3556	1.72	[1.31; 2.20]	0.5%
Elavia, 1992 − India	30	308	9.74	[6.67; 13.61]	0.4%
Elavia, 1992 − India	7	86	8.14	[3.34; 16.05]	0.3%
Elavia, 1992 − India	8	69	11.59	[5.14; 21.57]	0.3%
Ganju, 2000 − India	10	200	5.00	[2.42; 9.00]	0.4%
Goel, 2017 − India	0	479	0.00	[0.00; 0.77]	0.4%
Jha, 2012 − India	1	72	1.39	[0.04; 7.50]	0.3%
Kardam, 2014 − India	0	90	0.00	[0.00; 4.02]	0.3%
Kardam, 2014 − India	3	150	2.00	[0.41; 5.73]	0.4%
Luksamijarulkul, 2001 − Thailand	13	380	3.42	[1.83; 5.78]	0.4%
Shah, 2017 − India	6	1347	0.45	[0.16; 0.97]	0.5%
Shrestha, 2006 − Nepal	2	145	1.38	[0.17; 4.89]	0.4%
Singh, 2010 − India	1	250	0.40	[0.01; 2.21]	0.4%
Sukriti, 2008 − India	21	2162	0.97	[0.60; 1.48]	0.5%
Sukriti, 2008 − India	8	510	1.57	[0.68; 3.07]	0.4%
Taishete , 2016 − India	11	437	2.52	[1.26; 4.46]	0.4%
Techasathit, 2005 − Thailand	17	1165	1.46	[0.85; 2.33]	0.5%
Wijayadi, 2018 − Indonesia	29	467	6.21	[4.20; 8.80]	0.4%
Random effect meta−analysis		**12886**	**2.29**	**[1.41; 3.34]**	**8.8%**
Heterogeneity: I^2 = 88.7% [84.4%; 91.8%], τ^2 = 0.0039, p < 0.0001					
Western Pacific (26 Studies)					
Bidivale, 1992 − Malaysia	5	217	2.30	[0.75; 5.29]	0.4%
Fukumoto, 1989 − Japan	21	1020	2.06	[1.28; 3.13]	0.4%
Goh, 1988 − China	31	693	4.47	[3.06; 6.29]	0.4%
Kashiwagi, 1985 − Japan	13	224	5.80	[3.13; 9.72]	0.4%
Kashiwagi, 1985 − Japan	11	261	4.21	[2.12; 7.42]	0.4%
Kashiwagi, 1985 − Japan	5	142	3.52	[1.15; 8.03]	0.4%
Kashiwagi, 1985 − Japan	3	235	1.28	[0.26; 3.69]	0.4%
Nagao, 2008 − Japan	0	141	0.00	[0.00; 2.58]	0.4%
Shim, 2011 − South Korea	57	1812	3.15	[2.39; 4.06]	0.5%
Shin, 2006 − North Korea	2	113	1.77	[0.22; 6.25]	0.4%
Shin, 2006 − North Korea	3	113	2.65	[0.55; 7.56]	0.4%
Shin, 2006 − North Korea	0	56	0.00	[0.00; 6.38]	0.3%
Song, 1999 − South Korea	3	327	0.92	[0.19; 2.66]	0.4%
Tan, 1992 − Malaysia	0	32	0.00	[0.00; 10.89]	0.2%
Tan, 1992 − Malaysia	8	146	5.48	[2.40; 10.51]	0.4%
Tan, 1992 − Malaysia	1	154	0.65	[0.02; 3.56]	0.4%
Tan, 1992 − Malaysia	5	105	4.76	[1.56; 10.76]	0.4%
Tan, 1992 − Malaysia	4	162	2.47	[0.68; 6.20]	0.4%
Tan, 1992 − Malaysia	35	703	4.98	[3.49; 6.86]	0.4%
Tan, 1992 − Malaysia	11	739	1.49	[0.75; 2.65]	0.4%
Taylor, 1991 − Fiji	8	210	3.81	[1.66; 7.37]	0.4%
Taylor, 1991 − Fiji	65	1167	5.57	[4.32; 7.04]	0.5%
Taylor, 1991 − Fiji	8	109	7.34	[3.22; 13.95]	0.4%
Taylor, 1991 − Fiji	15	242	6.20	[3.51; 10.02]	0.4%
Taylor, 1991 − Fiji	39	904	4.31	[3.09; 5.85]	0.4%
Woodfield, 1976 − Papua New Guinea	6	107	5.61	[2.09; 11.81]	0.4%
Random effect meta−analysis		**10134**	**3.00**	**[2.29; 3.80]**	**10.2%**
Heterogeneity: I^2 = 73.1% [60.4%; 81.8%], τ^2 = 0.0018, p < 0.0001					
Unclear or Not reported (1 Study)					
Berris, 1978 − Multiple countries	2	126	1.59	[0.19; 5.62]	0.4%
Random effect meta−analysis		**126**	**1.59**	**[0.02; 4.72]**	**0.4%**
Heterogeneity: not applicable					
Overall random effect meta−analysis		**153326**	**2.39**	**[2.01; 2.79]**	**100.0%**
Residual heterogeneity: I^2 = 91.3% [90.5%; 92.0%], p = 0					



Supplementary Figure 2: Global seroprevalence of Hepatitis B Virus current infections (HBeAg) among Healthcare Workers

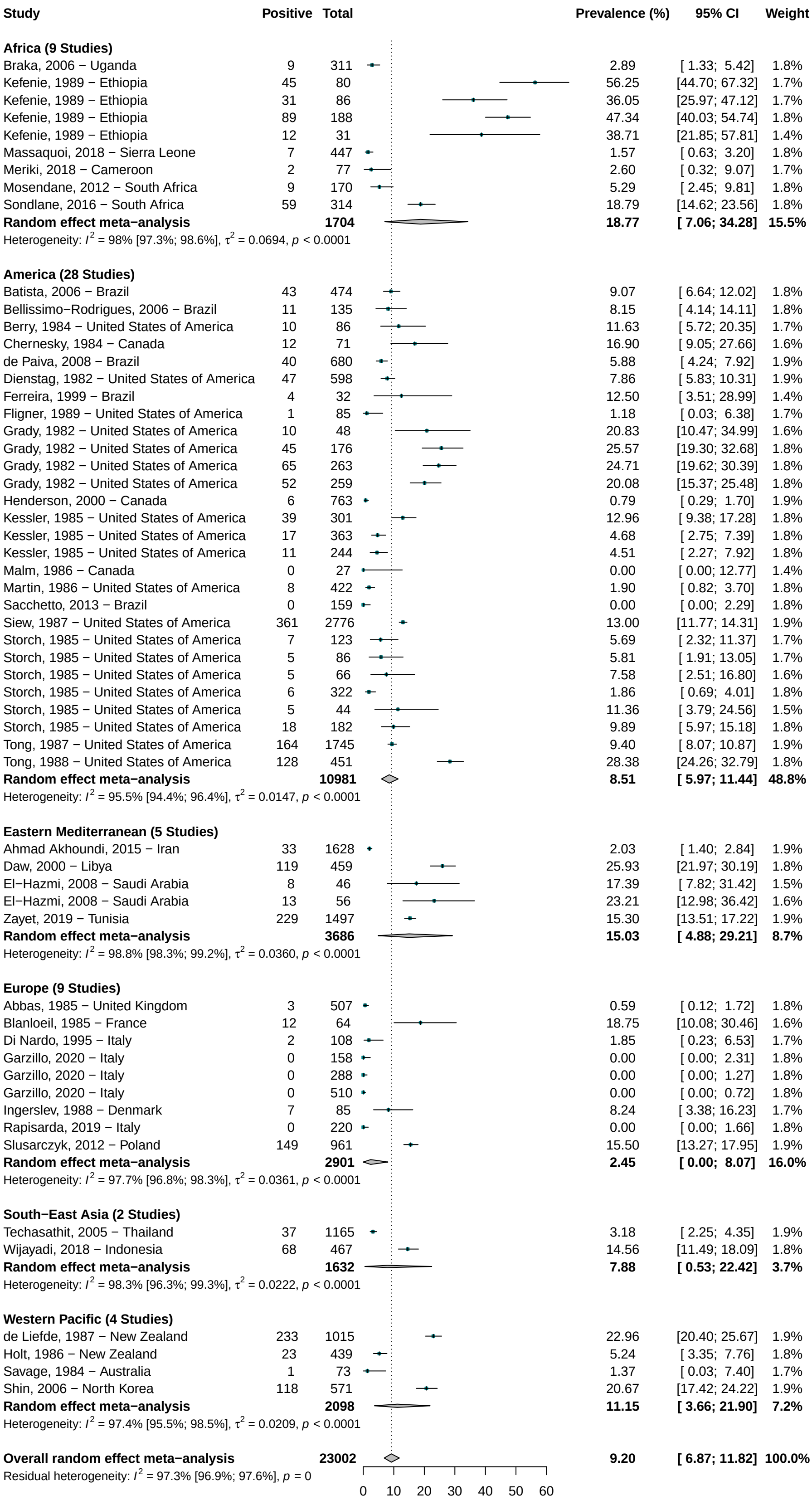


Supplementary Figure 3: Global seroprevalence of Hepatitis B Virus acute infections (HBsAg + IgM anti-HBc) among Healthcare Workers

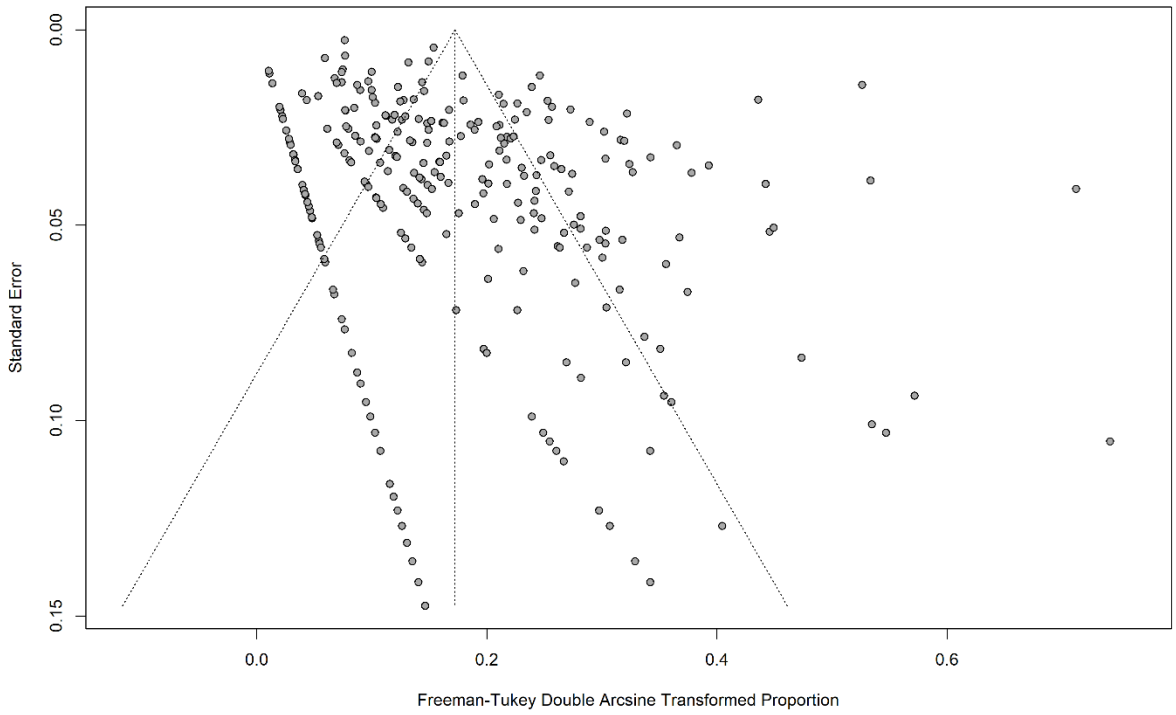


Supplementary Figure 4: Global seroprevalence of Hepatitis B Virus total immunity (anti-HBs > 10 IU/L) among Healthcare Workers

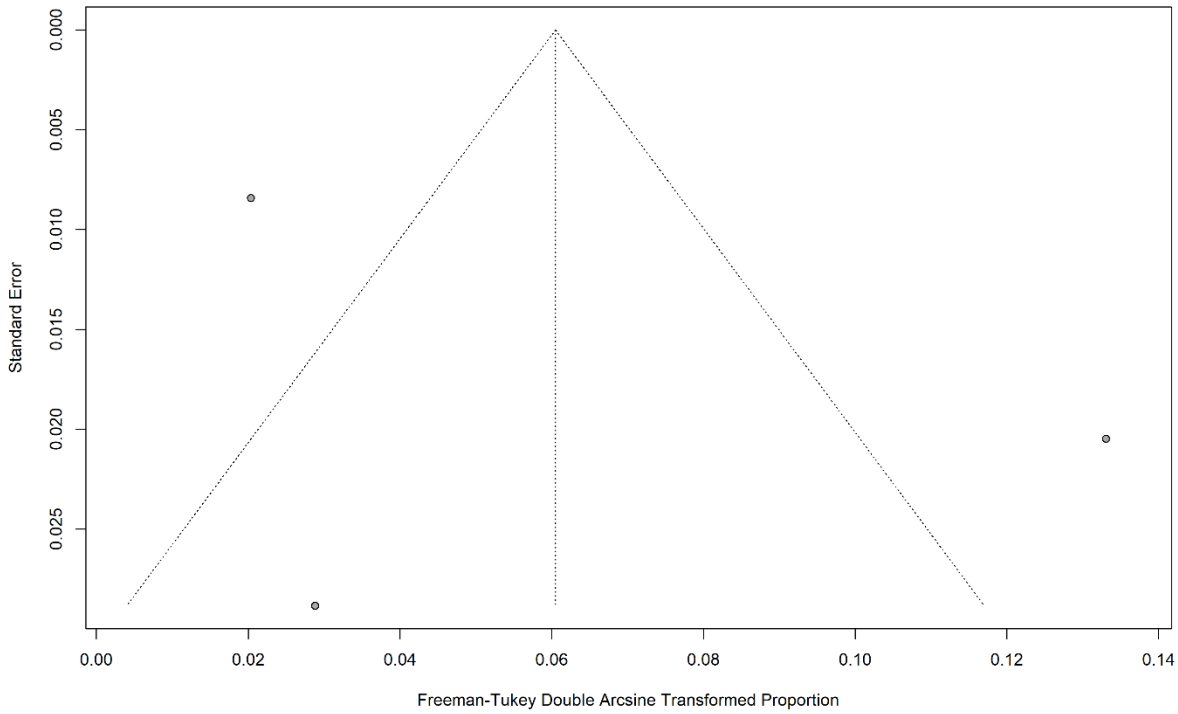
Supplementary Figure 5: Global seroprevalence of Hepatitis B Virus immunity due to natural infection (anti-HBs + anti HBc) among Healthcare Workers



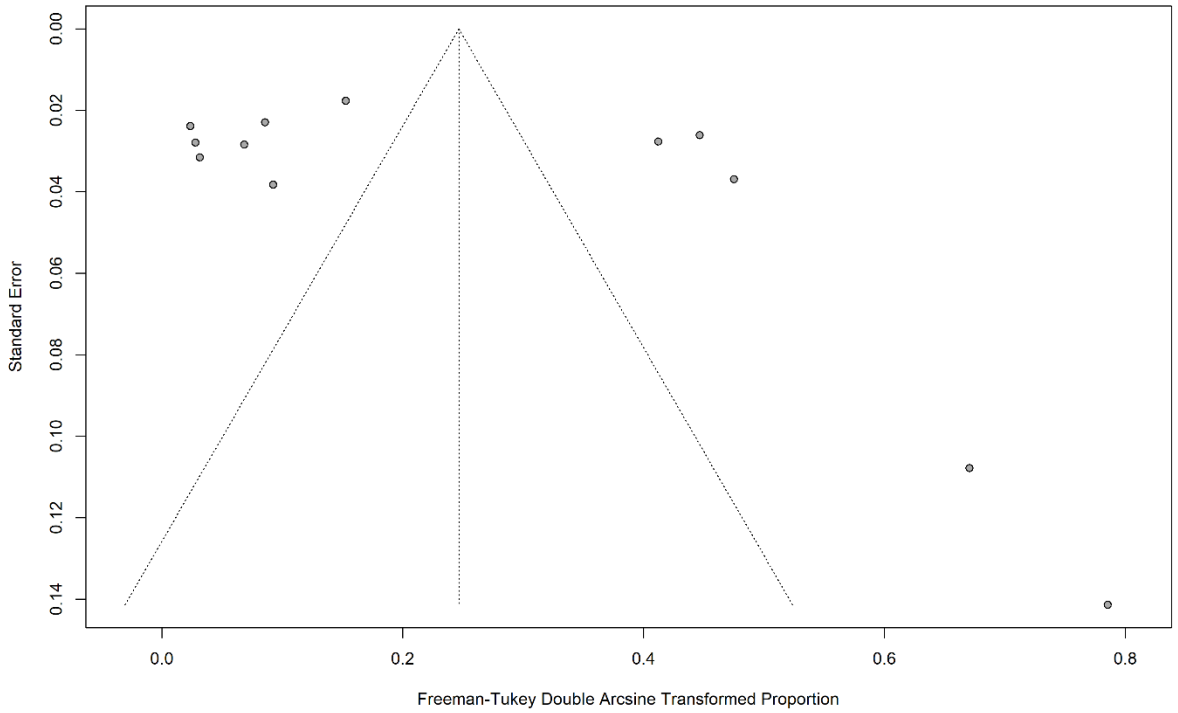
Supplementary Figure 6. Funnel plot for publication of global seroprevalence of Hepatitis B current infection (HBsAg) in healthcare workers



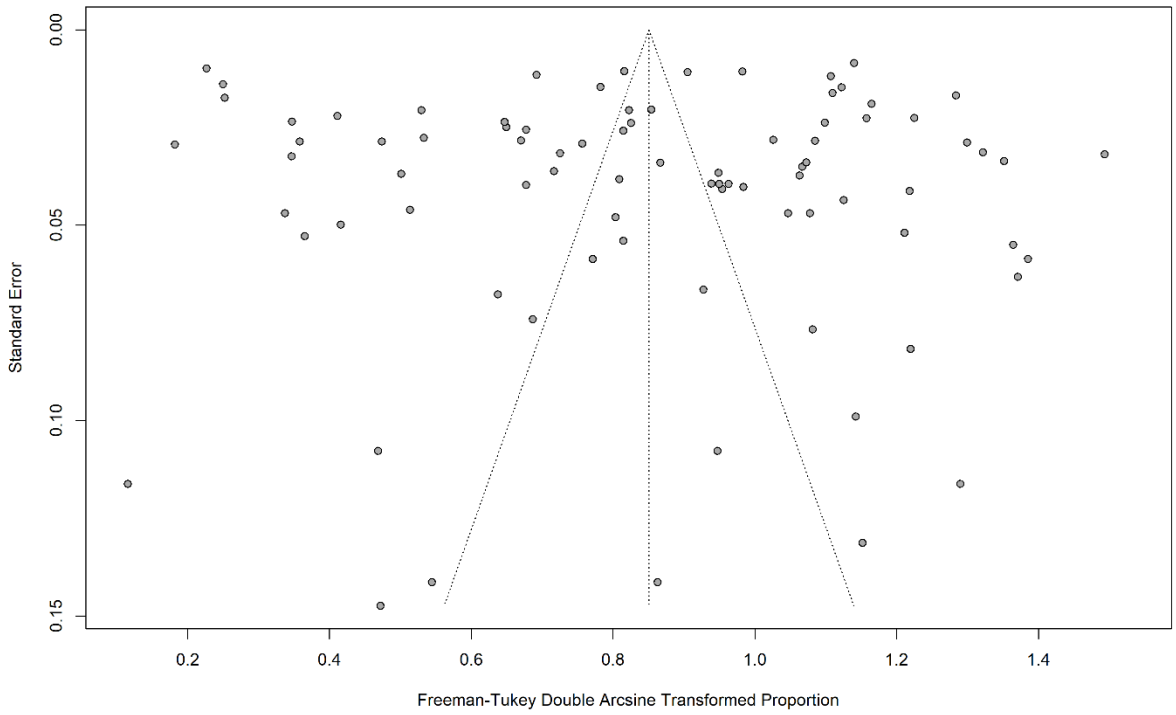
Supplementary Figure 7. Funnel plot for publication of global seroprevalence of Hepatitis B current infection (HBeAg) in healthcare workers



Supplementary Figure 8. Funnel plot for publication of global seroprevalence of Hepatitis B acute infection in healthcare workers



Supplementary Figure 9. Funnel plot for publication of global seroprevalence of immunity (natural or due to vaccination) against HBV in healthcare workers



Supplementary Figure 10. Funnel plot for publication of global seroprevalence of immunity due to natural against HBV in healthcare workers