

Table 66: Summary of Surveys Included in Meta-Analysis: Ethiopia												Eastern Africa	
Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg positive (%)	lower 95% CI	upper 95% CI	RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
Ethiopia	Ben-Porath, 1981-1982	migrants to Israel	Ethiopian migrants to Israel; all immigrants tested shortly after arrival in Israel (357)	males	165	14.0%	8.71%	19.29%	2.38%	0.3%	Ben-Porath, E., L. Hornstein, et al. (1986). "Hepatitis B virus infection and liver disease in Ethiopian immigrants to Israel." <i>Hepatology</i> 6(4): 662-6.	2426169	1020
Ethiopia	Gebreselassie, 1983*	all parts	Boys 3-13 yrs from all parts of the country; "randomly selected"; no selection described; sera collected at Ethiopian Central lab in Addis Ababba (91)	males	91	7.0%	1.76%	12.24%	2.39%	0.3%	Gebreselassie, L. (1983). "Prevalence of specific markers of viral hepatitis A and B among an Ethiopian population." <i>Bull World Health Organ</i> 61(6): 991-6.	6325033	1031
Ethiopia	Kefene, 1985-1986	from all over country	Military recruits from all over country- Ethiopian National Hepatitis B Study; a nationwide seroepidemiological study of hepatitis B markers prevalence; "military recruits from all regions of the country with allocation proportional to size of region in t	males	5,257	10.8%	9.96%	11.64%	3.38%	12.9%	Kefene, H., M. Rapicetta, et al. (1988). "Ethiopian National Hepatitis B Study." <i>J Med Virol</i> 24(1): 75-84.	3339335	1025
Ethiopia	Pasquini, 1988*	Arsi region	Attendees at outpatient clinic; every week during a morning clinic session all patients seen were asked to fill out survey and give serum sample; pts with liver disease excluded males (91)	males	91	14.8%	7.50%	22.10%	1.87%	0.2%	Pasquini, P., L. Bisanti, et al. (1988). "Hepatitis B infections in the Arsi region of Ethiopia." <i>Eur J Epidemiol</i> 4(3): 310-3.	3181380	1024
Ethiopia	Rapicetta, 1989*		Military recruits; consecutively seen recruits at two military camps on two occasions; male (5,265)	males	5,265	10.8%	9.96%	11.64%	3.38%	12.9%	Rapicetta, M., K. Hailu, et al. (1988). "Delta hepatitis virus infection in Ethiopia." <i>Eur J Epidemiol</i> 4(2): 185-8.	3402577	1026
Ethiopia	Abebe, 1994	Addis Ababa	General population; community-based seroepidemiological survey; stratified cluster sampling, males (1,898)	males	1,898	8.6%	7.34%	9.86%	3.34%	5.7%	Abebe, A., D. J. Nokes, et al. (2003). "Seroepidemiology of hepatitis B virus in Addis Ababa, Ethiopia: transmission patterns and vaccine control." <i>Epidemiol Infect</i> 131(1): 757-70.	12948377	1036
Ethiopia	Behre, 2000-2002	Worko-Mado, Cheretee, and Chekorso villages (NE); Sille-Elgo villages (S)	General population area endemic for schistosomiasis; selected 50% of households using random numbers; males (906)	males	906	4.9%	3.46%	6.26%	3.32%	4.6%	Berhe, N., B. Myrvang, et al. (2007). "Intensity of Schistosoma mansoni, hepatitis B, age, and sex predict levels of hepatic periportal thickening/fibrosis (PPT/F): a large-scale community-based study in Ethiopia." <i>Am J Trop Med Hyg</i> 77(6): 1079-86.	18165526	1037
Ethiopia	Ben-Porath, 1981-1982	migrants to Israel	Ethiopian migrants to Israel; all immigrants tested shortly after arrival; females (181)	females	181	12.2%	7.43%	16.97%	2.52%	0.4%	Ben-Porath, E., L. Hornstein, et al. (1986). "Hepatitis B virus infection and liver disease in Ethiopian immigrants to Israel." <i>Hepatology</i> 6(4): 662-6.	2426169	1020
Ethiopia	Gebreselassie, 1986*	Dira Dawa, Harerge	Young adult females 12-25y o from Dira Dawa, Harerge; no selection described (100)	females	100	2.0%	-0.74%	4.74%	3.06%	1.2%	Gebreselassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030
Ethiopia	Gebreselassie, 1986*	Addis Ababa, Shoa	Young adult females 12-25y o from Addis Ababa, Shoa; no selection described (100)	females	100	5.0%	0.73%	9.27%	2.66%	0.5%	Gebreselassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030
Ethiopia	Gebreselassie, 1986*	Dessie, Wello	Young adult females 12-25y o from Dessie, Wello; no selection described (100)	females	100	9.0%	3.39%	14.61%	2.29%	0.3%	Gebreselassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030
Ethiopia	Gebreselassie, 1986*	Awassa, Sidamo	Young adult females 12-25y o from Awassa, Sidamo; no selection described (100)	females	100	13.0%	6.41%	19.59%	2.04%	0.2%	Gebreselassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030

Ethiopia	Gebreelassie, 1986*	Gambela, Ilubabor	Young adult females 12-25 y o from Gambela, Ilubabor; no selection described (100)	females	100	28.0%	19.20%	36.80%	1.55%	0.1%	Gebreelassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030
Ethiopia	Tsega, 1983-1985	Addis Ababa	Pregnant women; admitted for delivery; no selection described, Addis Ababa (500)	females	500	5.0%	3.09%	6.91%	3.24%	2.5%	Tsega, E., M. Tsega, et al. (1988). "Transmission of hepatitis B virus infection in Ethiopia with emphasis on the importance of vertical transmission." <i>Int J Epidemiol</i> 17(4): 874-9.	2976060	1022
Ethiopia	Pasquini, 1988*	Arsi region	Attendees at outpatient clinic; every week during a morning clinic session all patients seen were asked to fill out survey and give serum sample; pts with liver disease excluded; females (209)	females	209	10.2%	6.10%	14.30%	2.71%	0.5%	Pasquini, P., L. Bisanti, et al. (1988). "Hepatitis B infections in the Arsi region of Ethiopia." <i>Eur J Epidemiol</i> 4(3): 310-3.	3181380	1024
Ethiopia	Abebe, 1994	Addis Ababa	General population; community-based seroepidemiological survey; stratified cluster sampling females (2,838)	females	2,838	4.6%	3.83%	5.37%	3.39%	15.2%	Abebe, A., D. J. Nokes, et al. (2003). "Seroepidemiology of hepatitis B virus in Addis Ababa, Ethiopia: transmission patterns and vaccine control." <i>Epidemiol Infect</i> 131(1): 757-70.	12948377	1036
Ethiopia	Behre, 2000-2002	Worko-Mado, Cheretee, and Chekorso villages (NE); Sille-Elgo villages (S)	General population area endemic for schistosomiasis; selected 50% of households using random numbers; female (801)	females	801	5.9%	4.24%	7.50%	3.29%	3.4%	Berhe, N., B. Myrvang, et al. (2007). "Intensity of <i>Schistosoma mansoni</i> , hepatitis B, age, and sex predict levels of hepatic periportal thickening/fibrosis (PPT/F): a large-scale community-based study in Ethiopia." <i>Am J Trop Med Hyg</i> 77(6): 1079-86.	18165526	1037
Ethiopia	Tiruneh, 2006	Gondar, northwest	Pregnant women visiting antenatal clinic Gondar (480)	females	480	7.3%	4.97%	9.63%	3.15%	1.7%	Tiruneh, M. (2008). "Seroprevalence of multiple sexually transmitted infections among antenatal clinic attendees in Gondar Health Center, northwest Ethiopia." <i>Ethiop Med J</i> 46(4): 359-66.	19271400	1038
Ethiopia	CDC, 1979-1991	refugees to US	Refugees to US; programs that screened all incoming refugees (944)	both	944	9.4%	7.54%	11.26%	3.25%	2.6%	CDC (1991) Screening for hepatitis B virus infection among refugees arriving in the United States, 1979-1991. <i>MMWR</i> 40(45):784-6	1944126	1039
Ethiopia	Hornstein, 1980-1982	migrants to Israel	Ethiopian immigrants arriving Israel 1980-1982; routine exams for new migrants (357)	both	357	12.6%	9.16%	16.04%	2.89%	0.8%	Hornstein, L., E. Ben-Porath, et al. (1991). "Hepatitis B virus infection in Ethiopian immigrants to Israel." <i>Isr J Med Sci</i> 27(5): 268-72.	1828794	1018
Ethiopia	Parenti, 1980-1984	refugees to US	Ethiopian refugees to US; refugees evaluated at two outpatient clinics that serve primarily immigrants (53)	both	53	9.4%	1.54%	17.26%	1.74%	0.1%	Parenti, D. M., D. Lucas, et al. (1987). "Health status of Ethiopian refugees in the United States." <i>Am J Public Health</i> 77(12): 1542-3.	3674256	1029
Ethiopia	Hornstein, 1985-1987	migrants to Israel	Ethiopian immigrants arriving Israel 1980-1982; routine exams of new migrants (86)	both	86	13.0%	5.89%	20.11%	1.91%	0.2%	Hornstein, L., E. Ben-Porath, et al. (1991). "Hepatitis B virus infection in Ethiopian immigrants to Israel." <i>Isr J Med Sci</i> 27(5): 268-72.	1828794	1018
Ethiopia	Hornstein, 1985-1988	migrants to Israel	Ethiopian immigrants arriving Israel 1985; routine exams of new migrants (143)	both	143	18.2%	11.88%	24.52%	2.10%	0.2%	Hornstein, L., E. Ben-Porath, et al. (1991). "Hepatitis B virus infection in Ethiopian immigrants to Israel." <i>Isr J Med Sci</i> 27(5): 268-72.	1828794	1018
Ethiopia	Hershko, 1984-1985	migrants to Israel	Ethiopian refugees to Israel admitted to hospital (131)	both	131	13.0%	7.24%	18.76%	2.25%	0.3%	Hershko, C., G. Neshet, et al. (1986). "Medical problems in Ethiopian refugees airlifted to Israel: experience in 131 patients admitted to a general hospital." <i>J Trop Med Hyg</i> 89(3): 107-12.	3464761	1027
Ethiopia	Chemtob, 1987	migrants to Israel	Ethiopian migrants to Israel; immigrants to Israel arriving 1980-1985; at an absorption center; no info on sampling (144)	both	144	18.8%	12.42%	25.18%	2.09%	0.2%	Chemtob, D., J. Fassberg, et al. (1991). "Prevention strategy of hepatitis B virus infection among the Ethiopian community in Israel." <i>Isr J Med Sci</i> 27(5): 273-7.	1828795	1019

Ethiopia	Flatau, 1991	migrants to Israel	Ethiopian migrants to Israel; no selection described; sera collected at primary care clinics (200)	both	200	11.5%	7.08%	15.92%	2.62%	0.5%	Flatau, E., O. Segol, et al. (1993). "Prevalence of markers of infection with hepatitis B and C viruses in immigrants of operation Solomon, 1991." <i>Isr J Med Sci</i> 29(6-7): 387-9.	8394300	1034
Ethiopia	Alkan, 1991	migrants to Israel	Ethiopian immigrants to Israel; randomly selected from HIV-negative (139)	both	139	8.6%	3.94%	13.26%	2.55%	0.4%	Alkan, M. L., S. Maayan, et al. (1993). "Serological markers for hepatitis B and treponemal infection among HIV carriers from Ethiopia." <i>Isr J Med Sci</i> 29(6-7): 390-2.	8349459	1033
Ethiopia	Nahmias, 1993*	migrants to Israel	Ethiopian migrants to Israel (6,230)	both	6,230	11.5%	10.71%	12.29%	3.39%	14.4%	Nahmias, J., Z. Greenberg, et al. (1993). "Health profile of Ethiopian immigrants in Israel: an overview." <i>Isr J Med Sci</i> 29(6-7): 338-43.	8349445	1023
Ethiopia	Bisharat, 1998*	migrants to Israel	Ethiopian migrants to Israel (506)	both	506	16.6%	13.36%	19.84%	2.94%	0.9%	Bisharat, N., M. Elias, et al. (1998). "Familial pattern of infection with hepatitis B virus among immigrating Ethiopian Jews in Israel." <i>Eur J Epidemiol</i> 14(1): 89-91.	9517878	1035
Ethiopia	Rein, 2006-2008	migrants to US	Refugees arriving in the US 2006-2008; from states with an active refugee health coordinator (250)	both	438	9.1%	6.41%	11.79%	3.07%	1.2%	Rein DB, Lesesne SB, O'Fallon A, Weinbaum CM (2009) Prevalence of hepatitis B surface antigen among refugees entering the United States between 2006 and 2008. <i>Hepatology</i> . 2010 Feb;51(2):431-4	19902482	1040
Ethiopia	Gebreselassie, 1983*	Angar-Dadess river valley of Wollega province in west	Inhabitants of rural community; "randomly selected"; no selection described; Angar-Didessa river valley area, Wollega (NA)	both	236	11.4%	7.35%	15.45%	2.72%	0.6%	Gebreselassie, L. (1983). "Prevalence of specific markers of viral hepatitis A and B among an Ethiopian population." <i>Bull World Health Organ</i> 61(6): 991-6.	6325033	1031
Ethiopia	Gebreselassie, 1986*	Gondar, northwest	Inhabitants of Gondar City; no selection described (100)	both	100	6.0%	1.35%	10.65%	2.55%	0.4%	Gebreselassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030
Ethiopia	Gebreselassie, 1986*	Gambela, Ilubabor	Inhabitants of Gambela, Ilubabor; no selection described (159)	both	159	22.0%	15.56%	28.44%	2.07%	0.2%	Gebreselassie, L. (1986). "Occurrence of hepatitis B surface antigen in various population groups in Ethiopia." <i>Ethiop Med J</i> 24(2): 63-7.	3698976	1030
Ethiopia	Tsega, 1986*	5 of 14 provinces selected as representative for this survey	Outpatients visiting hospitals or satellite health centers in five provinces ≤15 yo (500)	both	400	4.8%	2.67%	6.83%	3.20%	2.1%	Tsega, E., B. Mengesha, et al. (1986). "Hepatitis A, B, and delta infection in Ethiopia: a serologic survey with demographic data." <i>Am J Epidemiol</i> 123(2): 344-51.	3511678	1028
Ethiopia	Tsega, 1986*	5 of 14 provinces selected as representative for this survey	General population in five provinces >15 yo; visiting hospitals or satellite health centers in or near capital cities for minor complaints (500)	both	100	12.0%	5.63%	18.37%	2.09%	0.2%	Tsega, E., B. Mengesha, et al. (1986). "Hepatitis A, B, and delta infection in Ethiopia: a serologic survey with demographic data." <i>Am J Epidemiol</i> 123(2): 344-51.	3511678	1028
Ethiopia	Tsega, 1989*	Addis Ababa	Children of health care workers (103)	both	103	1.0%	-0.92%	2.86%	3.24%	2.5%	Tsega, E., J. Horton, et al. (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?" <i>Ethiop Med J</i> 27(3): 101-6.	2526733	1021
Ethiopia	Behre, 2000-2002	Worko-Mado, Cheretee, and Chekorso villages (NE); Sille-Elgo villages (S)	General population area not endemic for schistosomiasis; 50% of households using random numbers (349)	both	349	0.9%	-0.09%	1.89%	3.37%	9.2%	Berhe, N., B. Myrvang, et al. (2007). "Intensity of Schistosoma mansoni, hepatitis B, age, and sex predict levels of hepatic periportal thickening/fibrosis (PPT/F): a large-scale community-based study in Ethiopia." <i>Am J Trop Med Hyg</i> 77(6): 1079-86.	18165526	1037
				total studies	37	30,000		100.00%		100.00%			
				males	7								
				females	11								
				both	19								

* indicates publication year; survey year not reported

Table 67: Summary of Surveys Included in Meta-Analysis Kenya Eastern Africa

Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg			RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
						positive (%)	lower 95% CI	upper 95% CI					
Kenya	Autrup, 1981-1984	9 districts in Central, Eastern, and Western provinces	Outpatients at tending selected district hospitals for malaise; pts with GI complaints excluded; males (301)	males	301	10.4%	6.95%	13.85%	4.21%	0.8%	Autrup, H., T. Seremet, et al. (1987). "Aflatoxin exposure measured by urinary excretion of aflatoxin B1-guanine adduct and hepatitis B virus infection in areas with different liver cancer incidence in Kenya." <i>Cancer Res</i> 47(13): 3430-3.	3034416	1040
Kenya	Greenfield, 1982-1984	Nairobi and Mombasa	Child outpatient clinic attendees; patients attending the "filter clinic" at hospitals; these clinics see a wide spectrum of disease, but the majority have only minor complaints; exclude those requiring admission or with liver disease; males (535)	males	535	5.6%	3.66%	7.56%	4.96%	2.5%	Greenfield, C., B. M. Wankya, et al. (1986). "An age related point prevalence study of markers of hepatitis B virus infection in Kenya." <i>East Afr Med J</i> 63(1): 48-53.	3709390	1043
Kenya	Greenfield, 1982-1984	Nairobi and Mombasa	Adult outpatient clinic attendees; patients attending the "filter clinic" at hospitals; these clinics see a wide spectrum of disease, but the majority have only minor complaints; exclude those requiring admission or with liver disease; males (120)	males	120	9.2%	4.01%	14.33%	3.29%	0.4%	Greenfield, C., B. M. Wankya, et al. (1986). "An age related point prevalence study of markers of hepatitis B virus infection in Kenya." <i>East Afr Med J</i> 63(1): 48-53.	3709390	1043
Kenya	Bowry, 1984*	Nairobi	Black urban population of Nairobi; 113 preschoolers attending clinics; 279 children from five schools; 100 volunteer blood donors; 229 pregnant women attending antenatal clinics; no selection described; males (296)	males	296	4.7%	2.31%	7.15%	4.75%	1.6%	Bowry, T. R. (1984). "The pattern of transmission of hepatitis B virus in an urban population of Kenya." <i>East Afr Med J</i> 61(5): 385-92.	6510316	1045
Kenya	Okoth, 1986-1987	Muranga	Children attending outpatient clinics Muranga; randomly selected; males (358)	males	358	2.0%	0.52%	3.40%	5.16%	4.6%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." <i>East Afr Med J</i> 67(9): 640-9.	2253573	1041
Kenya	Okoth, 1986-1987	Muranga	Adults attending outpatient clinics Muranga; randomly selected; males (642)	males	642	5.8%	3.96%	7.56%	5.02%	2.9%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." <i>East Afr Med J</i> 67(9): 640-9.	2253573	1041
Kenya	Okoth, 1986-1987	Nginda	Primary school children Nginda; no selection described; males (386)	males	386	2.6%	1.01%	4.17%	5.11%	3.8%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." <i>East Afr Med J</i> 67(9): 640-9.	2253573	1041
Kenya	Okoth, 1986-1987	Gathera	Primary school children Gathera; no selection described; males (561)	males	561	1.4%	0.45%	2.41%	5.29%	9.9%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." <i>East Afr Med J</i> 67(9): 640-9.	2253573	1041
Kenya	Hyams, 1989*	Mombasa, Kilifi, and Malindi	Outpatients; all patients attending outpatient clinics at distinct hospitals in the towns and their relatives were invited to participate; male (702)	males	702	14.0%	11.43%	16.57%	4.67%	1.4%	Hyams, K. C., F. A. Okoth, et al. (1989). "Epidemiology of hepatitis B in eastern Kenya." <i>J Med Virol</i> 28(2): 106-9.	2786919	1042
Kenya	Autrup, 1981-1984	9 districts in Central, Eastern, and Western provinces	Outpatients attending selected district hospitals for malaise; pts with GI complaints excluded; females (308)	females	308	10.0%	6.65%	13.35%	4.26%	0.9%	Autrup, H., T. Seremet, et al. (1987). "Aflatoxin exposure measured by urinary excretion of aflatoxin B1-guanine adduct and hepatitis B virus infection in areas with different liver cancer incidence in Kenya." <i>Cancer Res</i> 47(13): 3430-3.	3034416	1040

Kenya	Greenfield, 1982-1984	Nairobi and Mombasa	Child outpatient clinic attendees; patients attending the "filter clinic" at hospitals; these clinics see a wide spectrum of disease, but the majority have only minor complaints; exclude those requiring admission or with liver disease; females (455)	females	455	3.7%	2.00%	5.48%	5.05%	3.1%	Greenfield, C., B. M. Wankya, et al. (1986). "An age related point prevalence study of markers of hepatitis B virus infection in Kenya." East Afr Med J 63(1): 48-53.	3709390	1043
Kenya	Greenfield, 1982-1984	Nairobi and Mombasa	Adult outpatient clinic attendees; patients attending the "filter clinic" at hospitals; these clinics see a wide spectrum of disease, but the majority have only minor complaints; exclude those requiring admission or with liver disease; females (118)	females	118	8.5%	3.45%	13.51%	3.36%	0.4%	Greenfield, C., B. M. Wankya, et al. (1986). "An age related point prevalence study of markers of hepatitis B virus infection in Kenya." East Afr Med J 63(1): 48-53.	3709390	1043
Kenya	Bowry, 1984*	Nairobi	Black urban population of Nairobi; infants, children, young adults, pregnant women (355)	females	355	3.9%	1.92%	5.96%	4.93%	2.3%	Bowry, T. R. (1984). "The pattern of transmission of hepatitis B virus in an urban population of Kenya." East Afr Med J 61(5): 385-92.	6510316	1045
Kenya	Okoth, 1986-1987	Muranga	Children attending outpatient clinics Muranga; randomly selected; females (453)	females	453	0.9%	0.02%	1.74%	5.32%	12.9%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." East Afr Med J 67(9): 640-9.	2253573	1041
Kenya	Okoth, 1986-1987	Muranga	Adults attending outpatient clinics Muranga; randomly selected; females (1,191)	females	1,191	2.8%	1.84%	3.70%	5.31%	11.0%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." East Afr Med J 67(9): 640-9.	2253573	1041
Kenya	Okoth, 1986-1987	Nginda	Primary school children Nginda; randomly selected; females (440)	females	440	1.1%	0.15%	2.13%	5.29%	9.7%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." East Afr Med J 67(9): 640-9.	2253573	1041
Kenya	Okoth, 1986-1987	Gathera	Primary school children Gathera; no selection described (584)	females	584	0.7%	0.01%	1.35%	5.36%	21.5%	Okoth, F. A., T. Yamanaka, et al. (1990). "A community based longitudinal study of viral hepatitis B in a rural community." East Afr Med J 67(9): 640-9.	2253573	1041
Kenya	Hyams, 1989*	Mombasa, Kilifi, and Malindi	Outpatients; all patients attending outpatient clinics at distinct hospitals in the towns and their relatives were invited to participate; female (831)	females	831	9.1%	7.14%	11.06%	4.96%	2.5%	Hyams, K. C., F. A. Okoth, et al. (1989). "Epidemiology of hepatitis B in eastern Kenya." J Med Virol 28(2): 106-9.	2786919	1042
Kenya	Okoth, 2001-2002	5 provinces	Pregnant women attending antenatal clinics in 8 hospitals in 5 provinces (2,241)	females	2,241	9.3%	8.10%	10.50%	5.23%	6.6%	Okoth, F., J. Mbuthia, et al. (2006). "Seroprevalence of hepatitis B markers in pregnant women in Kenya." East Afr Med J 83(9): 485-93.	17447350	1046
Kenya	Rein, 2006-2008		Refugees arriving in the US 2006-2008; information from states with an active refugee health coordinator (250)	both	121	4.1%	0.57%	7.63%	4.16%	0.8%	Rein DB, Lesesne SB, O'Fallon A, Weinbaum CM (2009) Prevalence of hepatitis B surface antigen among refugees entering the United States between 2006 and 2008. Hepatology. 2010 Feb;51(2):431-4	19902482	1048
Kenya	Bowry, 1985*	Turkana District	Nomadic inhabitants of Turkana villages; no selection described (98)	both	98	29.0%	20.02%	37.98%	1.83%	0.1%	Bowry, T. R., J. Pade, et al. (1985). "A pilot study of hepatitis B virus seroepidemiology suggests widespread immunosuppression in the nomadic inhabitants of Turkana District of Kenya." East Afr Med J 62(7): 501-6.	4076030	1044
Kenya	Azziz-Baumgartner, 2004	Makueni District, eastern Kenya	Randomly selected healthy controls from the same village as the aflatoxicosis patients (54)	both	54	7.4%	0.42%	14.40%	2.48%	0.2%	Azziz-Baumgartner, E., K. Lindblade, et al. (2005). "Case-control study of an acute aflatoxicosis outbreak, Kenya, 2004." Environ Health Perspect 113(12): 1779-83.	16330363	1047
				total studies	22	11,150			100.00%	100.00%			
				males	9								
				females	10								
				both	3								

* indicates publication year; survey year not reported

Table 68: Summary of Surveys Included in Meta-Analysis: Somalia												Eastern Africa	
Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg positive (%)	lower 95% CI	upper 95% CI	RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
Somalia	Bile, 1983-1984	Mogadishu	Children living in Mogadishu; 117 children at a pediatric hospital and 311 at primary schools near mother and child health centers males (223)	males	223	4.0%	1.43%	6.57%	7.61%	8.1%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051
Somalia	Bile, 1983-1984	coastal areas	Adult males from coastal areas; men who had recently come to Mogadishu from the coastal areas (98)	males	98	14.3%	7.37%	21.23%	6.06%	1.1%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051
Somalia	Bile, 1983-1984	Mogadishu	Children living in Mogadishu; 117 children at a pediatric hospital and 311 at primary schools near mother and child health centers females (205)	females	205	1.0%	-0.36%	2.36%	7.84%	29.0%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051
Somalia	Bile, 1983	Mogadishu	Pregnant women; attending Benadir Mother and Child Hospital in Mogadishu for routine care (135)	females	135	10.4%	5.25%	15.55%	6.78%	2.0%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051
Somalia	Jama, 1985-1986	Mogadishu	Pregnant women attending Benadir Mother and Child Hospital in Mogadishu for routine care (52)	females	52	37.0%	23.88%	50.12%	3.77%	0.3%	Jama, H., L. Grillner, et al. (1987). "Sexually transmitted viral infections in various population groups in Mogadishu, Somalia." <i>Genitourin Med</i> 63(5): 329-32.	2824336	1050
Somalia	Bile, 1983-1984	coastal areas	Adult females from agricultural areas; women who had recently come to Mogadishu from the coastal areas (72)	females	72	8.3%	1.93%	14.67%	6.29%	1.3%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051
Somalia	Aweis, 2000	asylum seekers to UK	Somali-born persons living in Liverpool; recruited at centers providing care for Somali households; adult males under-represented (309)	both	309	7.4%	4.51%	10.37%	7.52%	6.3%	Aweis, D., B. J. Brabin, et al. (2001). "Hepatitis B prevalence and risk factors for HBsAg carriage amongst Somali households in Liverpool." <i>Commun Dis Public Health</i> 4(4): 247-52.	12109390	1055
Somalia	Brabin, 2002*	migrants to Liverpool, UK	Somali migrants to Liverpool; recruited at centers providing care for Somali households (439)	both	439	5.7%	3.53%	7.87%	7.70%	11.4%	Brabin, B., N. J. Beeching, et al. (2002). "Hepatitis B prevalence among Somali households in Liverpool." <i>Arch Dis Child</i> 86(1): 67-8.	11806897	1054
Somalia	Rein, 2006-2008	refugees to US	Refugees arriving in the US 2006-2008; information from states with an active refugee health coordinator (250)	both	1,253	8.3%	6.77%	9.83%	7.82%	23.1%	Rein DB, Lesesne SB, O'Fallon A, Weinbaum CM (2009) Prevalence of hepatitis B surface antigen among refugees entering the United States between 2006 and 2008. <i>Hepatology</i> . 2010 Feb;51(2):431-4	19902482	1056
Somalia	Bile, 1983-1984	Shebeli and Juba area	People from agricultural areas who had recently come to Mogadishu from the agricultural areas (103)	both	103	15.5%	8.51%	22.49%	6.04%	1.1%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051
Somalia	Bile, 1983-1984	savannah lands in north and east	Nomadic people who had recently come to Mogadishu from the savannah areas (110)	both	110	20.0%	12.52%	27.48%	5.84%	1.0%	Bile, K. M., A. Aden, et al. (1987). "Epidemiology of hepatitis B in Somalia: inference from a cross-sectional survey of serological markers." <i>Trans R Soc Trop Med Hyg</i> 81(5): 824-8.	3502433	1051

Somalia	Sebastiani, 1985*	villages (Buur-Fuul, Moode and Baiuni Islands) i	Villagers in three different districts; no selection or response rate described (331)	both	331	12.0%	8.50%	15.50%	7.35%	4.4%	Sebastiani, A., A. Aceti, et al. (1985). "Hepatitis B virus circulation in three different villages of Somalia." <i>Trans R Soc Trop Med Hyg</i> 79(2): 162-4.	4002285	1052
Somalia	Mohamud, 1992*	Mogadishu	Adult residents of Mogadishu' no selection described (457)	both	457	22.3%	18.48%	26.12%	7.25%	3.7%	Mohamud, K. B., A. Aceti, et al. (1992). "[The circulation of the hepatitis A and B viruses in the Somali population]." <i>Ann Ital Med Int</i> 7(2): 78-83.	1334688	1049
Somalia	Mohamud, 1992*	villages	Child and adult residents of rural areas; no selection described (681)	both	681	17.3%	14.46%	20.14%	7.54%	6.7%	Mohamud, K. B., A. Aceti, et al. (1992). "[The circulation of the hepatitis A and B viruses in the Somali population]." <i>Ann Ital Med Int</i> 7(2): 78-83.	1334688	1049
Somalia	Nur, 1995	Mogadishu	Hospitalized adults Mogadishu; adults admitted to Benadir Hospital; none with evident hepatitis (57)	both	57	21.3%	10.67%	31.93%	4.60%	0.5%	Nur, Y. A., J. Groen, et al. (2000). "Prevalence of serum antibodies against bloodborne and sexually transmitted agents in selected groups in Somalia." <i>Epidemiol Infect</i> 124(1): 137-41.	10722141	1053
				total studies	15	4,525		100.00%		100.00%			
				males	2								
				females	4								
				both	9								

* indicates publication year; survey year not reported

Table 69: Summary of Surveys Included in Meta-Analysis: Uganda Eastern Africa

Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg			RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
						positive (%)	lower 95% CI	upper 95% CI					
Uganda	Sobeslavsky 1980*	Entebbe	Apparently healthy non-institutionalized population of Entebbe; individuals of both sexes and different age groups; male (381)	males	381	8.1%	5.36%	10.84%	13.32%	6.3%	Sobeslavsky O. (1980) Prevalence of markers of hepatitis B virus infection in various countries: a WHO collaborative study. 58(4):621-8	371	371
Uganda	de Lalla 1986-1987	Kitgum district (North)	General outpatient population; 134 outpatients, 40 pregnant women; 11 soldiers; 69 inpatients with TB; 19 pts with "Slim disease"; male (213)	males	213	12.7%	8.23%	17.17%	8.54%	2.4%	de Lalla, F., G. Rizzardini, et al. (1990). "HIV, HBV, delta-agent and Treponema pallidum infections in two rural African areas." Trans R Soc Trop Med Hyg 84(1): 144-7.	1068	1068
Uganda	Bwogi 2005	national	Adults aged 15-59 yrs; nationally representative sample; HBsAg survey nested in the 2005 HIV/AIDS serobehavioral survey; one-third of blood specimens collected from adults 15-59 were tested for HBcAb; positives tested for HbsAg; multistage systematic sampling; males (2,656)	males	2,656	11.8%	10.57%	13.03%	18.21%	31.5%	Bwogi, J., F. Braka, et al. (2009). "Hepatitis B infection is highly endemic in Uganda: findings from a national serosurvey." Afr Health Sci 9(2): 98-108.	1070	1070
Uganda	Seremba 2006	Kampala	Consecutive patients admitted to emergency medical ward in Kampala; males (169)	males	169	14.8%	9.45%	20.15%	6.84%	1.7%	Seremba, E., P. Ocama, et al. (2010). "Validity of the rapid strip assay test for detecting HBsAg in patients admitted to hospital in Uganda." J Med Virol 82(8): 1334-40.	1071	1071
Uganda	Sobeslavsky 1980*	Entebbe	Apparently healthy non-institutionalized population of Entebbe; individuals of both sexes and different age groups; female (169)	females	169	6.6%	2.86%	10.34%	10.31%	3.4%	Sobeslavsky O. (1980) Prevalence of markers of hepatitis B virus infection in various countries: a WHO collaborative study. 58(4):621-8	371	371
Uganda	de Lalla 1986-1987	Kitgum district (North)	General outpatient population; 134 outpatients, 40 pregnant women; 11 soldiers; 69 inpatients with TB; 19 pts with "Slim disease"; female (145)	females	145	6.2%	2.27%	10.13%	9.84%	3.1%	de Lalla, F., G. Rizzardini, et al. (1990). "HIV, HBV, delta-agent and Treponema pallidum infections in two rural African areas." Trans R Soc Trop Med Hyg 84(1): 144-7.	1068	1068
Uganda	Bwogi 2005	national	Adults aged 15-59 yrs; nationally representative sample; HBsAg survey nested in the 2005 HIV/AIDS serobehavioral survey; one-third of blood specimens collected from adults 15-59 were tested for HBcAb; positives tested for HbsAg; multistage systematic sampling; females (3,219)	females	3,219	9.1%	8.11%	10.09%	18.81%	48.1%	Bwogi, J., F. Braka, et al. (2009). "Hepatitis B infection is highly endemic in Uganda: findings from a national serosurvey." Afr Health Sci 9(2): 98-108.	1070	1070
Uganda	Seremba 2006	Kampala	Consecutive patients admitted to emergency medical ward in Kampala females (211)	females	211	14.2%	9.49%	18.91%	8.03%	2.1%	Seremba, E., P. Ocama, et al. (2010). "Validity of the rapid strip assay test for detecting HBsAg in patients admitted to hospital in Uganda." J Med Virol 82(8): 1334-40.	1071	1071
Uganda	Nakwagala 1999-2000	Kampala	HIV-negative outpatients; consecutive patients >14 yo recruited from the Mulagohospital general medicine outpatient clinic; 67% participation rate (129)	Both	129	13.1%	7.28%	18.92%	6.10%	1.4%	Nakwagala, F. N. and M. M. Kagimu (2002). "Hepatitis B virus and hiv infections among patients in Mulago hospital." East Afr Med J 79(2): 68-72.	1069	1069
					total studies	9				100.00%	100.00%		
					males	4							
					females	4							
					both	1							

* indicates publication year; survey year not reported

Table 70: Summary of Surveys Included in Meta-Analysis: Eritrea

Eastern Africa

Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg			RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
						positive (%)	95% CI	upper 95% CI					
Eritrea	Ghebrekidan 1995	port of Masawa	Former guerrilla fighters; no selection described (73)	Both	73	23.0%	13.35%	32.65%	45.88%	26.0%	Ghebrekidan, H., S. Cox, et al. (1998). "Prevalence of infection with HIV, hepatitis B and C viruses, in four high risk groups in Eritrea." <i>Clin Diagn Virol</i> 9(1): 29-35.	9562856	
Eritrea	Ghebrekidan 1995	port of Masawa	Truck drivers and port workers; no selection described (98)	Both	98	9.2%	3.46%	14.90%	54.12%	74.0%	Ghebrekidan, H., S. Cox, et al. (1998). "Prevalence of infection with HIV, hepatitis B and C viruses, in four high risk groups in Eritrea." <i>Clin Diagn Virol</i> 9(1): 29-35.	9562856	
			total studies	2	171				100.00%	100.00%			
			total studies	0									
			males	0									
			females	0									
			both	2									

* indicates publication year; survey year not reported

Table 71: Summary of Surveys Included in Meta-Analysis: Tanzania

Eastern Africa

Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg			RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
						positive (%)	lower 95% CI	upper 95% CI					
Tanzania	Pellizzer, 1991-1992	Dodoma (central urban area); Kondo (rural)	Male outpatients attending two hospitals for diseases not related to the liver; none with AIDS; males (251)	males	251	4.8%	2.16%	7.44%	7.64%	6.6%	Pellizzer, G., C. Ble, et al. (1994). "Serological survey of hepatitis B infection in Tanzania." <i>Public Health</i> 108(6): 427-31.	7997492	1062
Tanzania	Miller, 1992	Dar es Salaam	Healthy adult workers recruited from a chicken feed/poultry hatchery and a textile factory; male (212)	males	212	6.0%	2.80%	9.20%	6.54%	4.5%	Miller, W. C., J. F. Shao, et al. (1998). "Seroprevalence of viral hepatitis in Tanzanian adults." <i>Trop Med Int Health</i> 3(9): 757-63.	9754673	1063
Tanzania	Haukenes, 1984-1985	Dar es Salaam area	Pregnant women Dar es Salaam area; collected during first visit to antenatal clinic; no selection or response rate reported (60)	females	60	15.0%	5.96%	24.04%	1.56%	0.6%	Haukenes, G., J. F. Shao, et al. (1987). "Hepatitis B virus markers in the population of Dar es Salaam, Tanzania." <i>J Infect</i> 15(2): 183-8.	3668273	1059
Tanzania	Pellizzer, 1991-1992	Dodoma (central); urban and rural	Pregnant women Dodoma; attending antenatal service at two hospitals (463)	females	463	4.3%	2.47%	6.17%	9.38%	13.4%	Pellizzer, G., C. Ble, et al. (1994). "Serological survey of hepatitis B infection in Tanzania." <i>Public Health</i> 108(6): 427-31.	7997492	1062
Tanzania	Pellizzer, 1991-1992	Dodoma (central urban area); Kondo (rural)	Outpatients attending two hospitals for diseases not related to the liver; none with AIDS; females (290)	females	290	4.1%	1.85%	6.43%	8.40%	8.8%	Miller, W. C., J. F. Shao, et al. (1998). "Seroprevalence of viral hepatitis in Tanzanian adults." <i>Trop Med Int Health</i> 3(9): 757-63.	9754673	1063
Tanzania	Miller, 1992	Dar es Salaam	Healthy adult workers recruited from a chicken feed/poultry hatchery and a textile factory; female (191)	females	191	6.0%	2.63%	9.37%	6.23%	4.1%	Miller, W. C., J. F. Shao, et al. (1998). "Seroprevalence of viral hepatitis in Tanzanian adults." <i>Trop Med Int Health</i> 3(9): 757-63.	9754673	1063
Tanzania	Menendez, 1995	Ifikara, Kilombero District, Morogoro, southeastern rural	Pregnant women Ifikara; part of a trial on prevention of malaria and anemia in infants; all women delivering at district hospital invited to participate (980)	females	980	6.3%	4.78%	7.82%	10.11%	19.9%	Menendez, C., J. M. Sanchez-Tapias, et al. (1999). "Prevalence and mother-to-infant transmission of hepatitis viruses B, C, and E in Southern Tanzania." <i>J Med Virol</i> 58(3): 215-20.	10447415	1064
Tanzania	Stark, 1996	vilalges of Kileo and Kivulini	Women of childbearing age; all women of childbearing age invited to participate; 68% recruited (211)	females	211	16.6%	11.58%	21.62%	3.92%	1.8%	Rein DB, Lesesne SB, O'Fallon A, Weinbaum CM (2009) Prevalence of hepatitis B surface antigen among refugees entering the United States between 2006 and 2008. <i>Hepatology</i> . 2010 Feb;51(2):431-4	19902482	1067
Tanzania	Msuya, 1999	Moshi urban district, Kilimanjaro region	Women of childbearing age Moshi urban district; recruited at three largest govt primary health care clinics; attending primarily for antenatal care, family planning, or immunization of their children; 97% of invited participated (379)	females	379	4.2%	2.20%	6.24%	9.00%	11.2%	Msuya, S. E., E. Mbizvo, et al. (2002). "Female genital cutting in Kilimanjaro, Tanzania: changing attitudes?" <i>Trop Med Int Health</i> 7(2): 159-65.	11841706	1065
Tanzania	Rein, 2006-2008	migrants to US	Refugees arriving in the US 2006-2008; information from states with an active refugee health coordinator (250)	both	224	3.1%	0.83%	5.37%	8.45%	8.9%	Stark, K., G. Poggensee, et al. (2000). "Seroepidemiology of TT virus, GBC-C/HGV, and hepatitis viruses B, C, and E among women in a rural area of Tanzania." <i>J Med Virol</i> 62(4): 524-30.	11074483	1066
Tanzania	Carswell, 1976	Ubiria and Kwamsisi villages of Tanga province of northern Tanzania	Rural school children; no selection or response rate described (244)	both	244	5.3%	2.47%	8.09%	7.31%	5.9%	Carswell, F., A. O. Hughes, et al. (1981). "Nutritional status, globulin titers, and parasitic infections of two populations of Tanzanian school children." <i>Am J Clin Nutr</i> 34(7): 1292-9.	7258120	1061
Tanzania	Stahel, 1982	rural	Students and patients attending outpatient department for minor complaints or admitted for elective surgery (200)	both	200	7.5%	3.85%	11.15%	5.75%	3.5%	Stahel, E., M. Tanner, et al. (1984). "Seroepidemiology of hepatitis B virus in rural Tanzania: relation of hepatitis B markers and liver function tests in patients with clinical liver disease and in healthy controls." <i>East Afr Med J</i> 61(11): 806-11.	6535703	1060

Tanzania	ter Meulen, 1986-1987	Kagera, northwest	Healthy primary school children in Kagera; recruited at three largest govt primary health care clinics; attending primarily for antenatal care, family planning, or immunization of their children; 97% of invited participated (100)	both	100	8.0%	2.68%	13.32%	3.63%	1.6%	ter Meulen, J., K. M. Wittkowski, et al. (1989). "Evaluation of seroepidemiological associations between HIV-infection, hepatitis B and other sexually transmitted diseases in African patients." <i>Eur J Epidemiol</i> 5(2): 158-63.	2767223	1058
Tanzania	ter Meulen, 1986-1987	Kagera, northwest	Controls for STD clinic attendees; no history of STD during the past year Kagera (89)	both	89	5.6%	0.82%	10.38%	4.19%	2.0%	ter Meulen, J., K. M. Wittkowski, et al. (1989). "Evaluation of seroepidemiological associations between HIV-infection, hepatitis B and other sexually transmitted diseases in African patients." <i>Eur J Epidemiol</i> 5(2): 158-63.	2767223	1058
Tanzania	Aebischer, 1990*	Mwanza, Magu, and Nassa	Infants of Sukumu tribe; neonatal screening for endocrine-metabolic diseases; no selection described (223)	both	186	3.2%	0.68%	5.76%	7.87%	7.2%	Aebischer, M. L., M. C. Martorana, et al. (1990). "Evaluation of the sensitivity of microfilter paper assays in an anthropological study: results of samples from Cameroon and Tanzania." <i>Anthropol Anz</i> 48(1): 15-23.	2334145	1057
				total studies	15	4,080				100.00%	100.00%		
				males	2								
				females	7								
				both	6								

* indicates publication year; survey year not reported

Table 72: Summary of Surveys Included in Meta-Analysis: Zimbabwe											Eastern Africa		
Country	Study (survey year*)	Region	Population and sampling method	Sex	Sample (n)	HBsAg			RE weight (%)	FE weight (%)	Reference	Access No	Ref No.
						positive (%)	lower 95% CI	upper 95% CI					
Zimbabwe	Tswana 1985*	Masvingo	Tswana 1985*, healthy volunteers from companies in Masvingo; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; males (91)	males	91	22.0%	13.49%	30.51%	3.79%	0.4%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Kariba	Tswana 1985*, healthy volunteers from companies in Kariba; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; males (124)	males	124	14.5%	8.30%	20.70%	4.33%	0.7%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Wedza	Tswana 1985*, healthy volunteers from companies in Wedza; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; males (71)	males	71	16.9%	8.18%	25.62%	3.74%	0.3%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Harare	Tswana 1985*, healthy volunteers from companies and schools in Harare; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; males (265)	males	265	14.7%	10.44%	18.96%	4.74%	1.4%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Kadoma	Tswana 1985*, healthy volunteers from schools in Kadoma; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; males (98)	males	98	21.4%	13.28%	29.52%	3.88%	0.4%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1989-1991	urban and rural	Tswana 1989-1991, urban and rural adults; community-based cross-sectional study; randomly selected districts from each of the 9 provinces in the country; 17 districts total; collections were done at schools, clinics, factories, or rural health centers; males (1,461)	males	1,461	16.8%	14.88%	18.72%	5.08%	7.2%	Tswana, S., C. Chetsanga, et al. (1996). "A sero-epidemiological cross-sectional study of hepatitis B virus in Zimbabwe." S Afr Med J 86(1): 72-5.	8685787	1076
Zimbabwe	Campbell 1993-1997	Harare	Campbell 1993-1997, male workers recruited at 40 factories; longitudinal cohort of subjects in the Zimbabwe AIDS Prevention Project to measure HIV and HHV-8 incidence; recruited at 40 factories; enrolled 1993-1997; HBsAg tested at study entry; males (2,750)	males	2,750	5.2%	4.40%	6.06%	5.15%	38.0%	Campbell, T. B., M. Borok, et al. (2009). "Lack of evidence for frequent heterosexual transmission of human herpesvirus 8 in Zimbabwe." Clin Infect Dis 48(11): 1601-8.	19400749	1081
Zimbabwe	Moyo 2009*	high veld region	Moyo 2009*, men >30 yrs of age in highveld area; subjects recruited through church; main purpose of study to measure serum ferritin levels (194)	males	194	23.2%	17.26%	29.14%	4.39%	0.7%	Moyo, V. M., E. Mvundura, et al. (2009). "Serum ferritin concentrations in Africans with low dietary iron." Ann Hematol 88(11): 1131-6.	19259672	1080
Zimbabwe	Tswana 1985*	Masvingo	Tswana 1985*, healthy volunteers from companies in Masvingo; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; females (56)	females	56	16.1%	6.47%	25.73%	3.52%	0.3%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Kariba	Tswana 1985*, healthy volunteers from companies in Kariba; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; females (121)	females	121	12.4%	6.53%	18.27%	4.41%	0.8%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074

Zimbabwe	Tswana 1985*	Wedza	Tswana 1985*, healthy volunteers from companies in Wedza; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; females (149)	females	149	16.8%	10.80%	22.80%	4.38%	0.7%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Harare	Tswana 1985*, healthy volunteers from companies and schools in Harare; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; females (280)	females	280	4.3%	1.92%	6.66%	5.03%	4.7%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1985*	Kadoma	Tswana 1985*, healthy volunteers from schools in Kadoma; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described; females (100)	females	100	13.0%	6.41%	19.59%	4.24%	0.6%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1989-1991	urban and rural	Tswana 1989-1991, urban and rural adults; community-based cross-sectional study; randomly selected districts from each of the 9 provinces in the country; 17 districts total; collections were done at schools, clinics, factories, or rural health centers; females (1,933)	females	1,933	14.3%	12.74%	15.86%	5.11%	10.8%	Tswana, S., C. Chetsanga, et al. (1996). "A sero-epidemiological cross-sectional study of hepatitis B virus in Zimbabwe." S Afr Med J 86(1): 72-5.		1076
Zimbabwe	Patana 1995*	Chiweshe District	Patana 1995*, pregnant women attending an antenatal clinic at Howard Hospital in rural Chiweshe District (299)	females	299	2.0%	0.41%	3.59%	5.11%	10.5%	Patana, M., N. Z. Nyazema, et al. (1995). "Schistosomiasis and hepatitis B infection in pregnancy: implications for vaccination against hepatitis B." Cent Afr J Med 41(9): 288-92.	8591639	1075
Zimbabwe	Madzime 1996-1997	Harare	Madzime 1996-1997, pregnant women; random sample of women delivering during the study period Harare (984)	females	984	25.0%	22.29%	27.71%	4.99%	3.6%	Madzime, S., M. A. William, et al. (2000). "Seroprevalence of hepatitis C virus infection among indigent urban pregnant women in Zimbabwe." Cent Afr J Med 46(1): 1-4.	14674198	1079
Zimbabwe	Madzime 1996-1997	Harare	Madzime 1996-1997, indigent pregnant women admitted for labour and delivery during the study period; Harare (1,324)	females	1,324	20.5%	18.33%	22.67%	5.05%	5.6%	Madzime, S., M. A. William, et al. (2000). "Seroprevalence of hepatitis C virus infection among indigent urban pregnant women in Zimbabwe." Cent Afr J Med 46(1): 1-4.	14674198	1079
Zimbabwe	Mavenyengwa 2003-2005	Chitsungo, Harare, Guruve District	Mavenyengwa 2003-2005, pregnant women attending antenatal clinics in three health centres from rural, rural-urban and urban communities (418)	females	418	3.3%	1.59%	5.01%	5.10%	9.0%	Mavenyengwa, R. T., S. R. Moyo, et al. (2010). "Streptococcus agalactiae colonization and correlation with HIV-1 and HBV seroprevalence in pregnant women from Zimbabwe." Eur J Obstet Gynecol Reprod Biol 150(1): 34-8.	20189288	1082
Zimbabwe	Moyo 2009*	high veld region	Moyo 2009*, women >50 yrs of age in highveld area; subjects recruited through church; main purpose of study to measure serum ferritin levels (299)	females	299	10.4%	6.94%	13.86%	4.88%	2.2%	Moyo, V. M., E. Mvundura, et al. (2009). "Serum ferritin concentrations in Africans with low dietary iron." Ann Hematol 88(11): 1131-6.	19259672	1080
Zimbabwe	Tswana 1985*	Gweru	Tswana 1985*, healthy volunteers from companies in Gweru; study areas randomly picked from various areas of the country; volunteers from Morgenste Mission; no selection described (116)	both	116	14.7%	8.26%	21.14%	4.28%	0.6%	Tswana, S. A. (1985). "Serologic survey of hepatitis B surface antigen among the healthy population in Zimbabwe." Cent Afr J Med 31(3): 45-9.	4016904	1074
Zimbabwe	Tswana 1992*	Harare	Tswana 1992*, clinic controls for HCC patients; patients without raised AFP levels at Parireyatwa teaching Hospital; no selection described; pregnant women, smokers, ETOH consumers excluded; (100)	both	100	11.0%	4.87%	17.13%	4.35%	0.7%	Tswana, S. A. and S. R. Moyo (1992). "The interrelationship between HBV-markers and HIV antibodies in patients with hepatocellular carcinoma." J Med Virol 37(3): 161-4.	1279108	1073
Zimbabwe	Gangaidzo 1997*	Zaka District of Masvingo province; rural areas	Gangaidzo 1997*, healthy rural adults; rural communities around different parts of Zimbabwe, as part of a larger study into the prevalence and genetic pattern of iron overload (150)	both	150	14.1%	8.53%	19.67%	4.47%	0.8%	Gangaidzo, I. T., V. M. Moyo, et al. (1997). "Hepatitis C virus in Zimbabwe." Cent Afr J Med 43(5): 122-5.	9505450	1077

* indicates publication year; survey year not reported

total studies	22	11,383	100.00%	100.00%
males	8			
females	11			
both	3			