

Human Herpesvirus 8 Seroprevalence, China

Technical Appendix

Technical Appendix Table 1. Summary of data from literature on HHV8 prevalence, China*

Author, year	District	Design	Sample	Detection method	Sample collection year(s)	Target population	Sample size	HHV-8 prevalence (95% CI)
Qi et al., 2005	Shandong	Cross-sectional	Serum	ELISA	2003/2004	General population	303	6.3 (3.6–9.0)
Qi et al., 2006	Shandong	Cross-sectional	Serum	ELISA	2003/2004	General population	520	6.0 (4.0–8.0)
Qi et al., 2007	Shandong	Cross-sectional	Serum	ELISA	NA	General population	230	5.7 (2.7–8.7)
	Shandong	Cross-sectional	Serum	ELISA	NA	Immunocompromised persons†	86	16.3 (8.5–24.1)
Li, et al, 2008	Shandong	Cross-sectional	Plasma	ELISA	2005/2006	General population	460	5.7 (3.6–7.8)
Wang et al., 2000	Zhejiang	Cross-sectional	Serum/plasma	ELISA	1998/1999	Drug user	242	34.3 (28.3–40.3)
Wang et al., 2001	Zhejiang	Cross-sectional	Plasma	ELISA	1998/1999	General population	241	16.2 (11.5–20.9)
Zhu et al., 2008	Zhejiang	Cross-sectional	Plasma	ELISA	NA	Immunocompromised persons	214	36.4 (30.0–42.8)
			Plasma	ELISA	NA	General population	122	13.0 (7.0–19.0)
Fu et al., 2006‡	Guangdong	Cross-sectional	Whole blood	PCR	NA	General population	239	0.8 (0.0–1.9)
Fu et al., 2006‡	Guangdong	Cross-sectional	Plasma	ELISA	2004/2005	General population	3,135	0.2 (0.0–0.4)
Guan et al., 2008	Guangdong	Cross-sectional	Serum	ELISA	NA	Immunocompromised persons	167	0.6 (0.0–1.8)
Fu et al., 2009‡	Hubei	Cross-sectional	Serum	ELISA	2004/2005	General population	560	6.8 (4.7–8.9)
Fang et al., 2006	Hubei	Cross-sectional	Serum	ELISA	2004/2005	General population	560	5.2 (3.4–7.0)
Wang et al., 2002	Dongbei§	Cross-sectional	PMBC	PCR	NA	General population	230	7.8 (4.3–11.3)
Zhang et al., 2010	Shanxi	Cross-sectional	Plasma	IFA	2004/2005	General population	315	4.8 (2.4–7.2)
			Plasma	IFA	2004/2005	Immunocompromised persons	305	15.4 (11.3–19.5)
Du et al., 2000	Xinjiang	Cross-sectional	Serum	IFA	NA	General population	1,071	24.5 (21.9–27.1)
Sun, et al., 2002	Xinjiang	Cross-sectional	Serum	ELISA	1998–2000	Immunocompromised persons	56	28.5 (16.7–40.3)
Sun et al., 2003	Xinjiang	Cross-sectional	Serum	IFA	2000	General population	406	15.5 (12.0–19.0)
Qing et al., 2005	Xinjiang	Cross-sectional	Serum	PCR	2002/2003	General population	68	22.1 (12.2–32.0)
Wu et al., 2005	Xinjiang	Cross-sectional	Serum	IFA	NA	General population	204	30.4 (24.1–36.7)
He et al., 2007‡	Xinjiang	Cross-sectional	Serum	ELISA	NA	Immunocompromised persons	155	26.5 (19.6–33.4)
He et al., 2007‡	Xinjiang	Cross-sectional	Serum	ELISA	2004	Immunocompromised persons	482	25.3 (21.4–29.2)
Fu et al., 2009‡	Xinjiang	Cross-sectional	Serum	ELISA	2007	General population	2,228	19.2 (17.6–20.8)

Author, year	District	Design	Sample	Detection method	Sample collection year(s)	Target population	Sample size	HHV-8 prevalence (95% CI)
			Serum	ELISA	2007	Immunocompromised persons	37	43.2 (27.2–59.2)
	Hubei	Cross-sectional	Serum	ELISA	2007	General population	560	9.5 (7.1–11.9)
Yang et al., 2009	Xinjiang	Cross-sectional	Serum	ELISA	2006	Immunocompromised persons	468	14.3 (11.1–17.5)
Wang, et al., 2010	Xinjiang	Cross-sectional	Serum	ELISA	NA	General population	4,461	20.4 (19.2–21.6)
Yang et al., 2010‡	Xinjiang	Cross-sectional	Serum	ELISA	2006	Drug user	223	28.7 (22.8–34.6)
Yang et al., 2010‡	Xinjiang	Cross-sectional	Serum	ELISA	2006	Drug user	199	30.6 (24.2–37.0)

*HHV8, human herpesvirus 8; NA, not applicable.

†Immunocompromised persons include patients with tumors, organ transplant recipients, HIV-positive patients, and other patients with immunosuppressed-related conditions.

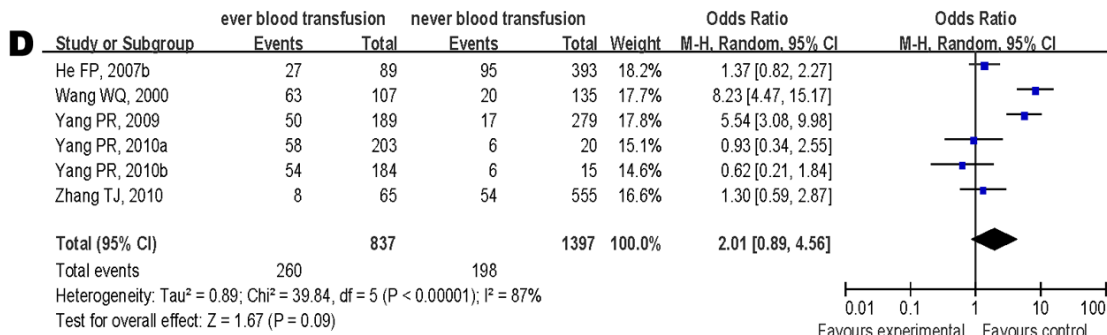
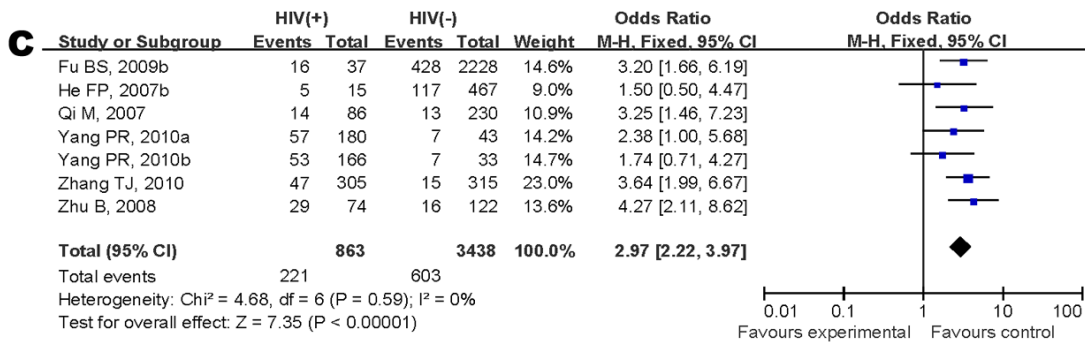
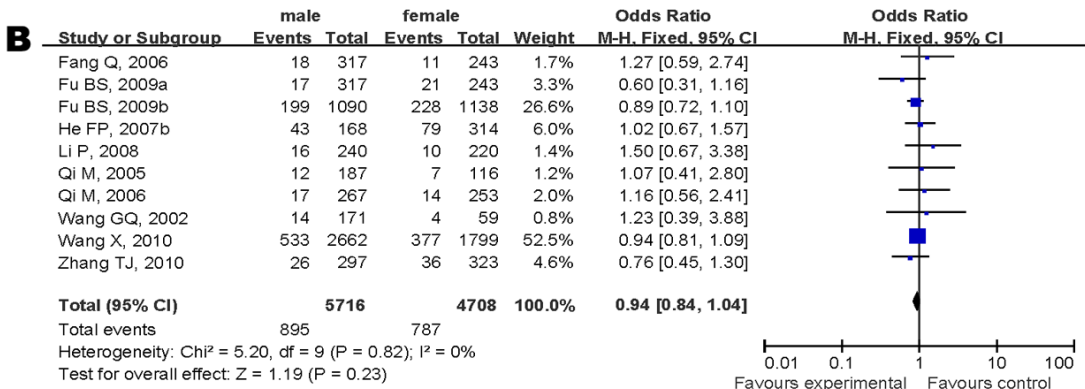
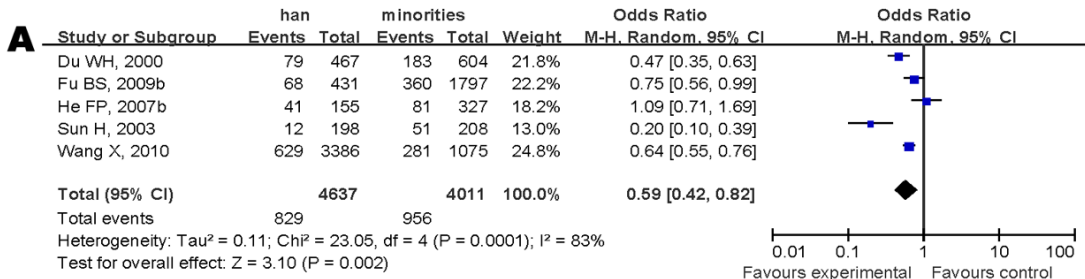
‡From same first author in 1 year.

§Dongbei includes the provinces of Heilongjiang, Jilin, and Liaoning.

Technical Appendix Table 2. Distribution of HHV-8 prevalence among different subpopulations in mainland China*

Population type and province	Author, year	Sample size	HHV-8 prevalence (95% CI)	Pooled prevalence by region (95% CI)
General population				
Shandong	Qi et al., 2005	303	6.3 (3.6–9.0)	5.9 (4.7–7.1)
	Qi et al., 2006	520	6.0 (4.0–8.0)	
	Qi et al., 2007	230	5.7 (2.7–8.7)	
	Li et al., 2008	460	5.7 (3.6–7.8)	
Zhejiang	Wang et al., 2001	241	16.2 (11.5–20.9)	15.0 (11.3–18.7)
	Zhu et al., 2008	122	13.0 (7.0–19.0)	
Guangdong	Fu et al., 2006a	239	0.8 (0.0–1.9)	0.2 (0.0–0.5)
	Fu et al., 2006b	3,135	0.2 (0.0–0.4)	
Hubei	Fu et al., 2009a	560	6.8 (4.7–8.9)	7.1 (4.7–9.4)
	Fu et al., 2009b	560	9.5 (7.1–11.9)	
	Fang et al., 2006	560	5.2 (3.4–7.0)	
Dongbei	Wang et al., 2002	230	7.8 (4.3–11.3)	7.8 (4.3–11.3)
Shanxi	Zhang et al., 2010	315	4.8 (2.4–7.2)	4.8 (2.4–7.2)
Xinjiang	Du et al., 2000	1,071	24.5 (21.9–27.1)	21.2 (18.6–23.9)
	Sun et al., 2003	406	15.5 (12.0–19.0)	
	Qing et al., 2005	68	22.1 (12.2–32.0)	
	Wu et al., 2005	204	30.4 (24.1–36.7)	
	Fu et al., 2009b	2,228	19.2 (17.6–20.8)	
	Wang et al., 2010	4,461	20.4 (19.2–21.6)	
Pooled	NA	NA	11.3 (7.2–15.5)	NA
Immunocompromised persons				
Shandong	Qi et al., 2007	86	16.3 (8.5–24.1)	16.3 (8.5–24.1)
Zhejiang	Zhu et al., 2008	214	36.4 (30.0–42.8)	36.4 (30.0–42.8)
Guangdong	Guan et al., 2008	167	0.6 (0.0–1.8)	0.6 (0.0–1.8)
Shanxi	Zhang et al., 2010	305	15.4 (11.3–19.5)	15.4 (11.3–19.5)
Xinjiang	Sun et al. 2002	56	28.5 (16.7–40.3)	25.6 (17.7–33.4)
	He et al., 2007a	155	26.5 (19.6–33.4)	
	He et al., 2007b	482	25.3 (21.4–29.2)	
	Fu, t al., 2009b	37	43.2 (27.2–59.2)	
	Yang et al., 2009	468	14.3 (11.1–17.5)	
Pooled	NA	NA	22.2 (12.7–31.8)	NA
IV drug users				
Zhejiang	Wang et al., 2000	242	34.3 (28.3–40.3)	34.3 (28.3–40.3)
Xinjiang	Yang et al., 2010a	223	28.7 (22.8–34.6)	29.6 (25.2–33.9)
	Yang et al., 2010b	199	30.6 (24.2–37.0)	
Pooled	NA	NA	31.2 (27.7–34.7)	NA

*HHV-8, human herpesvirus 8; a, b: From the same first author in one year; IV, intravenous. NA, not applicable.



Technical Appendix Figure. Meta-analysis of herpesvirus 8 (HHV8) prevalence among subgroups in China. A) Comparison of (HHV-8 prevalence between persons of Han ethnicity and of minority ethnicity in Xinjiang, China; B) Comparison of HHV-8 prevalence between male and female study participants in China; C) Comparison of HHV-8 prevalence between persons

with and without HIV infection in China; and D) Comparison of HHV-8 prevalence between blood contact and noncontact subjects.

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