

Table S1. The incidence of HIV/AIDS in each provincial unit during 2005-2015.

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Beijing	0.49	0.33	0.45	0.33	0.60	1.00	1.18	2.75	2.95	3.33	3.61
Tianjin	0.14	0.19	0.23	0.26	0.33	0.47	0.88	1.15	1.37	1.58	1.79
Hebei	0.09	0.07	0.11	0.13	0.11	0.17	0.21	0.38	0.57	0.70	0.92
Shanxi	0.34	0.31	0.36	0.29	0.30	0.47	0.55	0.70	0.86	1.18	1.35
Neimenggu	0.03	0.07	0.06	0.05	0.05	0.12	0.13	0.28	0.54	0.81	0.83
Liaoning	0.06	0.06	0.12	0.12	0.17	0.25	0.42	1.02	1.31	1.49	1.88
Jilin	0.08	0.08	0.15	0.17	0.26	0.36	0.67	0.92	1.25	1.59	1.96
Heilongjiang	0.06	0.09	0.09	0.17	0.17	0.29	0.41	0.68	0.98	1.26	1.44
Shanghai	0.17	0.29	0.45	0.71	0.83	1.43	1.55	2.78	2.31	1.88	2.15
Jiangsu	0.11	0.12	0.16	0.18	0.27	0.42	0.59	1.24	1.48	1.65	1.98
Zhejiang	0.09	0.14	0.25	0.31	0.48	0.88	0.94	1.79	2.28	2.74	3.02
Anhui	0.41	0.23	0.32	0.31	0.37	0.54	0.76	1.37	1.40	1.43	1.71
Fujian	0.14	0.18	0.25	0.33	0.50	0.65	0.71	1.23	1.10	1.65	2.00
Jiangxi	0.14	0.18	0.24	0.26	0.36	0.53	0.71	1.27	1.68	1.73	2.60
Shandong	0.06	0.04	0.04	0.04	0.11	0.11	0.13	0.30	0.36	0.47	0.62
Henan	2.35	2.28	2.44	1.91	1.96	1.58	1.86	3.40	3.03	3.05	3.26
Hubei	0.39	0.42	0.42	0.47	0.51	0.62	0.78	1.48	1.77	1.89	2.02
Hunan	0.26	0.48	0.53	0.64	0.85	1.16	1.41	2.92	3.16	3.40	3.82
Guangdong	0.47	0.57	0.81	1.01	1.30	1.20	1.41	2.94	2.89	3.29	3.65
Guangxi	1.85	2.67	5.17	5.00	7.31	8.41	10.88	18.15	15.04	14.02	13.25
Hainan	0.05	0.18	0.39	0.26	0.39	0.36	0.68	1.48	1.70	1.14	2.10
Chongqing	0.15	0.16	0.34	0.65	1.06	1.49	2.54	5.54	6.16	8.39	8.76
Sichuan	0.11	0.16	0.50	0.67	1.06	1.94	2.68	6.09	7.39	8.02	9.55
Guizhou	0.11	0.05	0.31	0.46	0.63	0.80	1.36	4.02	4.43	4.87	6.02
Yunnan	0.72	1.86	3.26	3.77	4.49	4.81	5.92	13.63	12.47	12.34	12.31
Xizang	0.07	0.11	0.04	0.18	0.10	0.14	0.17	0.69	0.29	0.67	1.04
Shaanxi	0.06	0.10	0.14	0.13	0.22	0.34	0.45	0.91	1.33	1.41	1.74
Gansu	0.10	0.02	0.13	0.08	0.15	0.21	0.25	0.55	0.68	0.88	1.20
Qinghai	0.13	0.18	0.13	0.16	0.20	0.39	0.53	1.36	1.62	1.85	2.59
Ningxia	0.07	0.03	0.12	0.10	0.17	0.30	0.19	0.75	0.91	0.87	1.18
Xinjiang	0.53	1.33	1.23	1.04	1.91	2.50	3.18	11.09	8.02	7.12	8.13
Sum	0.43	0.51	0.74	0.76	1.00	1.20	1.53	3.11	3.12	3.33	3.69

Table S2. The incidence rate of gonorrhoea in each provincial unit during 2005-2015

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Beijing	26.93	23.55	18.61	13.24	11.40	8.83	6.31	5.52	5.58	5.11	5.14
Tianjin	14.43	7.20	5.92	5.46	3.98	3.43	3.62	3.39	3.23	2.78	2.70
Hebei	2.52	2.17	1.59	1.37	1.33	1.38	1.28	1.31	1.31	1.67	1.72
Shanxi	7.95	6.11	5.61	3.93	3.60	3.42	3.20	3.30	3.64	4.11	3.72
Neimenggu	7.28	6.87	6.60	6.40	6.65	6.08	8.06	7.72	7.67	8.41	8.33
Liaoning	7.03	6.86	6.65	5.64	5.36	5.11	5.17	5.62	6.19	6.16	5.89
Jilin	9.46	7.12	6.60	7.46	7.06	6.38	6.73	6.17	6.79	5.98	5.29
Heilongjiang	10.21	7.63	6.62	5.14	4.51	3.81	3.74	4.01	4.23	3.99	4.38
Shanghai	70.62	56.86	45.95	41.42	35.04	28.22	21.93	20.07	21.39	23.44	29.82
Jiangsu	29.22	23.73	20.69	17.69	14.23	10.42	8.28	6.78	7.36	7.43	7.65
Zhejiang	55.21	49.58	47.51	42.70	38.55	34.19	28.74	25.51	27.72	27.79	29.41
Anhui	8.42	7.49	7.00	6.26	5.74	5.03	4.87	4.00	4.80	4.61	4.64
Fujian	18.03	14.35	14.92	15.18	15.36	14.30	13.88	13.89	15.45	12.60	13.13
Jiangxi	11.15	10.21	8.95	7.57	7.78	7.10	6.63	6.06	6.78	6.40	7.27
Shandong	6.25	4.92	4.06	3.17	2.83	2.77	2.70	2.77	3.61	3.90	3.85
Henan	5.10	3.97	3.43	2.94	2.39	1.97	2.14	2.33	2.88	3.21	2.92
Hubei	7.36	7.02	5.89	6.11	5.25	4.72	4.22	3.65	3.57	3.63	3.87
Hunan	5.66	5.78	5.20	4.57	4.52	4.08	3.75	3.48	3.63	3.23	3.56
Guangdong	23.80	21.90	21.34	21.17	20.53	18.06	16.52	16.77	19.04	15.36	15.84
Guangxi	23.66	23.11	22.63	19.64	18.21	15.12	13.17	11.24	10.29	8.91	8.56
Hainan	14.04	11.17	8.88	7.75	8.47	8.59	8.93	8.66	12.67	15.98	16.85
Chongqing	15.95	15.10	13.90	12.60	10.61	9.60	6.90	6.03	6.20	6.53	5.93
Sichuan	12.66	11.69	10.01	7.63	7.28	6.00	4.96	4.12	3.71	3.35	3.37
Guizhou	6.05	6.03	5.09	4.25	4.02	3.89	4.38	3.53	3.79	3.71	4.76
Yunnan	7.35	6.02	5.26	4.94	4.00	3.98	3.74	4.09	3.53	4.49	6.42
Xizang	4.73	2.67	2.85	1.20	2.09	2.76	1.77	1.42	1.56	1.51	1.73
Shaanxi	7.91	5.66	5.00	4.75	4.46	4.80	3.89	4.22	4.20	3.37	3.47
Gansu	6.56	5.86	4.49	3.57	3.27	3.57	6.13	3.47	4.02	3.87	2.94
Qinghai	8.36	4.53	4.78	3.71	3.95	3.73	2.11	2.55	2.67	2.60	2.86
Ningxia	27.24	22.06	18.79	17.23	13.67	10.36	6.33	5.04	5.49	4.83	5.09
Xinjiang	14.63	17.56	16.50	12.98	9.63	9.36	9.75	10.12	9.40	9.37	8.91
Sum	13.79	12.14	11.08	9.90	9.02	7.91	7.31	6.82	7.36	7.05	7.36

Table S3. The incidence rate of syphilis in each provincial unit during 2005-2015

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Beijing	17.58	23.28	25.13	23.18	23.61	24.97	23.82	21.99	24.82	26.70	24.68
Tianjin	10.27	16.19	21.71	28.80	27.09	24.39	22.81	23.10	23.67	21.64	19.37
Hebei	1.20	1.57	1.91	2.48	3.22	4.57	6.42	8.57	10.20	11.60	13.50
Shanxi	6.36	9.20	12.57	14.59	17.45	20.10	22.72	28.85	28.13	28.19	26.90
Neimenggu	5.97	9.74	13.10	15.99	18.40	24.18	28.83	36.31	43.34	45.30	43.41
Liaoning	8.25	11.06	14.47	17.63	21.49	28.96	36.39	39.34	44.29	44.63	40.43
Jilin	6.18	8.33	12.75	16.79	17.60	20.73	29.43	27.12	25.66	22.77	21.34
Heilongjiang	7.07	9.40	12.53	15.66	18.40	20.67	22.94	24.31	25.65	25.96	25.31
Shanghai	50.80	59.94	66.04	76.58	79.98	76.42	61.41	59.06	55.70	55.36	56.13
Jiangsu	12.42	16.60	21.85	27.96	32.10	31.95	30.05	29.04	27.40	30.12	29.64
Zhejiang	43.11	54.77	64.35	75.92	84.26	94.90	79.95	62.54	58.10	60.49	59.36
Anhui	5.30	7.17	9.01	10.46	13.53	16.62	20.56	24.10	27.02	29.76	34.19
Fujian	24.29	28.00	35.40	43.93	45.39	48.73	49.96	53.57	57.77	62.13	62.96
Jiangxi	6.07	7.59	8.82	11.49	12.29	12.92	14.31	15.77	19.33	21.85	25.11
Shandong	2.35	2.54	3.09	4.24	5.80	6.90	7.98	11.06	13.21	14.63	15.00
Henan	2.67	3.85	5.41	7.24	10.25	14.29	19.60	25.84	25.24	19.08	17.04
Hubei	2.93	4.64	6.17	10.97	13.85	16.12	16.28	16.42	16.28	17.88	20.67
Hunan	3.37	6.77	9.25	11.55	16.73	24.04	28.31	31.75	31.41	31.15	31.04
Guangdong	21.94	25.26	29.28	33.40	37.09	41.93	44.81	45.96	45.52	47.77	46.64
Guangxi	26.09	38.81	44.95	52.64	63.02	76.64	87.05	59.85	26.66	20.86	17.27
Hainan	13.56	15.42	20.16	20.26	24.12	27.57	27.85	35.10	39.47	38.48	48.59
Chongqing	10.79	14.73	19.55	26.85	25.38	29.58	33.65	36.68	38.59	40.38	48.55
Sichuan	6.58	8.54	10.14	11.98	18.40	24.52	26.71	28.16	24.69	24.04	27.83
Guizhou	2.75	3.69	5.47	7.71	12.25	15.77	17.92	22.37	24.09	27.50	32.37
Yunnan	2.48	3.73	5.10	6.81	9.42	10.95	13.10	18.71	20.48	27.69	33.02
Xizang	0.76	0.54	1.57	1.41	1.43	7.62	6.90	7.32	15.23	22.72	33.57
Shaanxi	2.95	4.10	5.34	6.88	9.62	12.24	14.92	18.48	20.10	22.71	24.91
Gansu	4.73	5.30	6.65	8.24	11.43	15.33	19.37	18.00	13.64	14.14	16.78
Qinghai	12.73	10.44	15.73	14.75	23.63	27.87	28.76	43.68	54.96	57.84	42.66
Ningxia	7.82	9.55	14.04	16.51	18.07	23.64	35.93	42.47	55.08	53.98	49.19
Xinjiang	10.80	19.60	28.32	38.76	49.57	50.18	70.28	87.49	97.55	93.45	107.51
Sum	9.67	12.80	15.88	19.49	23.07	26.86	29.47	30.44	30.04	30.93	31.85



Figure S1. The administrative divisions of China