**SUPPLEMENTARY MATERIAL**

**Table S1**. Number of WHO-confirmed H5N1 cases allocated to each poultry contact type using the contact classification algorithm, by country, to 30 September 2014

|  |  |  |
| --- | --- | --- |
|  | Contact classification according to algorithm |  |
| Country | Unknown | Zero | Low (Indirect) | Medium | High | Medium + High (Direct) | Total | References |
| Azerbaijan | 0 | 0 | 0 | 0 | 8 | 8 | 8 | [1, 2] |
| Cambodia | 0 | 0 | 2 | 0 | 1 | 1 | 3 | [3, 4] |
| China | 0 | 0 | 6 | 3 | 1 | 4 | 10 | [5-9] |
| Egypt | 2 | 0 | 0 | 48 | 13 | 61 | 63 | [10] |
| Indonesia | 12 | 2 | 18 | 23 | 0 | 23 | 55 | [11-13] |
| Thailand | 0 | 1 | 4 | 6 | 4 | 10 | 15 | [14-17] |
| Turkey | 0 | 0 | 1 | 3 | 6 | 9 | 10 | [18, 19] |
| Vietnam | 1 | 0 | 3 | 4 | 3 | 7 | 11 | [20, 21] |
| Total | 15 | 3 | 34 | 87 | 36 | 123 | 175 |  |
| % | 8.6 | 1.7 | 19.4 | 49.7 | 20.6 | 70.3 | 100 |  |

**Table S2**. Number of WHO-confirmed H7N9 cases allocated to each poultry contact type using the contact classification algorithm, by country / Chinese province, to 30 September 2014

|  |  |  |
| --- | --- | --- |
|  | Contact classification according to algorithm |  |
| Country/ Province | Unknown | Zero | Low (Indirect) | Medium | High | Medium + High (Direct) \* | Total | References |
| China |  |  |  |  |  |  |  |  |
| Anhui | 0 | 0 | 1 | 0 | 0 | 0 | 1 | [22, 23] |
| Guangdong | 3 | 1 | 11 | 6 | 5 | 12 | 26 | [24-28] |
| Jiangsu | 0 | 1 | 1 | 0 | 1 | 1 | 3 | [29, 30] |
| Jilin | 0 | 0 | 0 | 1 | 0 | 1 | 1 | [31] |
| Shandong | 0 | 0 | 2 | 0 | 0 | 0 | 2 | [32] |
| Shanghai | 3 | 1 | 4 | 2 | 0 | 2 | 10 | [22, 25, 33, 34] |
| Zhejiang | 0 | 0 | 10 | 9 | 2 | 11 | 21 | [32, 35-41] |
| Taiwan | 1 | 0 | 0 | 0 | 0 | 0 | 1 | [42, 43] |
| Total | 7 | 3 | 29 | 18 | 8 | 27 | 65 |  |
| % | 10.8 | 4.6 | 44.6 | 27.7 | 12.3 | 40.0 | 100 |  |

**References**

1. Gilsdorf A, *et al.* Two clusters of human infection with influenza A/H5N1 virus in the Republic of Azerbaijan, February-March 2006. *Euro Surveillance*. 2006;11:122-126.
2. World Health Organization (WHO). Human avian influenza in Azerbaijan, February–March 2006. *Weekly Epidemiological Record*. 2006;81:183-188.
3. Chea N, *et al*. Two clustered cases of confirmed influenza A(H5N1) virus infection, Cambodia, 2011. *Euro Surveillance*. 2014;19:pii=20839.
4. Vong S, *et al*. Low frequency of poultry-to-human H5N1 transmission, Southern Cambodia, 2005. *Emerging Infectious Diseases*. 2006;12:1542-1547.
5. Wang H, *et al.* Probable limited person-to-person transmission of highly pathogenic avian influenza A (H5N1) virus in China. *The Lancet.* 2008;371:1427-1434.
6. Wang M, *et al.* Food markets with live birds as source of avian influenza. *Emerging Infectious Diseases*. 2006;12:1773-1775.
7. Yu H, *et al.* Human influenza A (H5N1) cases, urban areas of People’s Republic of China, 2005–2006. *Emerging Infectious Diseases*. 2007;13:1061-1064.
8. Yu H, *et al.* The first confirmed human case of avian influenza A (H5N1) in Mainland China. *The Lancet.* 2006;367:384.
9. Shu Y, Yu H, Li D. Lethal avian influenza A (H5N1) infection in a pregnant woman in Anhui province, China. *New England Journal of Medicine*. 2006;354:1421-1422.
10. Kandeel A, *et al.* Zoonotic transmission of avian influenza virus (H5N1), Egypt, 2006-2009. *Emerging Infectious Diseases*. 2010;16:1101-1107.
11. Kandun IN, *et al.* Chicken faeces garden fertilizer: Possible source of human avian influenza H5N1 infection. *Zoonoses and Public Health*. 2010;57:285-290.
12. Kandun IN, *et al.* Three Indonesian clusters of H5N1 virus infection in 2005. New *England Journal of Medicine*. 2006;355:2186-2194.
13. Sedyaningsih ER, *et al*. Epidemiology of cases of H5N1 virus infection in Indonesia, July 2005-June 2006. *Journal of Infectious Diseases*. 2007;196:522-527.
14. Apisarnthanarak A, *et al*. Atypical avian influenza (H5N1). *Emerging Infectious Diseases.* 2004;10:1321-1324.
15. Chokephaibulkit K, *et al*. A child with avian influenza A (H5N1) infection. *Journal of the Pediatric Infectious Diseases Society.* 2005;24:162-166.
16. Chotpitayasunondh T, *et al.* Human disease from influenza A (H5N1), Thailand, 2004. *Emerging Infectious Diseases*. 2005;11:201-209.
17. Ungchusak K, *et al.* Probable person-to-person transmission of avian influenza A (H5N1). *New England Journal of Medicine*. 2005;352:333-340.
18. Oner AF, *et al.* Avian influenza A (H5N1) infection in eastern Turkey in 2006. New *England Journal of Medicine*. 2006;355:2179-2185.
19. World Health Organization. Human cases of influenza A(H5N1) infection in eastern Turkey, December 2005–January 2006. *Weekly Epidemiological Record*. 2006;43:410-416.
20. de Jong MD, *et al*. Fatal avian influenza A (H5N1) in a child presenting with diarrhea followed by coma. *New England Journal of Medicine*. 2005;352:686-691.
21. Hien TT, *et al.* Avian influenza A (H5N1) in 10 patients in Vietnam. *New England Journal of Medicine*. 2004;350:1179-1188.
22. Gao R, *et al.* Human infection with a novel avian-origin influenza A (H7N9) virus. *New England Journal of Medicine*. 2013;368:1888-1897.
23. Song R, *et al.* Surveillance of the first case of human avian influenza A (H7N9) virus in Beijing, China. *Infection*. 2014;42:127-133.
24. Chen Z, *et al.* Asymptomatic, mild, and severe Influenza A(H7N9) virus infection in humans, Guangzhou, China. *Emerging Infectious Diseases*. 2014;20:1535-1540.
25. Wang Y, Li J, Wang X. Clinical and epidemiological analysis of the first case of human infection with avian influenza A (H7N9) virus in Shenzhen, China. *International Journal of Infectious Diseases*. 2014;25:177-179.
26. Yang ZF, *et al.* Epidemiological and viral genome characteristics of the first human H7N9 influenza infection in Guangdong Province, China. *Journal of Thoracic Diseas*e. 2014;6:1785-1793.
27. Yi L, *et al.* Family clusters of avian influenza A H7N9 virus infection in Guangdong Province, China. *Journal of Clinical Microbiology*. 2015;53:22-28.
28. Xiao X, *et al.* Transmission of avian influenza A(H7N9) virus from father to child: a report of limited person-to-person transmission, Guangzhou, China, January 2014. *Euro Surveillance*. 2014;19:pii=20837.
29. Bao C, *et al.* Live-animal markets and influenza A (H7N9) virus infection. *New England Journal of Medicine*. 2013;368:2337-2339.
30. Li Q, *et al.* Epidemiology of human infections with avian influenza A(H7N9) virus in China. *New England Journal of Medicine*. 2014;370:520-532.
31. Fan M, *et al.* Human influenza A(H7N9) virus infection associated with poultry farm, Northeastern China. *Emerging Infectious Diseases*. 2014;20:1902-1905.
32. Liu T, *et al.* One family cluster of avian influenza A(H7N9) virus infection in Shandong, China. *BMC Infectious Diseases*. 2014;14:98.
33. Hu J, *et al.* Limited human-to-human transmission of avian influenza A(H7N9) virus, Shanghai, China, March to April 2013. *Euro Surveillance*. 2014;19:pii=20838.
34. Mei Z, *et al.* Avian influenza A(H7N9) virus infections, Shanghai, China. *Emerging Infectious Diseases*. 2013;19:1179-1181.
35. Chen E, *et al.* Human infection with avian influenza A(H7N9) virus re-emerges in China in winter 2013. *Euro Surveillance*. 2013;18:pii=20616.
36. Chen E, *et al.* The first avian influenza A (H7N9) viral infection in humans in Zhejiang Province, China: a death report. *Frontiers in Medicine*. 2013;7:333-344.
37. Chen Y, *et al.* Human infections with the emerging avian influenza A H7N9 virus from wet market poultry: clinical analysis and characterisation of viral genome. *The Lancet*. 2013;381:1916-1925.
38. Han J, *et al.* Epidemiological link between exposure to poultry and all influenza A(H7N9) confirmed cases in Huzhou city, China, March to May 2013. *Euro Surveillance*. 2013;18:pii=20481.
39. Mao H, *et al.* A study of family clustering in two young girls with novel avian influenza A (H7N9) in Dongyang, Zhejiang Province, in 2014. *Journal of Clinical Virology*. 2015;63:18-24.
40. Tu C, *et al.* The first case of avian influenza A (H7N9) virus occurring in the autumn season, China. *American Journal of Infection Control*. 2014;42:212-213.
41. Xie L, *et al.* Clinical and epidemiological survey and analysis of the first case of human infection with avian influenza A(H7N9) virus in Hangzhou, China. *European Journal of Clinical Microbiology and Infectious Disease*. 2013;32:1617-1620.
42. Chang SY, *et al.* The first case of H7N9 influenza in Taiwan. *The Lancet*. 2013;381:1621.
43. Lo YC, *et al.* Surveillance of avian influenza A(H7N9) virus infection in humans and detection of the first imported human case in Taiwan, 3 April to 10 May 2013. *Euro Surveillance*. 2013;18:pii=20479.