To:	BC MHOs, PHNLs, ICPs, ERDOCs, IDSPEC, MEDMICRO, AMBULANCE, BCCDC Internal Groups, National Surveillance Network Partners
Subject:	November 8, 2013 – Emerging Respiratory Viruses Update
Purpose:	To re-emphasize heightened clinician awareness of A(H7N9) and MERS-CoV through the fall/winter period given the recent announcement of new cases
Action required:	Yes
Recommendations:	Enhanced vigilance, notification and infection control by clinicians in response to cases of severe acute respiratory illness (SARI) with links to affected areas in the two weeks prior to symptom onset (i.e. residence, travel history or contact with someone with such history).

***** Please share with your workplace colleagues as appropriate. *****

Dear Colleagues –

In the past week alone, two additional cases of avian influenza A(H7N9) and at least four additional cases of MERS-CoV have been reported. The latter includes the first Hajj-associated case and also the first importation to Spain to be reported. Relevant update and details are thus provided below.

1. H7N9 UPDATE [Total: 140 cases; Deaths: 45], China

On 6 November 2013, the WHO reported two new laboratory-confirmed human cases of avian influenza A(H7N9). Both cases had symptom onset dates in late October and both reported recent exposure to live poultry. The first case is a 3-year-old boy with mild illness who was detected during routine hospital-based surveillance in Guangdong province. Only eight cases have been reported in children under 10 years old so far during this outbreak, which has predominately affected older adult men with underlying chronic conditions. Reports of mild illness associated with this latest paediatric case are consistent with previous cases of H7N9 in children. This case is only the second to be reported in Guangdong province. The previous case from Guangdong province, which borders Hong Kong, was reported in early August. Few details are available about the other recently reported case, a 64-year-old woman farmer in Zhejiang province. Zhejiang continues to be one of the most affected provinces during the outbreak, with 47 cases reported to date, two of which were reported earlier this October.

These latest cases bring the total H7N9 case count since first emergence in February 2013 to 140, including 45 deaths. Of note, a single case of H7N9 has been reported from Taiwan, but not otherwise outside of mainland China to date. Updated map and H7N9 epidemic curve are provided in the attached fyi.

To stay current with ongoing H7N9 developments, consult the WHO avian influenza A(H7N9) page: http://www.who.int/influenza/human_animal_interface/influenza_h7n9/en/index.html.

2. MERS-CoV UPDATE [Total: 155+ cases; Deaths: 64], Middle East

Spain has reported its first case of MERS-CoV in a 61-year-old woman who travelled to Medina and Mecca in the Kingdom of Saudi Arabia (KSA) for the Hajj during the month of October. The woman had no underlying medical conditions and reported no recent contact with animals or other confirmed MERS-CoV cases. She developed symptoms on 15 October 2013 and sought emergency medical care in Mecca on 28-29 October 2013; she was hospitalized for pneumonia upon her return to Spain on 1 November 2013. Contact-tracing investigations of family members and health care personnel in KSA and Spain, as well as airline passengers and staff, are ongoing.

Since our last update, additional cases have also been reported in several Middle Eastern countries, including KSA (2) and Qatar (1) and the United Arab Emirates where a man from Oman was hospitalized with the virus in Abu Dhabi. To date, at least 155 confirmed cases have been reported since the initial Jordan cluster in March/April 2012, including 64 deaths. Updated map and MERS-CoV epidemic curve are provided in the attached fyi.

The Spanish case is the first MERS-CoV case to be reported in association with the Hajj pilgrimage. Spain is the fifth country in Europe to report an imported MERS-CoV case. No MERS-CoV cases have been reported to date in the Americas. However, Hajj-related travel may include extended stay and there has been ongoing detection of cases in predominantly affected areas. Given an incubation period of 10 days or more clinicians are reminded to stay alert for possible importations among patients presenting with severe acute respiratory illness (SARI) and links to the Middle East.

For a detailed report of the latest European case, see the Rapid Risk Assessment from the European Centre for Disease Prevention and Control: http://www.ecdc.europa.eu/en/publications/Publications/mers-cov-risk-assessment-6-november-2013.pdf.

For ongoing WHO MERS-CoV updates, see:
http://www.who.int/csr/disease/coronavirus_infections/en/index.html.

3. ACTION AND ADVICE [abbreviated]

In the event of a suspected SARI case, clinicians should notify their local health authority/Medical Health Officer. Clinicians and health care workers should implement respiratory precautions immediately, and cases should be managed in respiratory isolation with contact and droplet precautions. Aerosol-generating procedures may facilitate spread warranting airborne precautions. Given a spectrum of illness inclusive of milder or atypical presentations, clinicians are encouraged to use their judgement and/or consult infection control for guidance around enhanced measures where the index of suspicion and exposure risk (e.g. based on contact, comorbidity or clustering history) may be higher.

For diagnostic testing for suspected H7N9 or MERS-CoV, please discuss with your local health authority/Medical Health Officer and consult a virologist or microbiologist at the BC Public Health Microbiology & Reference Laboratory (PHMRL) to arrange advance notification and direct shipping. Lower respiratory specimens (e.g., sputum, endotracheal aspirate, or bronchoalveolar lavage) are recommended, where possible and clinically indicated. Follow strict infection prevention and control guidelines when collecting respiratory specimens.

Influenza & Emerging Respiratory Pathogens
BC Centre for Disease Control

H7N9 influenza activity

China/Taiwan by case residence as of November 8th, 2013

Province	Deaths / Cases
Anhui	4 / 5
Beijing	0 / 3
Fujian	0 / 5
Guangdong	0 / 2
Hebei	1 / 1
Henan	1 / 4
Hunan	1 / 2
Jiangsu	10 / 30
Jiangxi	1 / 7
Shandong	0 / 2
Shanghai	13 / 30
Zhejiang	7 / 48
Taiwan	0 / 1
Total	45‡/ 140

Beijing
Langfang
Hebei
Shandong
Zaozhuang
Zhengzhou
Weishi
Xinyi
Henan
Qiaocheng
Zhoukou
Jiangsu
Waterbodies
Anhui
Shanghai
Zhejiang
Hunan
Nanchang
Tonggu
Shaoyang
Wugang
Jiangxi
Fujian
Wenzhou
Fuzho
Fuqing
Longyan
Guangdong
Huizhou
Dongguan City
Hong Kong
Taiwan

Population Density
Low High

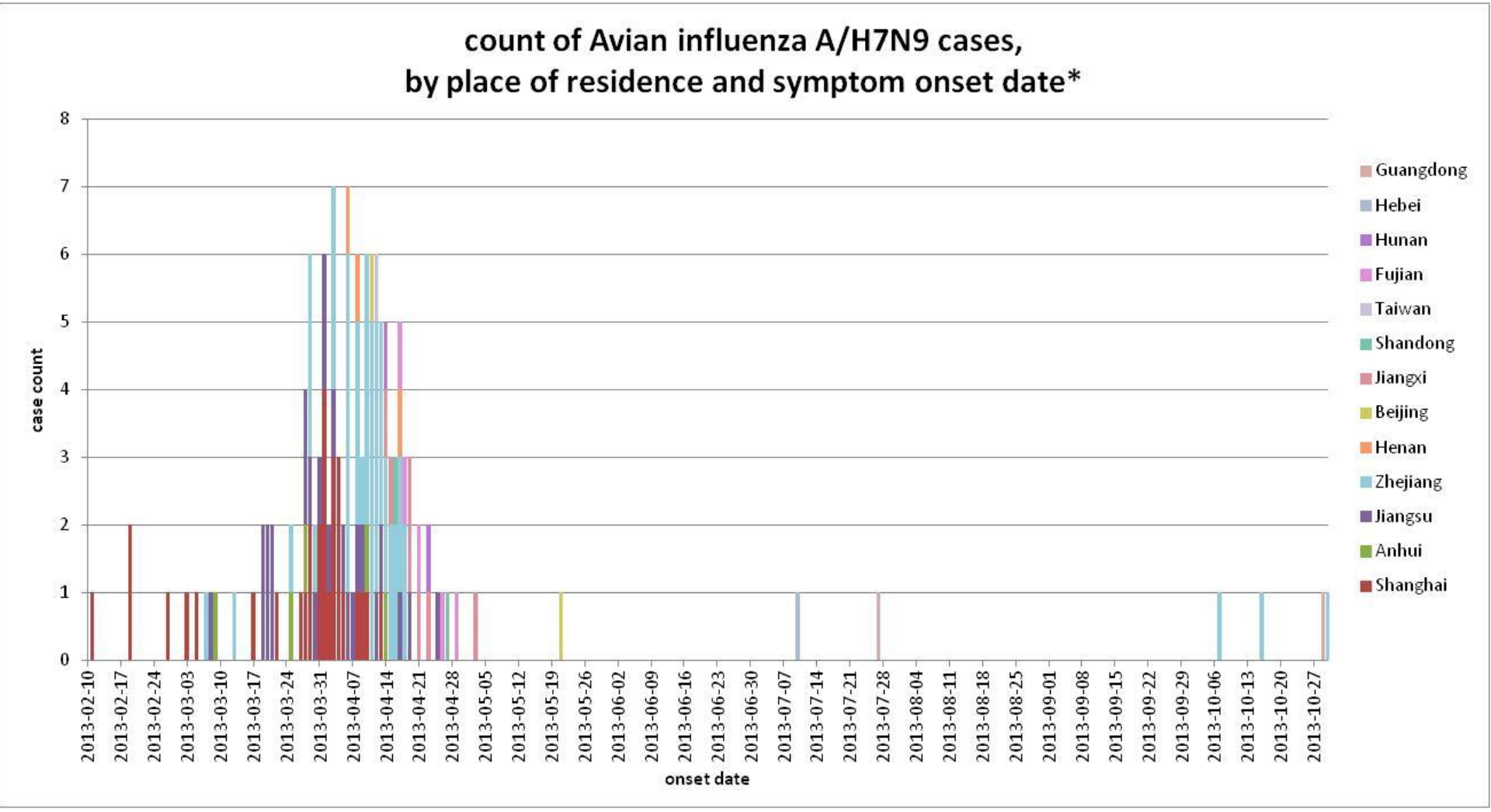
0 50 100 200 300 400 500 Kilometers

‡ Five deaths could be attributed to a province of residence but could not be matched to a case due to insufficient data; these deaths are included in the province-specific totals but are not depicted on the map. An additional seven deaths could not be attributed to a province of residence due to insufficient data but are included in the overall total.

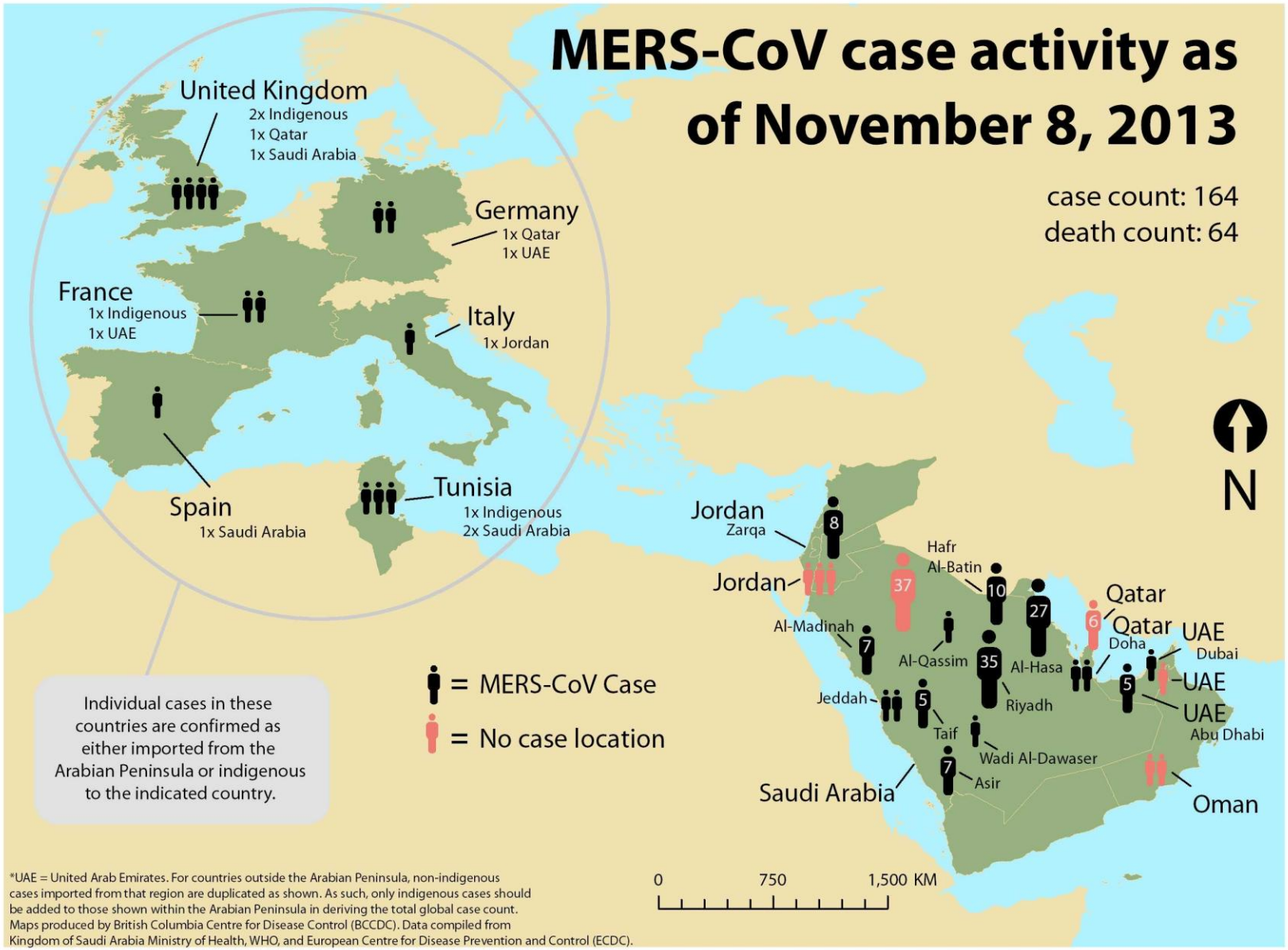
* Cases that could not be attributed to a city of residence due to insufficient data.

Data compiled from ProMed, GPHIN alerts and other public reports. Map created November 8th, 2013 by BCCDC.

Nov 8, 2013 H7N9 Epidemic Curve



*Does not include: 1 Henan, 4 Jiangsu cases with unknown onset date; one asymptomatic case in Beijing.



*UAE = United Arab Emirates. For countries outside the Arabian Peninsula, non-indigenous cases imported from that region are duplicated as shown. As such, only indigenous cases should be added to those shown within the Arabian Peninsula in deriving the total global case count.
Maps produced by British Columbia Centre for Disease Control (BCCDC). Data compiled from Kingdom of Saudi Arabia Ministry of Health, WHO, and European Centre for Disease Prevention and Control (ECDC).

Nov 8, 2013 MERS-CoV Epidemic Curve

NOTE: cases for whom date of onset is missing are shown by reporting date with light shading