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WEEKLY SYNTHESIS OF SURVEILLANCE INFORMATION, LITERATURE & GOVERNMENT UPDATES

(WEEK ENDING NOVEMBER 27, 2009)

GOVERNMENT UPDATES

CENTRE FOR DISEASE CONTROL (CDC)

November 27, 2009: CDC H1N1 Flu Surveillance Update.
http://www.cdc.gov/h1n1flu/update.htm

Weekly Flu View Map and Surveillance Report for Week Ending November 21, 2009.
http://www.cdc.gov/flu/weekly/
Map includes both seasonal flu and H1N1 flu activity. During week 45 (November 15-21, 2009), influenza activity decreased slightly in the US, however the proportion of outpatient visits for ILI was above the national baseline.

CDC Guidance for Emergency Shelters for the 2009-2010 Flu Season (November 24, 09)
http://www.cdc.gov/h1n1flu/guidance/emergencyshelters.htm
This document provides interim guidance specific for U.S.-based emergency shelters used by displaced persons during a natural or man-made disaster during the 2009-10 influenza ("flu") season. This document provides guidance to reduce the risk of introducing and transmitting both seasonal and 2009 H1N1 flu in these settings. This document is intended for use by federal, state, local, and tribal jurisdictions in the United States. It should be used in conjunction with existing shelter operation and management plans, procedures, guidance, resources, and systems.

PUBLIC HEALTH AGENCY OF CANADA (PHAC)

FluWatch Week 46 (November 15-21, 2009)
http://www.phac-aspc.gc.ca/fluwatch/09-10/w46_09/index-eng.php
Nationally, the activity level reported this week decreased compared to the previous week. All influenza indicators declined during week 46. A possible epidemic peak has been reached by all provinces and territories. The Pandemic (H1N1) 2009 strain accounted for nearly 100% of the positive influenza A subtyped specimens this week.

Deaths Associated with Influenza A (H1N1) as of November 26, 2009
http://www.phac-aspc.gc.ca/alert-alerte/h1n1/surveillance-eng.php
The Public Health Agency of Canada (PHAC) is committed to sharing information about the impact of the H1N1 flu virus in Canada. Every Tuesday and Thursday at 4 p.m., the Agency will issue national updates on H1N1-associated deaths. In addition, PHAC will issue special reports on any unusual cases or clusters.

Weekly Distribution of the H1N1 Vaccine (November 28, 2009)
http://www.phac-aspc.gc.ca/alert-alerte/h1n1/vacc/dist-eng.php

ONTARIO

Ontario Influenza Bulletin 2009-2010, Surveillance Week 46 (Nov 15-21, 2009)
http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_09/bulletins/flu_bul_01_20092010.pdf
Overall, influenza activity in Ontario is lower compared to the previous week. All of the measures indicate that influenza activity is lower in week 46 to week 45.

MOHLTC Guidance Document for Group Home Settings (November 26, 2009)
http://www.health.gov.on.ca/en/ccom/flu/h1n1/pro/docs/grouphomes_guidance.pdf

Kingston, Frontenac and Lennox & Addington (KFL&A): Regional Syndromic Surveillance Influenza Report (November 18-24, 2009)
http://www.quesst.ca/report/Syndromic%20Surveillance%20Weekly%20Flu%20Report%2020091125.pdf

BC CENTER FOR DISEASE CONTROL (BC CDC):

BC CDC: H1N1 flu virus update (November 24, 2009)
http://www.bccdc.ca/resourcematerials/newsandalerts/healthalerts/2009HealthAlerts/H1N1FluVirusHumanSwineFlu.htm

Weekly BC Pandemic H1N1 Surveillance Update as of November 23, 2009:
http://www.bccdc.ca/dis-cond/DiseaseStatsReports/influSurveillanceReports.htm

WORLD HEALTH ORGANIZATION (WHO)

Global Situation Update 76, November 27, 2009
http://www.who.int/csr/don/2009_11_20a/en/index.html
In temperate regions of the northern hemisphere, the early arriving winter influenza season continues to be intense across parts of North America and much of Europe. In North America, the Caribbean islands and a limited number of European countries there are signs that disease activity peaked. In the US and Canada, influenza transmission remains very active and geographically widespread. In the United States, disease activity appears to have peaked in all areas of the country. In Canada, influenza activity remains similar but number of hospitalizations and deaths is increasing. Most countries in the Caribbean have ILI and SARI levels coming down.

WHO- Travel Frequently Asked Questions (November 27, 2009)
http://www.who.int/csr/disease/swineflu/frequently_asked_questions/travel/en/index.html

WHO addresses mutation, antiviral resistance issues (Nov 26, 2009)
http://www.yomiuri.co.jp/dy/national/20091124TDY03303.htm

EUROPEAN CENTRE FOR DISEASE PREVENTION & CONTROL (ECDC)

November 27, 2009: ECDC Daily Update, Pandemic (H1N1) 2009
http://ecdc.europa.eu/en/healthtopics/Documents/091127_Influenza_AH1N1_Situation_Report_0900hrs.pdf

Executive Summary of Pandemic Influenza (H1N1) (November 30, 2009)
http://ecdc.europa.eu/en/healthtopics/Documents/091130_Influenza_A(H1N1)_Weekly_Executive_Update.pdf

Mass gatherings during H1N1 2009 pandemic- an example of Hajj event (November 25, 2009)
http://ecdc.europa.eu/en/activities/sciadvice/Lists/ECDC%20Reviews/ECDC_DispForm.aspx?List=512ff74f%2D77d4%2D4ad8%2Db6d6%2Dbf0f23083f30&ID=684

HEALTH/SURVEILLANCE BULLETINS:

AUSTRALIA

Australia Influenza Surveillance Summary Report, No. 27, 2009, reporting period: November 7-13 2009 (November 13, 2009)
http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflucurrent.htm

CENTER FOR INFECTIOUS DISEASE RESEARCH AND POLICY (CIDRAP)

CDC: Flu activity eases, but deaths still climb
http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/nov3009national-br.html

CDC estimates case-fatality rate (CFR) for pandemic H1N1 flu so far is 0.018%
http://www.publichealthreports.org/interactive/webcast.cfm

Alaska finds ethnic differences in patients
http://www.adn.com/swineflu/story/1031513.html

CDC warns about rise in serious pneumococcal disease
http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/nov2509pneumonia.html

Japan reports flu-related brain swelling
http://www.yomiuri.co.jp/dy/national/20091124TDY03303.htm

JOURNALS SCANNED:

- American Journal of Public Health
- British Medical Journal
- Canadian Medical Association Journal
- Clinical Infectious Diseases
- Emerging Infectious Diseases
- Eurosurveillance
- Journal of Infectious Diseases
- Lancet
- MMWR
- Nature
- New England Journal of Medicine

- PLoS One
- PLoS Currents
- Science

AMERICAN JOURNAL OF PUBLIC HEALTH

-Nothing new on H1N1 this week

BRITISH MEDICAL JOURNAL

-Nothing new on H1N1 this week

CANADIAN MEDICAL ASSOCIATION JOURNAL

1) Letter: Who is conflicted about handwashing? (Bonnie Henry et al., November 24, 2009)
http://www.cmaj.ca/cgi/reprint/181/11/826-a?maxtoshow=&HITS=10&hits=

Abstract:
Debate re: role of hand hygiene.

2) Letter: Pandemic flu buddy system (Thomas Ungar, November 24, 2009)
http://www.cmaj.ca/cgi/reprint/181/11/826-a?maxtoshow=&HITS=10&hits=10

Abstract:
Physician coverage (2 step process) when ill with influenza.

CLINICAL INFECTIOUS DISEASES

-Nothing new on H1N1 this week

EMERGING INFECTIOUS DISEASES

1) Laboratory surge response to pandemic (H1N1) 2009 outbreak, New York City metropolitan area, USA (Crawford JM et al., November 25, 2009)
http://www.cdc.gov/eid/content/16/1/pdfs/09-1167.pdf

Abstract:
The influenza A pandemic (H1N1) 2009 outbreak began in this area on April 24, 2009, and within weeks respiratory virus testing increased 7.5×. In response, laboratory and client service workforces were increased, physical plant build-out was completed, testing paradigms were converted from routine screening tests and viral culture to a high-capacity molecular assay for respiratory viruses, laboratory information system interfaces were built, and same-day epidemiologic reports were produced. Daily review by leadership of data from emergency rooms, hospital facilities, and the Health System Laboratories enabled real-time management of unfolding events. The ability of System laboratories to rapidly increase to high-volume comprehensive diagnostics, including influenza A subtyping, provided key epidemiologic information for local and state public health departments.

2) Epidemiology of travel-associated pandemic (H1N1) 2009 infection in 116 patients, Singapore (Mukherjee P, et al., November 25, 2009)
http://www.cdc.gov/eid/content/16/1/pdfs/09-1376.pdf

Abstract:
To understand how travel patterns affected the initial outbreak, we examined epidemiologic and travel data for the first 116 case-patients admitted to Tan Tock Seng Hospital, Singapore, with travel-associated infection. Sixty-one percent and 54% of patients, respectively, met US Centers

for Disease Control and Prevention and World Health Organization temperature criteria for influenza-like illness. One fourth of the case-patients traveled after illness onset, and 15% became ill while traveling. Regions of exposure for imported infections changed rapidly; case-patients initially arrived from North America, followed by Australasia and Southeast Asia. Case-patients on longer flights were more likely to become ill before arrival; those with shorter flights tended to become ill after arrival. Thermal scanners detected fevers in 12% of the arriving case-patients, resulting in a shorter time to isolation.

EUROSURVEILLANCE

- Nothing new on H1N1 this week

JOURNAL OF INFECTIOUS DISEASES

-Nothing new on H1N1 this week

LANCET

-Nothing new on H1N1 this week.

MMWR

-Nothing new on H1N1 this week

NATURE

-Nothing new on H1N1 this week

NEW ENGLAND JOURNAL OF MEDICINE

1) Australia's winter with the 2009 pandemic Influenza A (H1N1) virus (J.F. Bishop, Mary P. Murnane, and Rhonda Owen, November 26, 2009)
http://content.nejm.org/cgi/content/full/NEJMp0910445?query=TOC

Abstract:
Key lessons so far from this experience in an unprotected population suggest that important elements of the response were a national coordination of efforts and the use and modification of the national pandemic plan framework, focusing on persons who were most at risk. The spread of the epidemic occurred earlier in some geographic locations than in others, which created challenges (such as implementing the school closure policy) in terms of maintaining a coordinated national approach to the epidemic. This challenge was addressed in part by holding regular meetings of the cross-jurisdictional Australian Health Protection Committee. Public messages regarding the public health response used the names of the phases of the pandemic plan, including "Delay," "Contain," and "Protect," which may have helped the public to take appropriate personal action and reduce the impact of the virus on our population.

2) The emotional epidemiology of H1N1 Influenza vaccination (D. Ofri, November 26, 2009)
http://content.nejm.org/cgi/content/full/NEJMp0911047?query=TOC

Abstract:
The irony was painful. No matter how often I trotted out the statistics of 30,000 to 40,000 annual deaths from influenza, the patients would not be moved. So when they demanded the H1N1 vaccine last spring, I reminded them of their reluctance over the seasonal flu shot. "Oh, that's different," they said. Six months have passed. Flu season is now here. After repeated delays, H1N1 vaccine finally arrived in our clinic earlier this month to the uniform relief of the medical staff. But my formerly desperate patients were now leery. "It's not tested," they said. "Everyone

knows there are problems with the vaccine." "I'm not putting that in my body." I was unprepared for this response, but maybe I shouldn't have been. For weeks now, in the schoolyard of my children's elementary school, other parents had been sidling up to me, seemingly in need of validation. "You're not giving your kids that swine flu shot, are you?" they'd say, their tone nervous, if a bit derisive. How to explain this dramatic shift in 6 short months? It certainly isn't related to logic or facts, since few new medical data became available during this period. It seems to reflect a sort of psychological contagion of myth and suspicion.

3) When to consider the use of antibiotics in the treatment of 2009 H1N1 influenza-associated pneumonia (P.F. Wright, Kathryn B. Kirkland, and John F. Modlin, November 25, 2009)
http://h1n1.nejm.org/?p=1234&query=TOC

Abstract:
For outpatient treatment of most patients who have influenza–associated pneumonia with a suspected secondary bacterial infection, the bacterial component can be treated with appropriate oral antibiotics for age — amoxicillin–clavulanate or a second-generation cephalosporin for both children and adults. There is no evidence for synergistic coinfection of influenza with *Mycoplasma pneumoniae* or other agents of atypical pneumonia. We do not believe that initial coverage for MRSA is indicated in all patients who are thought to have secondary bacterial pneumonia. Moreover, given emerging epidemiologic and clinical data, we have a strong suspicion that much of the lower respiratory tract illness will turn out to be of viral origin and should not require antibacterial therapy.

PLoS One

1) Taipei's use of a multi-channel mass risk communication program to rapidly reverse and epidemic of highly communicable disease (Muh-Yong Ye et al., November 23, 2009)
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0007962

Abstract:
The timely launch of this systematic, communication-based intervention proved effective at preventing a dangerous spike in AHC and was able to bring this high-risk disease under control. We recommend that public health officials incorporate similar methods into existing guidelines for preventing pandemic influenza and other emerging infectious diseases.

PLoS Currents

1) Knol: H1N1 vaccination and adults with underlying health conditions in the U.S. (Edward Goldstein and Marc Lipitsch, November 21, 2009)
http://knol.google.com/k/h1n1-vaccination-and-adults-with-underlying-health-conditions-in-the-us?collectionId=28qm4w0q65e4w.1&position=1#

Abstract:
65% of fatalities from pH1N1 infections in a large US case series occur in adults with underlying health conditions other than pregnancy, but it appears that only relatively few high-risk adults will get vaccinated during the fall wave of pH1N1 transmission. There are several reasons for this problem; the most important is vaccine shortage. High risk adults were not part of the initial, narrow priority cohort which included pregnant women and children ages 0.5-4; this is despite the fact that some of those high risk groups, such as immunosuppressed adults and possibly individuals with neurological disorders, have a relative risk for fatality (per capita) higher than pregnant women, and over 28-fold higher than healthy children under the age of 4. With more vaccine becoming available than needed in the initial priority cohort, a broader group which includes high risk adults and individuals under 24 becomes eligible for vaccine in many locations. Nonetheless, due to continuing high demand, high-risk adults face competition for vaccine from

healthy individuals under 24; additionally, some locations specifically prioritize school students over high-risk adults. Finally, there is an issue of awareness and a shortage of specific channels that target high risk adults other than pregnant women and facilitate vaccine distribution among them in the United States.

SCIENCE

- Nothing new on H1N1 this week.