International influenza update
There are two main seasonal patterns of influenza virus circulation associated with either a tropical climate or a temperate climate. Tropical climate countries tend to have consistent levels of influenza years round with smaller peaks that might occur in the rainy season, whereas temperate climate countries, like the U.S., tend to see a distinct influenza season with a sharp peak of activity typically occurring during the winter months.

Temperate Climate Countries
- In Australia influenza activity began to increase in late June, and may have peaked in mid-August. Influenza activity in New Zealand began to increase in early June. In Australia and New Zealand, substantial influenza activity was reported and influenza A (H3) viruses predominated overall, but influenza A (H1N1)pdm09 and influenza B viruses were reported from both countries.
- In South Africa, influenza activity began to increase in late-May.
- In temperate countries of South America, influenza activity began to increase in late April.

Tropical Climate Countries
- Overall influenza activity remained low, and the predominant virus type and subtype varied by country.
- In the Caribbean and Central America, influenza virus activity remained low with influenza A(H3N2) and influenza B viruses predominated.
- In Southern Asia, influenza A(H1N1)pdm09 viruses predominated with elevated activity reported in India, Nepal, and the Maldives. Influenza activity in Southeast Asia increased in July and August. Influenza A(H1N1)pdm09 viruses predominated in the Philippines and Myanmar. Influenza A(H3N2), influenza A(H1N1)pdm09, and influenza B viruses co-circulated in Singapore and influenza A(H1N1)pdm09 and influenza B viruses co-circulated in Vietnam.

The WHO recommendations for influenza vaccine composition for the 2018 Southern Hemisphere season will be made at the WHO Consultation meeting September 25-28, 2017, Melbourne, Australia.

Influenza in the US
- From May-September 2017, the United States experienced low level seasonal influenza activity. Influenza B viruses were reported more frequently from late May to late June and influenza A viruses predominated beginning in early July. The majority of the subtyped influenza A viruses are influenza A (H3N2) viruses.
- CDC has received reports of localized influenza outbreaks across the U.S.
- Maine began weekly reporting last week, and reports will continue through the season

Flumps
- We are continuing to see influenza cases with parotitis. Any individual with suspect mumps who has respiratory symptoms should also be tested for influenza to help further define the etiology.

Non-seasonal influenza
- Avian influenza (H5N1) continues to be reported sporadically – mostly in Egypt.
- H7N9 continues to be a risk in travelers to China with cases reported in September. A total of 1,562 laboratory-confirmed human cases reported since early 2013 with about a 40% fatality rate. Most cases are exposed through contact with infected poultry or contaminated environments. There is no sustained human to human transmission at this time. The current 5th epidemic in China is the largest since H7N9 was identified in 2013.
- Eighteen cases of H3N2v viruses detected in the US this summer, all associated with swine exposures in fair settings (ND (1), OH (15), PA (1), TX (1)). Maine has not seen any H3N2v since 2011 but the risk remains and providers should ask about agricultural exposures.
- No high-path avian influenza (HPAI) detected in the US since March 2017.
Non-influenza respiratory viruses

- MERS-CoV continues to circulate in the Arab Peninsula – should be considered in the differential for patients with relevant clinical information and travel to a potentially affected area. Globally, 2,081 laboratory-confirmed cases of infection with MERS-CoV including at least 722 related deaths have been reported to WHO.
- Enterovirus continues to circulate with EV-D68 still causing illness
- Adenovirus, parainfluenza, RSV, rhinovirus and other viruses may co-circulate with influenza. Maine is beginning a project to help monitor what the current circulating viruses are through the National Respiratory and Enteric Virus Surveillance System (https://www.cdc.gov/surveillance/nrevss/)
- HETL can test for many of the circulating non-influenza respiratory viruses. For more information see www.mainepublichealth.gov/lab

Questions

Q: They are a small family health practice, with no electronic ability. Do they have to send 10 samples to the lab?
A: No, we do not require individual practices to send 10 samples. If you have the capability and want to send samples we will accept them.

Q: We fall in the grey area as we are not an acute care facility but we’re not an inpatient facility either. In the past we have sent 2-3 samples then were told to stop. Would you like us to send 10 samples?
A: Yes, if you have the capability to send the samples we would like to receive your samples to either confirm influenza or determine the etiology of what is circulating.

Q: Where are the notes from this call posted?
A: The notes from the call are posted online at www.maineflu.gov

Conclusion
- Please feel free to use influenza.dhhs@maine.gov to ask any questions we may not have answered
- We will have future calls as needed, they will be announced the same way this call was