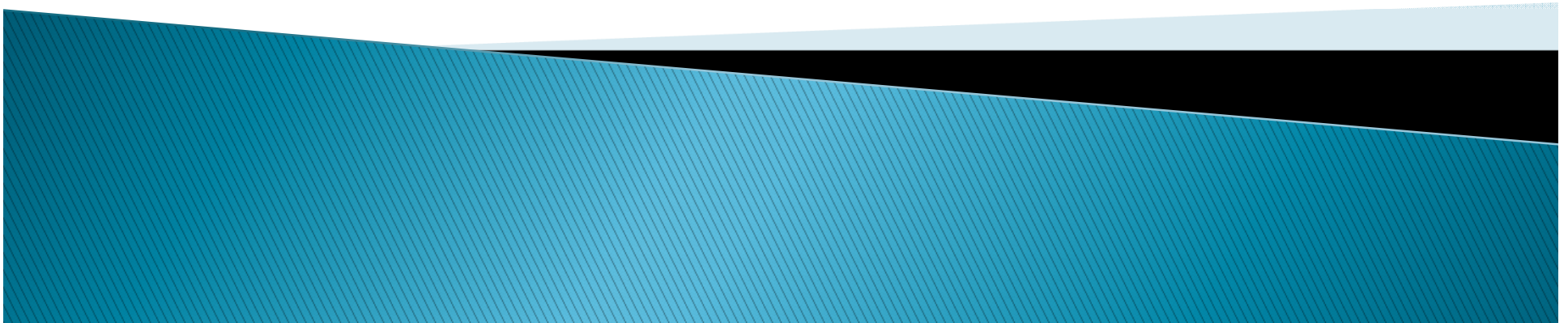


Influenza and Public Health in the News

Krista Rietberg, MPH
Public Health – Seattle & King County
ESF 8 Briefing
November 15, 2016

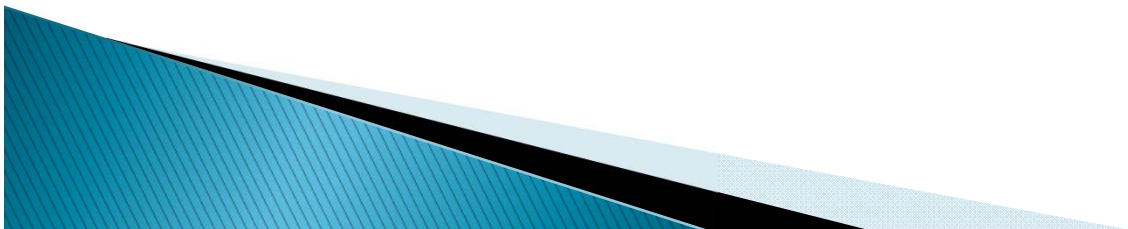


Influenza



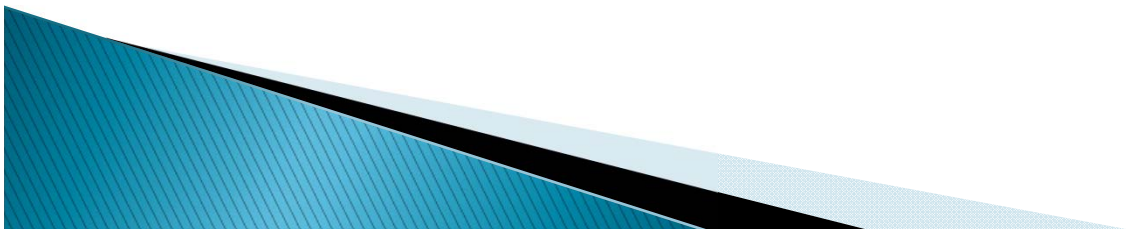
Influenza Symptoms

- ▶ Fever
- ▶ Sore throat
- ▶ Cough
- ▶ Runny nose or stuffy nose
- ▶ Muscle and/or body aches
- ▶ Headaches
- ▶ Fatigue
- ▶ Vomiting and diarrhea (mostly in children)



Influenza Reporting

- ▶ Influenza deaths
- ▶ Influenza clusters and outbreaks
 - Schools, long term care facilities, hospitals
- ▶ Avian and other novel influenza



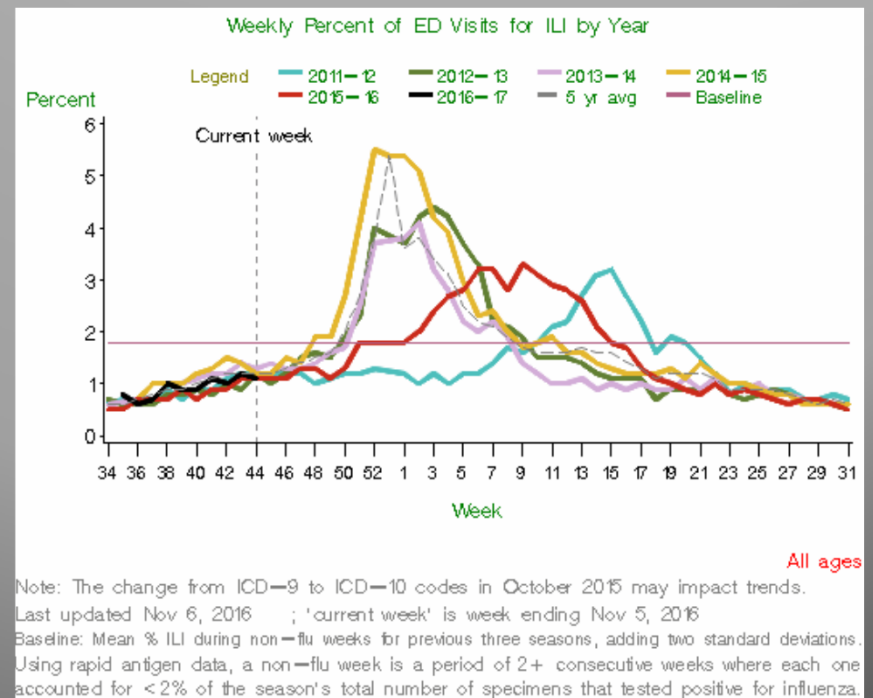
Influenza surveillance

- ▶ Sentinel Providers
 - 20 area providers
 - Submit 5 specimens per week
 - Start of flu season
 - Type of flu circulating



Influenza Surveillance

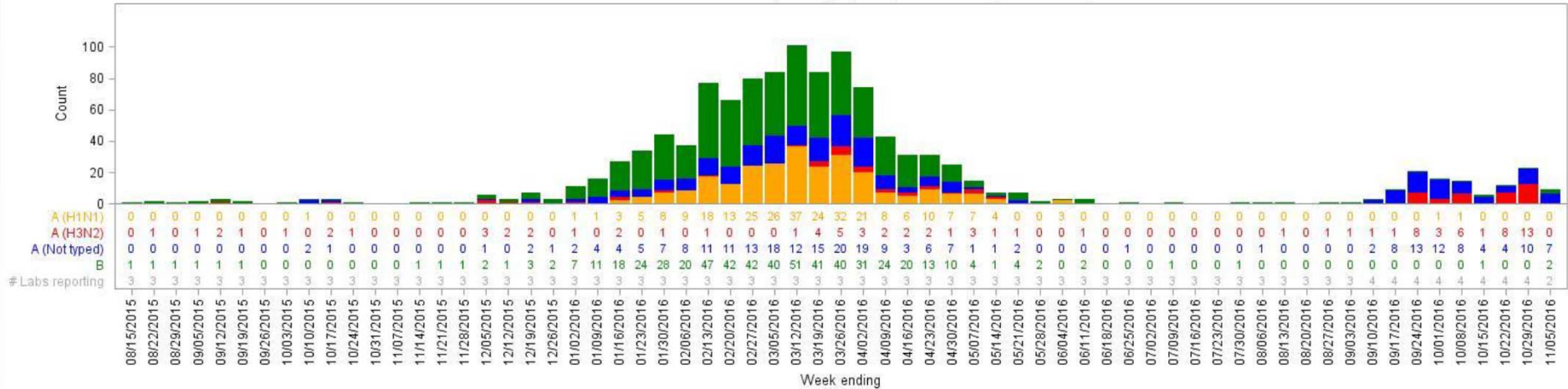
- ▶ Syndromic surveillance
 - Emergency department visits
 - Hospital admissions



Influenza Surveillance

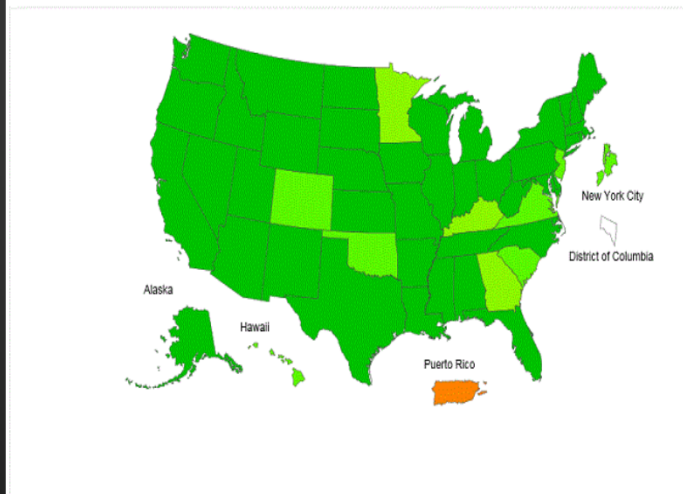
National Respiratory and Enteric Virus Surveillance System (NREVSS)

Positive Influenza Results by Subtype, Using PCR Testing Methodologies

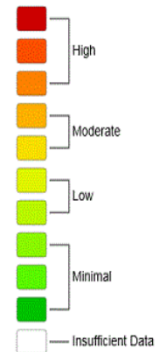


Influenza Surveillance

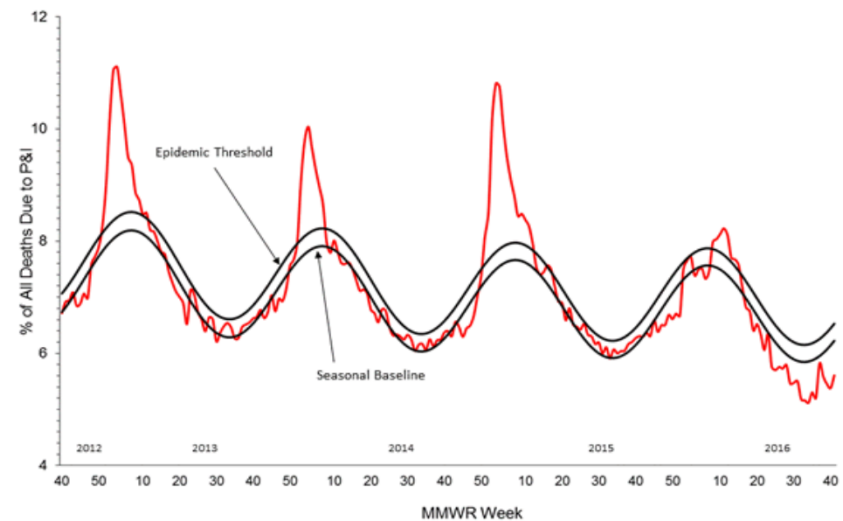
Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2016-17 Influenza Season Week 43 ending Oct 29, 2016



ILI Activity Level



Pneumonia and Influenza Mortality from
the National Center for Health Statistics Mortality Surveillance System
Data through the week ending October 15, 2016, as of November 2, 2016



Acute Flaccid Myelitis



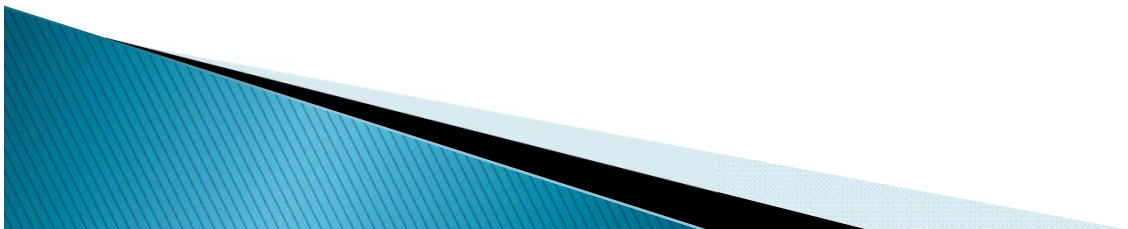
Acute Flaccid Myelitis

- ▶ Acute flaccid myelitis (AFM) is a condition that affects the nervous system, specifically the spinal cord, which can result from a variety of causes including viral infections.

Year	Number confirmed cases	Number of states reporting confirmed cases
2014 (Aug–Dec)	120	34
2015	21	16
2016* (Jan–Sept)	89	33

AFM Symptoms

- ▶ Sudden onset of limb weakness and loss of muscle tone and reflexes.
- ▶ May also experience
 - facial droop/weakness
 - difficulty moving the eyes
 - drooping eyelids, or
 - difficulty swallowing or slurred speech



AFM Diagnosis

- ▶ MRI imaging
- ▶ Testing cerebrospinal fluid
- ▶ Overall symptom picture

FIGURE 1

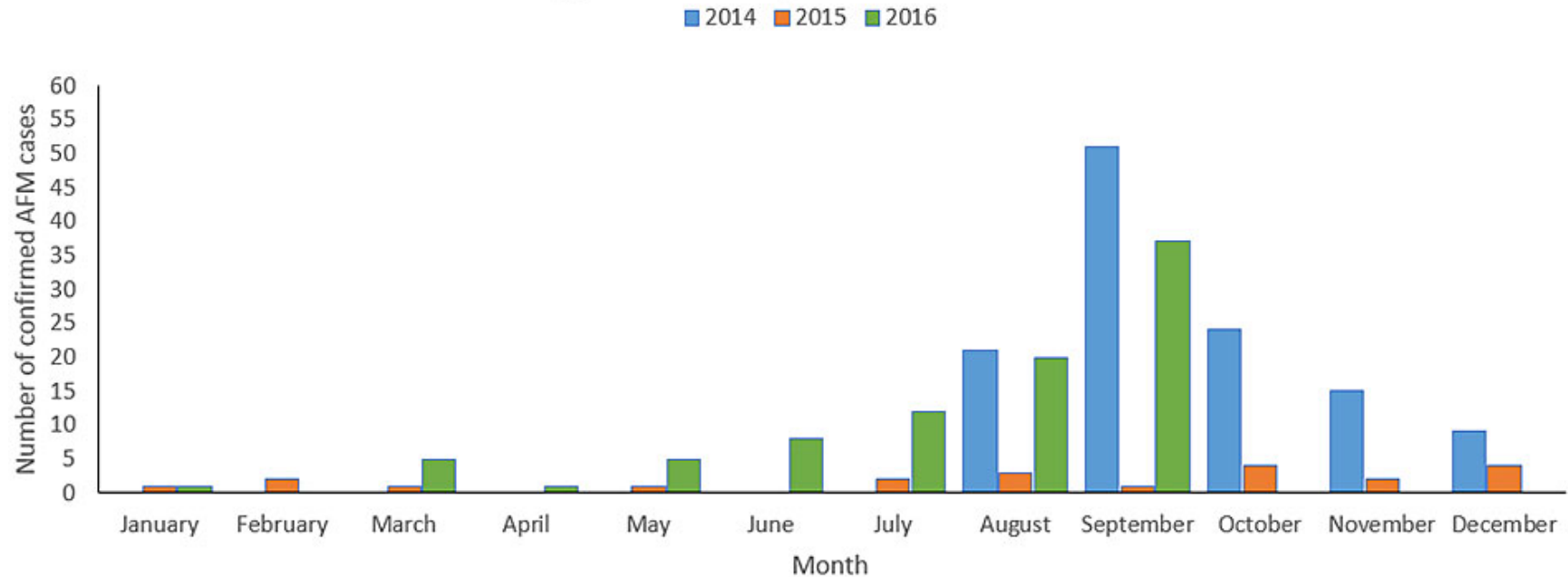
Spinal magnetic resonance image, acute flaccid paralysis case following enterovirus D68 infection, France, 2014



Gadolinium enhancement of the ventral nerve roots of the cauda equina is shown (arrows).

Acute Flaccid Myelitis—U.S.

Number of confirmed U.S. AFM cases reported to CDC by month of onset,
August 2014 - September 2016^{^*†}



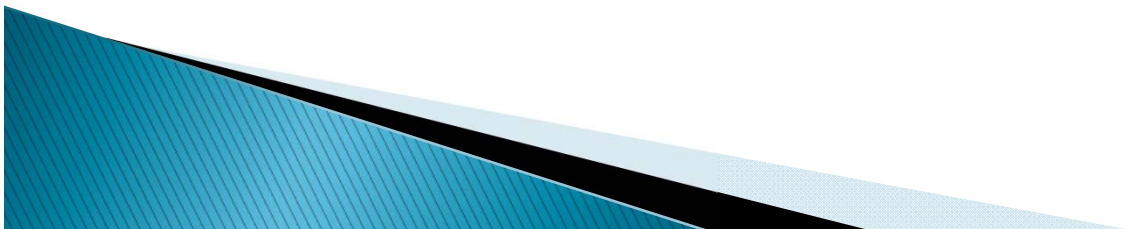
AFM—Washington State

- ▶ Case counts
 - Nine reported cases (ages 3–14)
 - Eight cases have been confirmed as AFM
 - One case has been ruled out for AFM
- ▶ Case status
 - Five children have been released from the hospital
 - Three children remain hospitalized
- ▶ Cases from 5 Washington counties
 - King, Franklin, Pierce, Snohomish, Whatcom



What is CDC Doing?

- ▶ Encouraging reporting by providers
- ▶ Verifying reports
- ▶ Testing specimens
- ▶ Working to better understand potential causes and how often the illness occurs
- ▶ Providing information to providers and public health
- ▶ Looking for causes and risk factors



Zika Virus



Zika Virus

- ▶ Spread mostly by the bite of an infected *Aedes* species mosquito. (*Ae. aegypti* and *Ae. Albopictus*)
- ▶ Zika can be passed from a pregnant woman to her fetus. Infection during pregnancy can cause certain birth defects.
- ▶ Zika can be sexually transmitted.
- ▶ There is no vaccine or treatment for Zika.

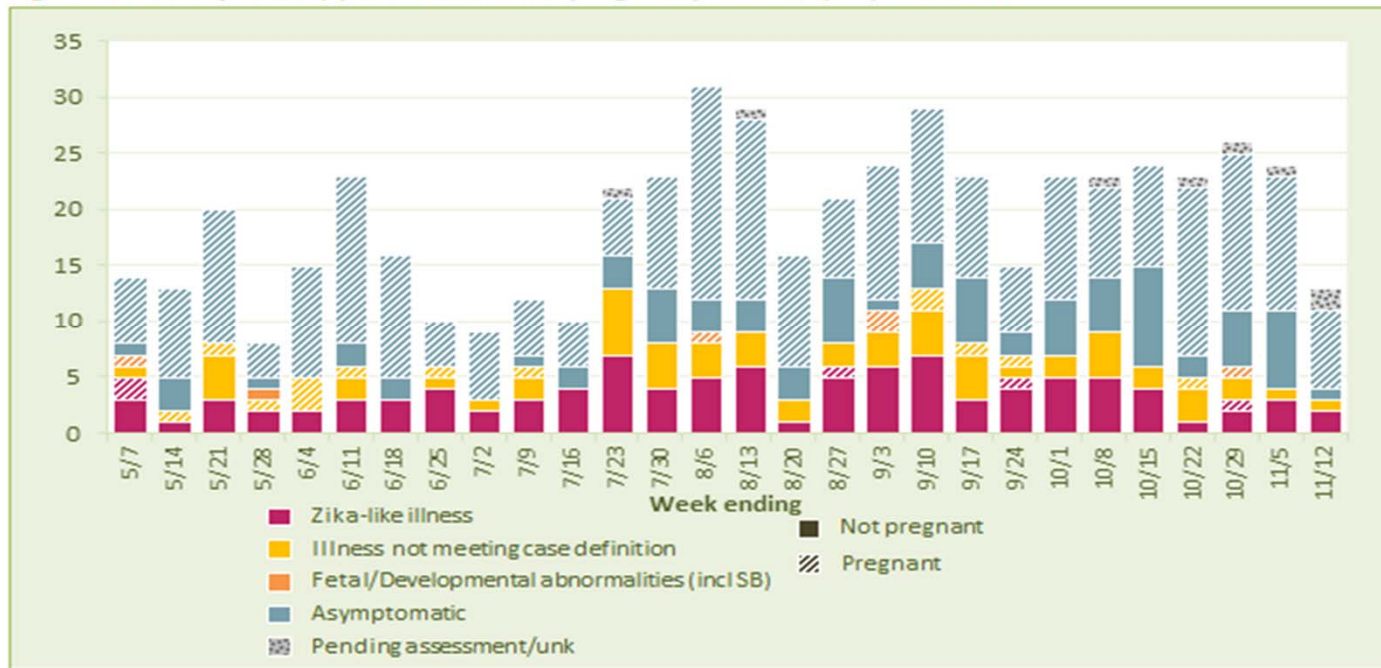


Countries and Territories with Active Zika Virus Transmission



Zika in King County

Figure 1. ZIKV reports, by presentation and pregnancy status, by report week.



Total reported to date:	770
Reports this week:	13
Total cases	22

Questions?

- ▶ Krista Rietberg, MPH
- ▶ 206-263-8275
- ▶ Krista.rietberg@kingcounty.gov

- ▶ Resources

- <http://www.cdc.gov/acute-flaccid-myelitis/index.html>
- <http://kingcounty.gov/healthservices/health/communicable/diseases/zika.aspx>
- <http://www.kingcounty.gov/healthservices/health/communicable/diseases/Influenza/fluactivity.aspx>

