

Local Experiences in Public Health
Preparedness and Response III

Measles Protocol in the Portland-Metro Area

ECHO Presentation
October 8th, 2015

Introductions



Learning Objectives

Following the presentation, participants will:

- Understand the public health significance of a measles case in a school
- Identify key steps and stakeholders needed to coordinate a measles investigation
- Become familiar with the measles protocol process and tools developed in the Portland metro-area



Agenda

(90 minutes)

- **Background (30 minutes)**
- **Exercise (45 minutes)**
- **Discussion and Questions (15 minutes)**



https://www.youtube.com/watch?v=kQc_wPtuvXw



Basic Measles Facts

// Transmission and Disease

- **Very** easily transmitted
 - >90% of susceptible people can get it
 - Person-to-person, true airborne/aerosol or contact with contaminated surfaces
- 10-12 days after exposure...
 - Prodrome, Rash, Fever
 - Signs and symptoms:
 - Rash, fever, and cough, coryza, conjunctivitis, or Koplik's spots
 - Infectious 4 days before and after rash onset



Basic Measles Facts

// Transmission and Disease

- Treatment limited to supportive care
- Estimated Case Fatality Rate:
 - 1 in 1000-2000 children

Levels of Case Definition

Confirmed

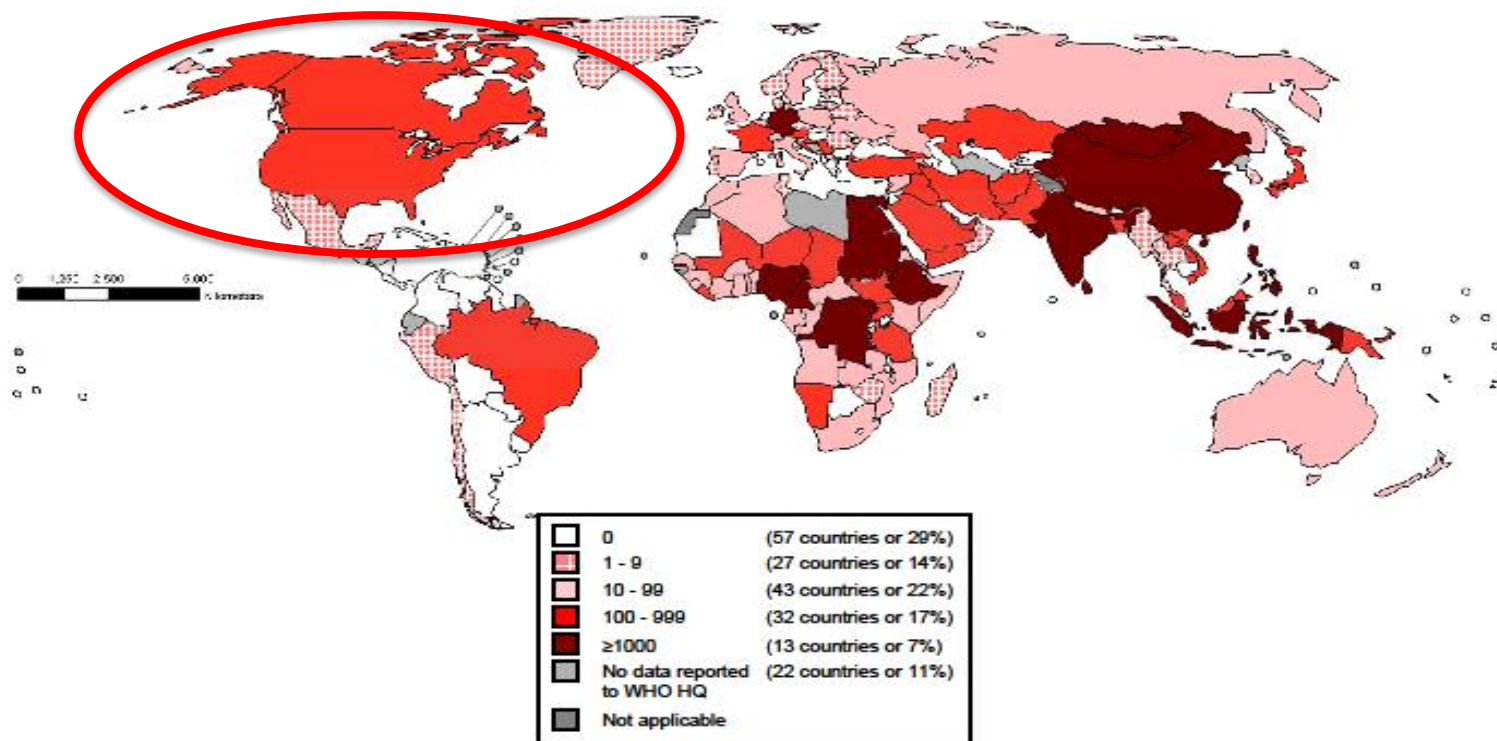
Presumptive

Suspect



Where is Measles?

Number of Reported Measles Cases with onset date from Jan 2015 to Jun 2015 (6M period)



Data source: surveillance DEF file
Data in HQ as of 10 August 2015

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. ©WHO 2015. All rights reserved.



Measles Is Here

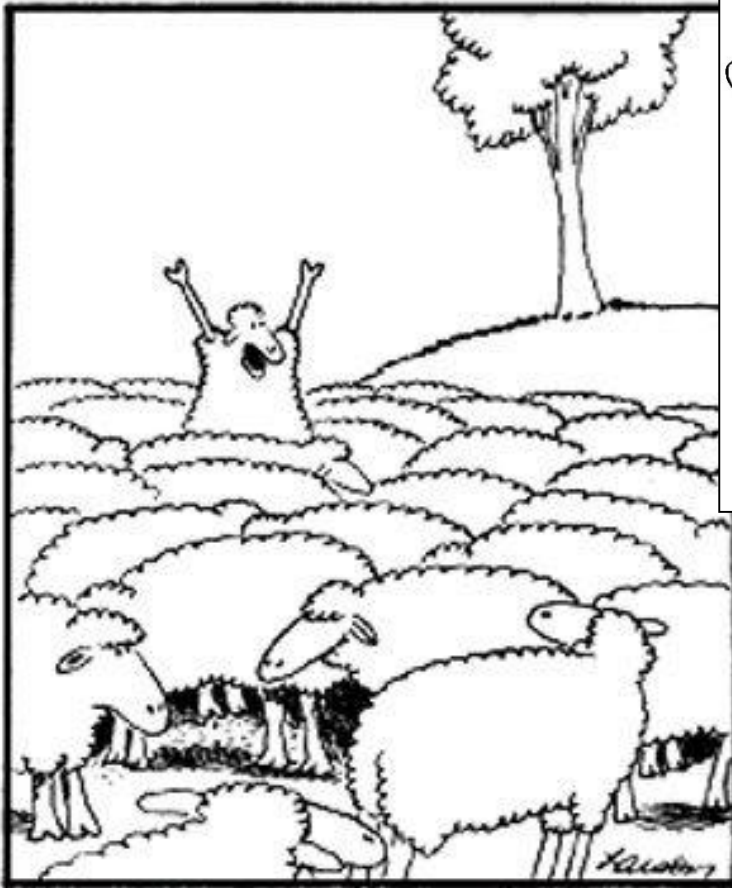
// Oregon DOE guidance

- Exclusion: OAR 333-019-0010 & -0014
- Reportable: YES - Highly Communicable
- Control Measures:
 - Identify exposures and those who are susceptible
 - Notify those exposed
 - Education



Herd Immunity

// When it pays...



"Wait! Wait! Listen to me! ... We don't have to be just sheep!"



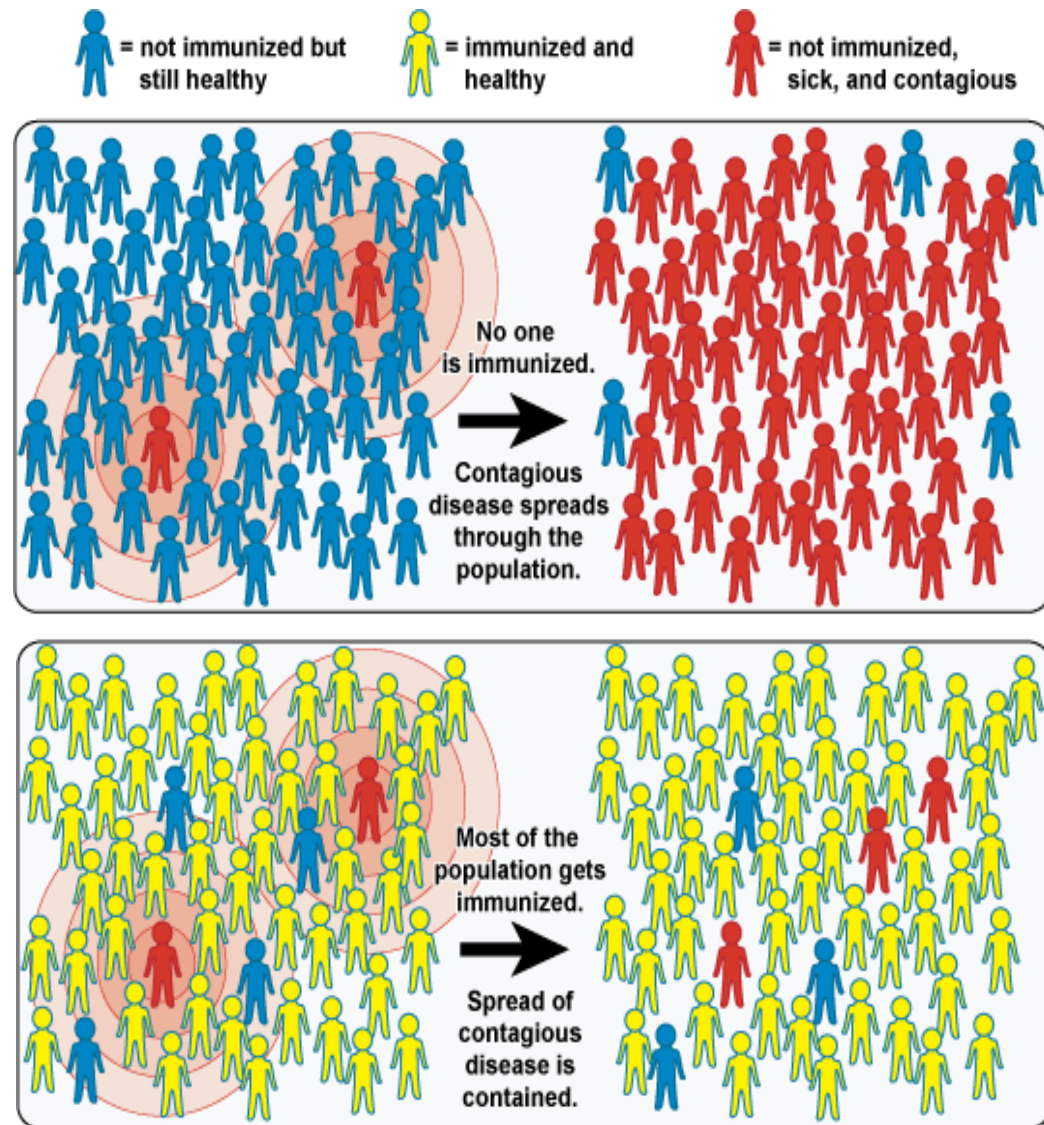
...to be part of the herd



Herd Immunity

// How it works

- Vaccines don't always work for all people
- Protect vulnerable people by protecting people around them



The Background

- In 2014 , almost 30% Multnomah County kindergartners were not vaccinated for Measles
- Not enough herd immunity and possibility for secondary spread
- How would local health departments, school respond to a measles outbreak?



The Background

- Measles on the Rise Table Top Exercise October 2014
 - Participants
 - State and local public health
 - Schools
 - Daycare centers
 - Outcomes
 - Un-answered questions
 - Need for protocol development



The Process

- 4 County participation over 6 month period
 - Clackamas, Clark, Multnomah and Washington
- Divided into Subject Matter Expert Groups
 - Health Officers
 - Communicable Disease Managers
 - Immunization at state and local level
 - Public Information
 - Community Liaison
- Each Group wrote specific sections



The Tools (sections)

1. State Investigative Guideline
2. Measles Response Protocols:
 - I. Medical Assessment
 - II. Waiting Window
 - III. Exclusions
 - IV. Contact Management
 - V. Prophylaxis
 - VI. Communications
 - VII. Incident Action Plan



Exercise



Scenario

- A moderately suspect case of measles was reported to Portland area provider Dr. Jones by a child's mother.
- Mother explained symptoms and Dr. Jones suspects Measles
- Dr. Jones calls Multnomah County Health Department to report suspect case while doing a home visit with the child



Protocol 1: Medical Assessment

1. The PH Nurse completes the *Suspect Measles Worksheet* while talking to Dr. Jones
2. PH Nurse reviews Investigative Guidelines, Testing Criteria algorithm.
 1. Do we test?



Protocol 2: Waiting Window

Updated Scenario:

- Highly suspect Measles case with labs sent to Washington State Public Health Lab. We are awaiting results
1. Review *Waiting Window Checklist* and notify stakeholders
 2. Identify contacts and activities during communicable period



Protocol 2: Waiting Window cont

3. Interview parent for activities

Symptom onset and school attendance				
Wed 9-30	Thurs 10-1	Fri 10-2	Weekend	Mon 10-5
Arrived home from London	In school	In school	At home	At home/MD visit
No symptoms	Symptomatic			

- ## 4. Only a school exposure in Multnomah County
- I. Notify school administration
 - II. How many students attend school?
 - III. Have staff starting pulling immunization information



Protocol 2: Waiting Window cont

5. Notify other key players
 - I. Who would you notify?
 - II. How do you communicate with them?

CONFIRMED

6. Prepare Messaging

7. Waiting...

The results are in on October 6th:



Protocol 3: Exclusions

Updated Scenario-Laboratory confirmed Measles case
attended school two days last week

1. October 7th-PH Nurse contacts School Admin to collect student/staff data
 - 10 children unvaccinated**
 - 5 staff unknown status**
 - 85 children and staff up to date**
2. October 7-8th -Health Officer and CD staff determine exclusions on October 8th
 - I. Swim lane diagrams (Student and Staff)



Protocol 3: Exclusions cont

1. Exclusion Recommendations

	Prophylaxis	Exclusion	Surveillance
Unvaccinated children	1 MMR	Yes- 21 days	Active
Unknown Staff	Titer Results Positive (3) Negative (2)	No Yes – 21 days	Passive Active
Up to date	None	No	Passive

2. Surveillance

1. Active- 1x per day call, text or email with symptom check
2. Passive- Notify LHD if symptoms develop



Protocol 4: Contact Management

1. Oct 8th-Notification
 - I. Letter to entire school
 - II. Phone calls
 - III. Media release

2. Oct 8-9th-Daily Active Monitoring begins
 - I. Spreadsheets



Protocol 7: Communications

Communication is Key!!!

1. Brochure
2. Communication Plan
3. Exclusion Packet
4. Graphics



Exercise

Updated Scenario

- Unvaccinated staff and children are monitored daily for the 21 days after their exposure.
- If anyone develops symptoms- entire process starts over
- Some children/staff may be out of school/work for multiple incubation periods



Other Protocols

- Simplified scenario- only a school exposure
 1. Protocol 6: Prophylaxis
 2. Protocol 8: IAP



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Questions



The Presenters

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