

Respiratory Viral Surveillance

PeaceHealth:

Sacred Heart Riverbed

Sacred Heart University District

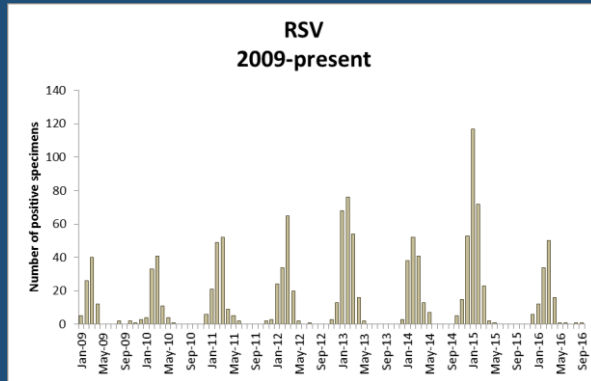
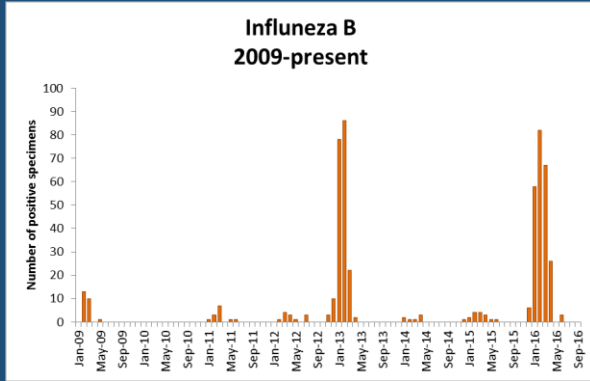
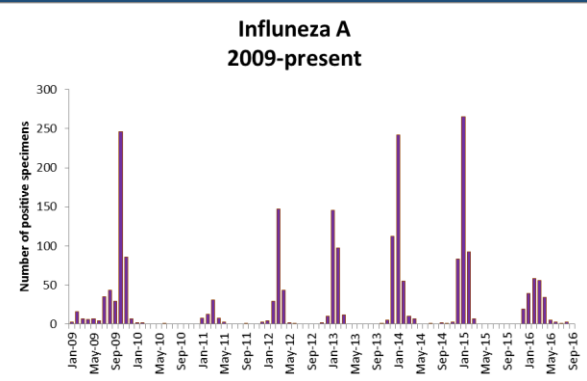
Cottage Grove Community Hospital

Peace Harbor Hospital

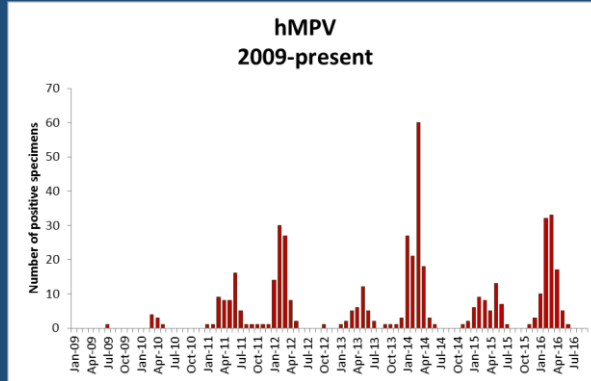
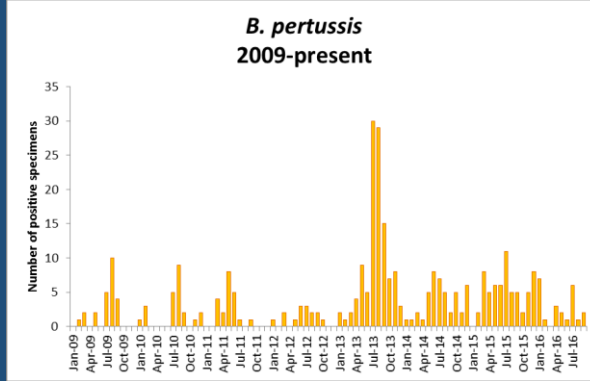
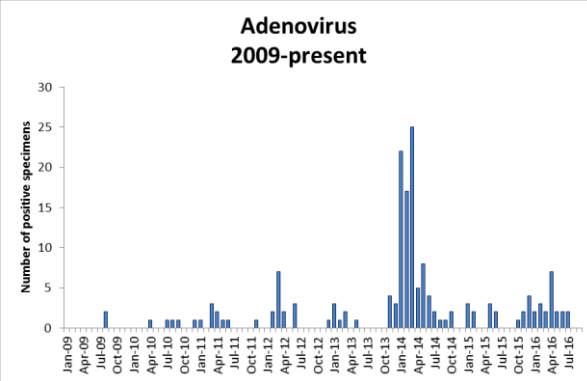
Surveillance

- Viral & selected respiratory bacterial infections
- Historical respiratory viral surveillance
- Epidemiologic threshold for influenza A & B
 - Advising staff of impending outbreak
 - Requesting unvaccinated staff to wear a mask
 - Ending masking for unvaccinated staff
 - The SIR
- Communication with Lane County Public Health

Organisms with seasonal outbreaks



Organisms with historical outbreaks



CDC Centers for Disease Control and Prevention
 CDC 24/7: Saving Lives, Protecting People™

EMERGING INFECTIOUS DISEASES®

Human Adenovirus Associated with Severe Respiratory Infection, Oregon, USA, 2013–2014

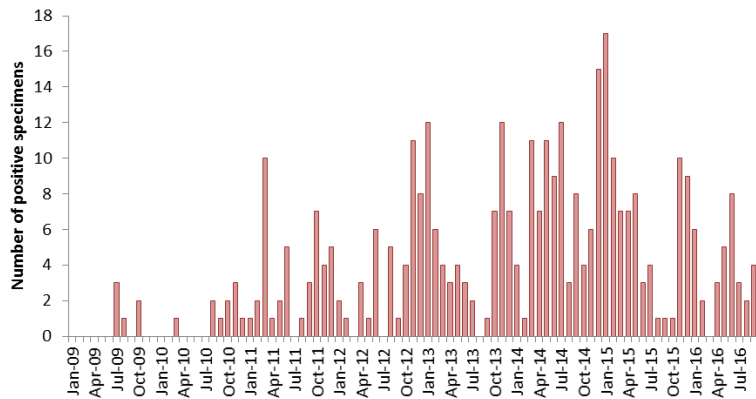
Acknowledgment Kelly Reed, Patrick Luedtke

Journal of Clinical Virology

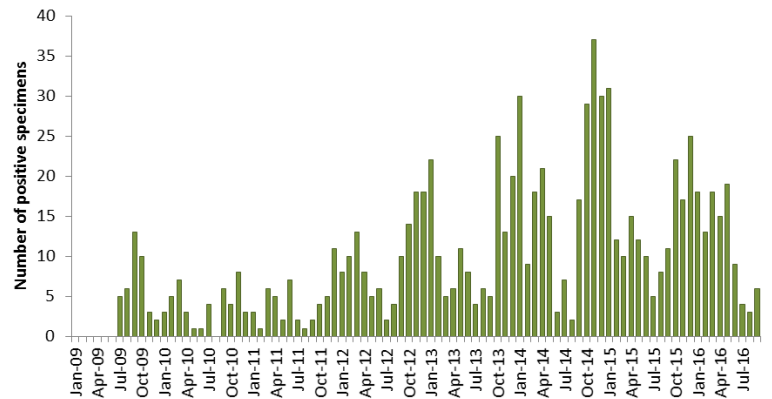
An outbreak of severe respiratory tract infection due to human metapneumovirus in a long-term care facility for the elderly in Oregon

Organisms with ongoing surveillance

Parainfluenza 2009-present



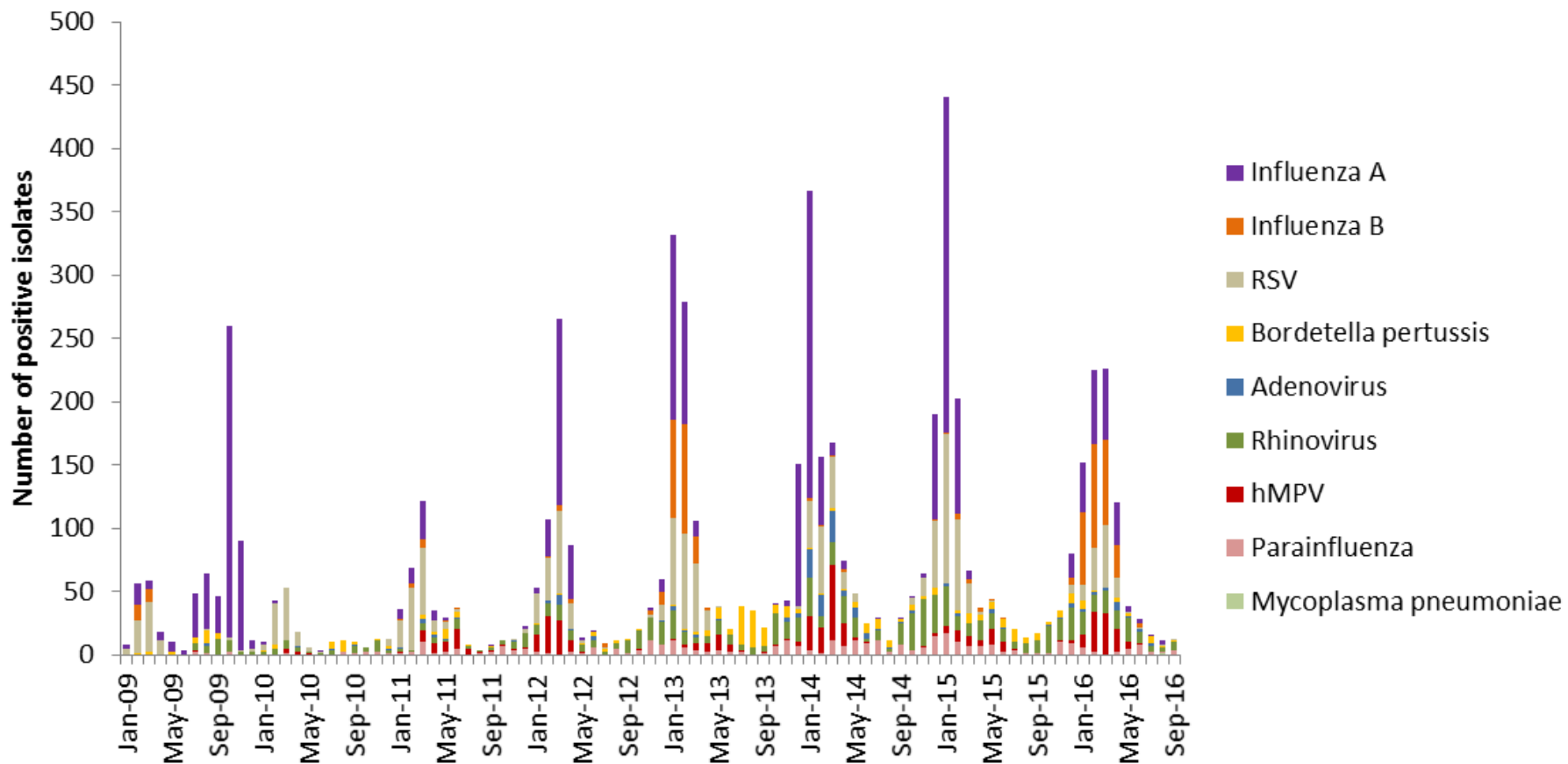
Rhinovirus 2009-present



Historical respiratory viral surveillance

Oregon West Network - Respiratory Viral Surveillance 2009-Present

*Includes *B. pertussis* & *M. pneumoniae*



Epidemic threshold

Model created by World Health Organization

- Based on previous experience with the disease (5 year minimum)
- Assumption: population has remained stable (consideration during previous Influenza season)

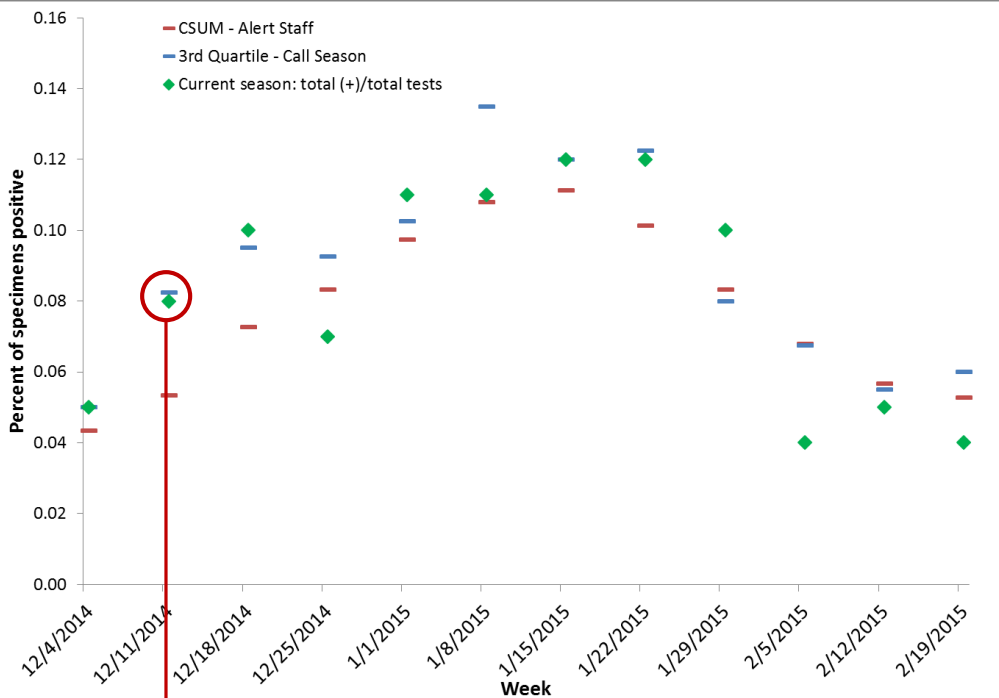
Influenza A&B positive specimens / Total # of specimens tested

C-SUM (3 week average) – Alert staff to impending masking

Week 4	Week 5	Week 6
0.1	0.1	0.11
0.09	0.07	0.18
0.05	0.1	0.12
0.07	0.11	0.11
0.09	0.1	0.06

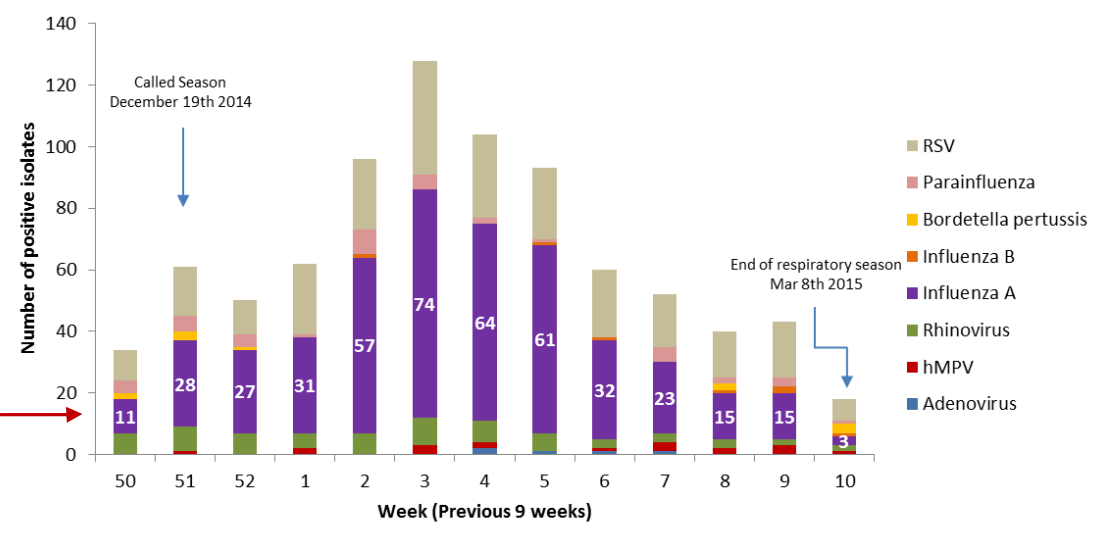
Median + upper 3rd quartile (weekly) – Call Season

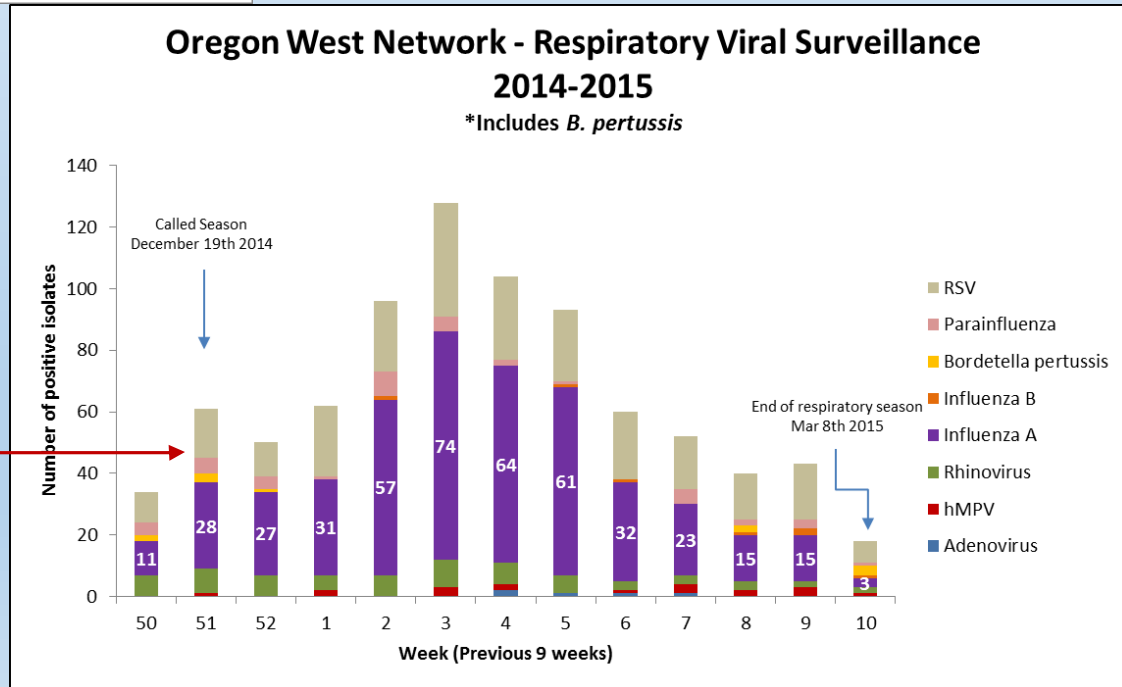
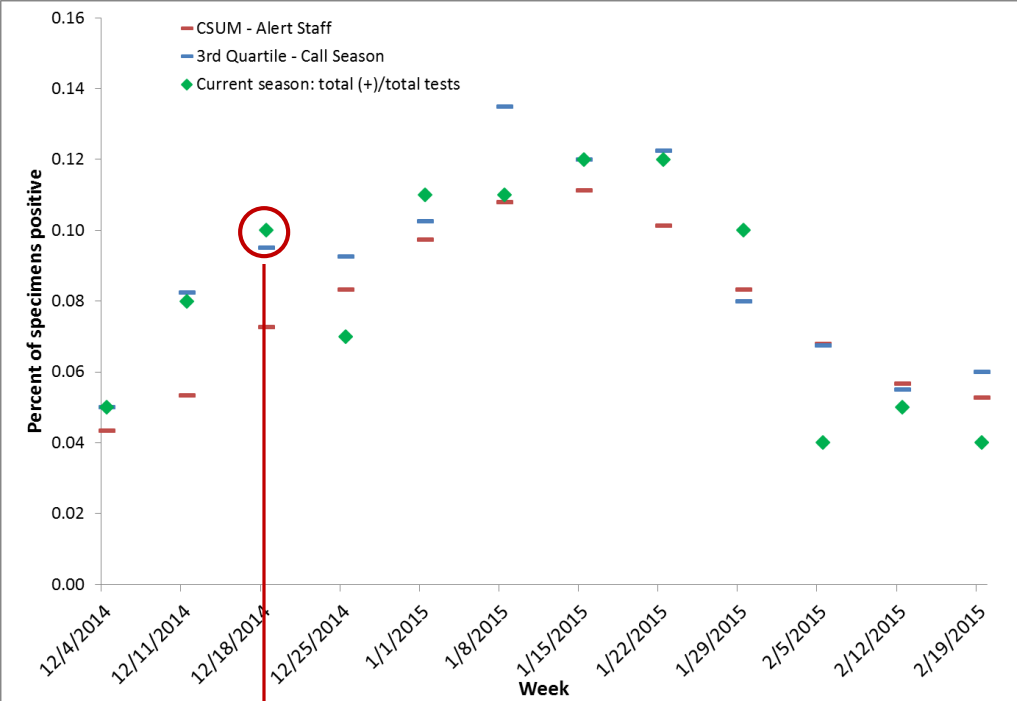
Week 7
0.09
0.12
0.1
0.12
0.13

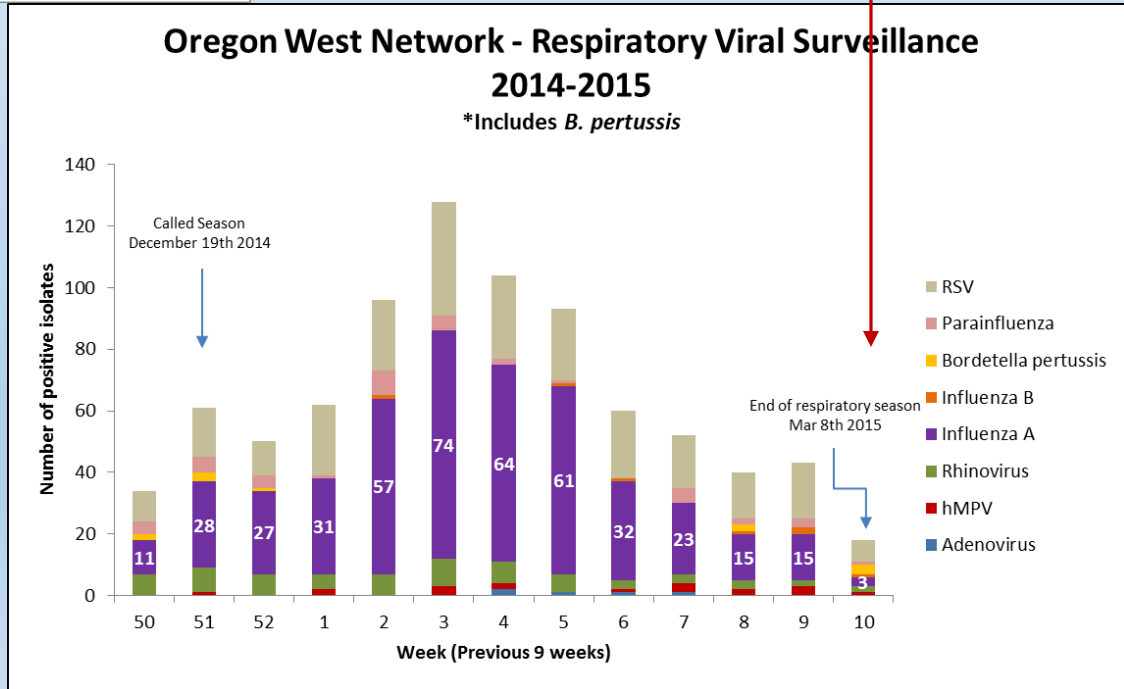
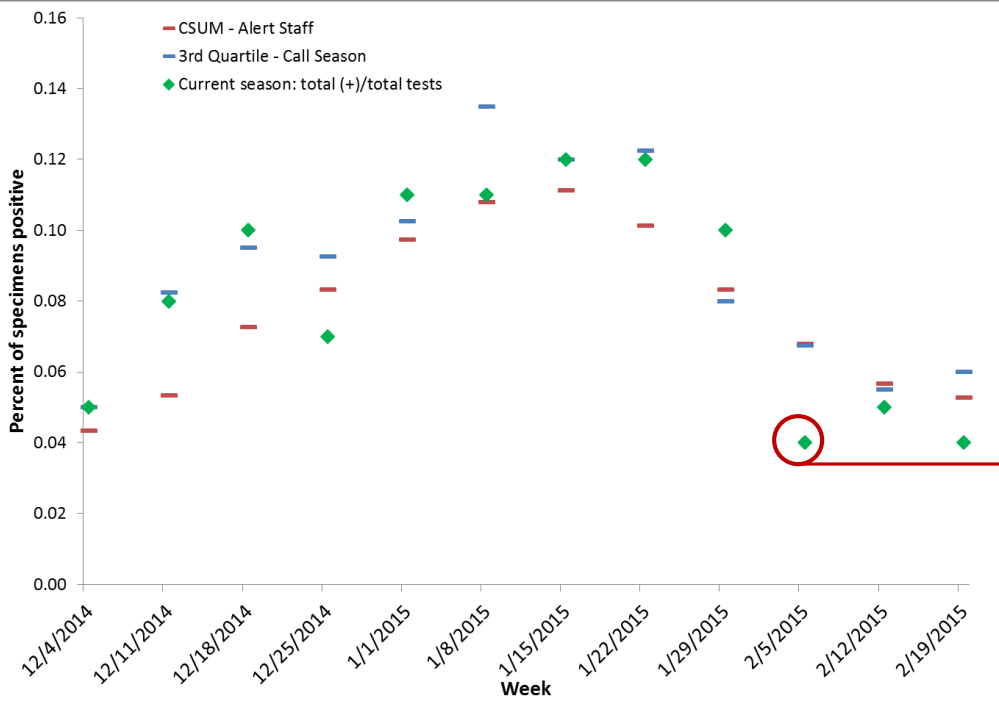


Oregon West Network - Respiratory Viral Surveillance 2014-2015

*Includes *B. pertussis*

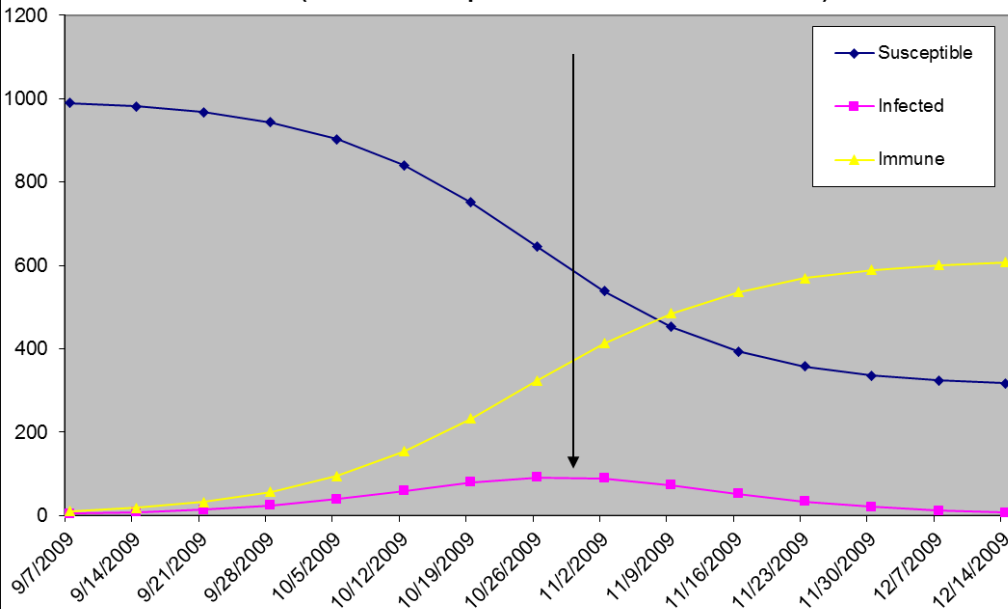






Model For Current nH1N1 Outbreak

(Est. Peak of Epidemic: 10/26/2009-11/02/2009)



The SIR Model

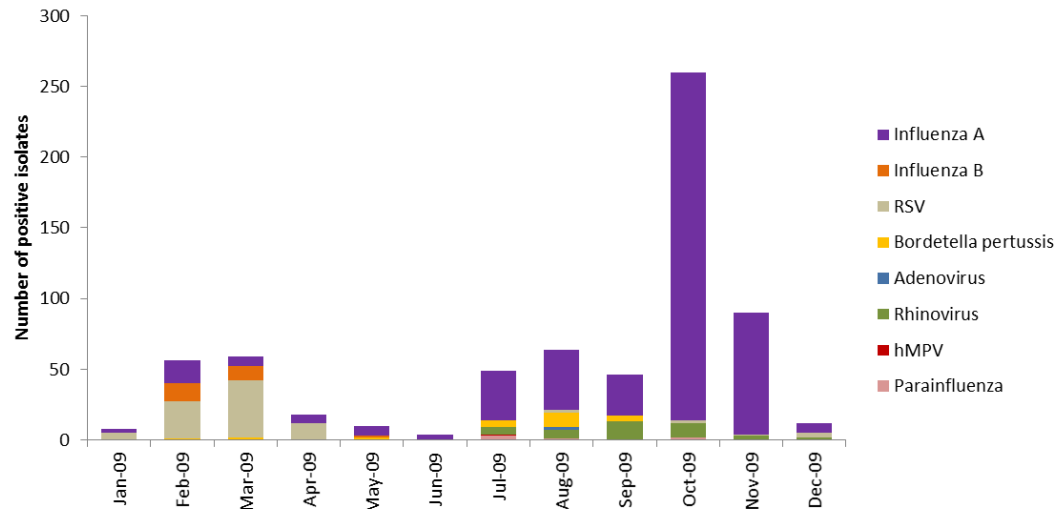
Susceptible, Infected, Resolved

Why we use it:

- Fear
- Anxiety
- Valium by numbers

Oregon West Network - Respiratory Viral Surveillance 2009 Pandemic (H1N1)

*Includes *B. pertussis* & *M. pneumoniae*



Communication with PeaceHealth caregivers and Lane County Public Health

To... **RVP Surveillance;**

Cc...

Send

Subject **Respiratory Viral Surveillance: Week 10**

Surveillance update:

- Influenza A frequency is below the epidemic threshold.
- PeaceHealth Oregon Network unvaccinated caregivers are no longer required to wear a mask.

