Influenza
Epidemiology & Surveillance
in
San Diego County

“Kick the Flu Summit”
San Diego Immunization Coalition
September 2012

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INFLUENZA BASICS

Transmission
• Respiratory droplets
• Spreads person to person or animal to human

Symptoms
• Starts 1 - 4 days after the virus enters the body

Infectious Period
• Begins 1 day before symptoms start and up to 7 days after symptoms start

Source: CDC website – www.cdc.gov/flu
EFFECTIVE SURVEILLANCE

Network of People

Network of Preparedness

Network of Information Sharing
Fairgoers Sickened by New Swine Flu Strain

By Timothy W. Martin

Attending the county fair can expose you to the risk of a new type of swine flu.

Health officials said Friday that nearly 20 people have gotten sick in the past year after coming in close contact with pigs at county or state fairs. A dozen cases have been reported this week, with 10 coming from a county fair held last
H3N2v

• 305 cases in U.S. in 2012 (1 death) – updated 9/14/2012
• No cases reported in California
• Mild symptoms
• Most cases had direct exposure to pigs
• Limited person to person spread
VACCINE COMPOSITION:
2012-2013 Northern Hemisphere Influenza Season

• A/California/7/2009 (H1N1)pdm09-like virus
• A/Victoria/361/2011 (H3N2)-like virus new
• B/Wisconsin/1/2010-like virus new
Vaccine Production

Graphic courtesy of GlaxoSmithKline
Influenza Surveillance in Action

Data collection & Detection

Characterize

Monitor & Assess

Describe & Report

Decision Support
San Diego County

**Surveillance Data Sources**

- Voluntary reporting of positive influenza case and lab results
- Reporting of severe influenza cases (ICU/Deaths)
- Emergency department visits for influenza-like-illness
- Death certificates for pneumonia and influenza (P&I)
- Misc....911 calls, medical examiner, others
Virus detection and characterization

- Rapid influenza diagnostic testing

- Public health lab
  - Confirmatory testing
  - Sub-typing of specimens

- State/CDC
  - Strain typing
San Diego County

Reports & Updates

- Weekly **Influenza Watch** report emailed to interested people
- Regular alerts and updates through CAHAN
- Information used in HHSA reports and press releases
** CURRENT UPDATE **

Influenza Activity for San Diego County

- **Sporadic cases reported** (n=28 since 07/01/12)
- **Expected levels for this time of the year**
- **No variant strains detected**
- **No deaths**
San Diego County Influenza Detections by Type and Week of Report, 2011-12 FY and 2012-13 FYTD (N=28, as of 9/14/12)

* Single hospital retroactive batch reports

Recent Levels
Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2011-12

Number of Positive Specimens

Week

Percent Positive

- H3N2v
- 2009 H1N1
- A(H3)
- A(Subtyping not performed)
- B
- Percent Positive
Influenza Cases Reported by Type and Age Group, 2011-12 (N=1771)

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services, 9/12/2012
Number of Influenza Deaths by Type and Year

San Diego County

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services, 9/12/2012
SUMMARY

• Surveillance is an important tool
• Collaborative work with stakeholders
• Expected influenza levels at this time
• Vigilance for emerging strains

• Explore future data sources (e.g. twitter, electronic health records, meaningful use)
THANK YOU

For More Information

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