What is public health?

• As define by the Associated Schools of Public Health:
  – Public health is the science and art of protecting and improving the health of communities
  – Helps improved the health and well being of all
  – Aims to help people achieve a healthier lifestyle
Who is public health?

A department and team of staff with diverse training and backgrounds to monitor the health of the community.

This includes practitioners in:

- Environmental Health
- Disease Control
- Health Education and Promotion
- Epidemiology and Biostatistics
- Clinical Care
- Maternal, Child & Adolescent Health
- Injury Prevention
- Nutrition
- Emergency Preparedness and Response
- Emergency Medical Services
- Laboratory
- And many other divisions
Influenza

• Highly contagious, acute febrile respiratory illness
• Yearly seasonal occurrence (November-March)
• Passes from person to person
• Infects all age groups
• Considerable public health impact
Seasonal vs. Pandemic Influenza

• **Seasonal influenza**: a respiratory illness that can be transmitted person to person. Most people have some immunity, and a vaccine is available.

• **Pandemic Influenza**: a virulent human flu that causes a global outbreak, or pandemic. Because there is little or no natural immunity, the disease can spread easily from person to person.
Average Annual Impact of Seasonal Influenza in US and California

- 5 – 20 percent of the population become infected
- Over 200,000 hospitalized from flu complications (California: 25,000)
- Est. 36,000 Influenza related deaths (California: 4,500)
- Individual cases of influenza are not reportable but outbreaks are reportable to Public Health
- Individual influenza like illnesses are reported by hospitals and various medical clinics using Reddinet
Prevention of Influenza

- Frequent hand washing
- Covering coughs and sneezes
- Proper disposal of tissues
- Staying home from work/school if ill
- Utilization of appropriate personal protective equipment.
Interventions

- Vaccination
- Isolation
- Quarantine
- School Closures
- Prohibit Mass Gatherings
- Social Distancing
- Proper hand hygiene and respiratory etiquette
Pandemic H1N1
General Information

- Influenza spreads from person to person
- H1N1 virus is a type A influenza virus that contains genes from pigs, birds, and humans
- Over 70 countries have reported cases
- A person can be infectious 1 day before and up to 7 days after onset of symptoms
- Case definition: Person under 60 years of age with fever ≥ 100 F and cough
General Information

(continued)

• **Signs and Symptoms**
  
  – Fever, sore throat, cough, runny or stuffy nose, body aches, headaches, chills, and fatigue.
  
  – Diarrhea and vomiting may also be experienced.
  
  – **Severity of illness can range from mild to severe.**
  
  – Severe disease with pneumonia, respiratory failure, and even death is possible
Riverside County
Situational Status Update
(As of 09/30/2009)

• Probable Cases: 78
  Meets case definition and NP swab positive for Influenza A and non-subtypeable

• Confirmed Cases: 403
  Meets case definition and laboratory-confirmed H1N1 Influenza

• Deaths: 7
For Perspective

- On an annual basis in Riverside County there are on average:
  - 375 Influenza-related deaths
  - 19,000 Emergency room visits for influenza-like-illness (ILI)
Priority Groups for H1N1 Vaccine

- Pregnant Women
- Caretakers of children younger than 6 months of age
- Healthcare and emergency medical services personnel
- Persons between the age of 6 months and 24 years old
- Persons ages of 25 through 64 years of age who are at high risk (chronic health disorders or compromised immune systems)
Antivirals

• Not everyone with H1N1 Influenza requires antivirals
• Clinician evaluates for treatment based on the patients severity of illness
Community Mitigation

- **Community Events**
  - Request individuals with influenza-like illness (ILI) not to attend community events
  - Discourage going to emergency department—unless very ill
  - Take precautions to avoid exposure of others

- **Schools**
  - School dismissals will be evaluated on a case-by-case basis
  - Students and staff with influenza-like illness (ILI) should stay home until 24 hours after symptoms have resolved
Community Mitigation

• **Isolation in Health Care Settings**
  – Probable and confirmed cases must be isolated for 7 days after onset of illness or 24 hours after symptoms resolved, whichever is longer

• **Quarantine**
  – Exposed individuals are asked to monitor for development of cough and fever for 7 days after last contact with probable or confirmed case.
  – Should stay home from work/school if symptoms develop
Providing Care for the Ill

- Keep sick person away from others
- Sick should keep coughs covered and hands cleaned
- No visitors for ill persons
- Avoid having pregnant women care for ill
- Avoid close contact with ill, use face masks if contact is necessary
- Dispose of waste and keep the household and laundry clean
Planning and Preparedness
Impact of Pandemic Influenza on Society

- Health Services
- Businesses
- Schools
- Essential Services
- Community Services
- Community Activities
- Transportation
Riverside County Roles

- Response to pandemic at local level
- Pandemic emergency command and management
- Emergency medical response
- Pandemic flu surveillance
- Maintenance of essential services
- Communications
- Antiviral and vaccine distribution
- Response to healthcare surge capacity
- Maintain essential health and medical services
- Prepare and respond to possible second wave
Preparation for a Pandemic

- Seasonal flu precautions
- Educate yourself and those around you
- Personal preparedness
- Community preparedness
- Create flexible plans
- Coordinate with other agencies
Community and Faith-Based Organizations

- Guidance has been developed and Recommendations include:
  - Spread the word about importance of vaccination
  - Sponsor community forum to discuss and provided information about the flu
  - Encourage families to be prepared for the flu and have plans in place
  - Work with state, local, tribal, or territorial governments to coordinate response efforts.

- Further information may be obtained at:
  [http://www.pandemicflu.gov/professional/community/cfboguidance.html#A](http://www.pandemicflu.gov/professional/community/cfboguidance.html#A)
Health Care Workers

- Guidance for Health Care Workers in outpatient settings has been developed.

- Recommendations include:
  - The use of personal protective equipment (PPE)
    - Wearing of gloves, masks, goggles or face shields, gowns, and respirators
  - Proper hand washing procedures
  - Workers with febrile respiratory illness should be excluded from work based upon facility guidelines. If H1N1 exposure is suspected, personnel should not report to work for 7 days or until the resolution of symptoms, whichever is longer.

- Further information may be obtained at:
  [http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm](http://www.cdc.gov/h1n1flu/guidelines_infection_control.htm)
Schools

• Guidance exists for child care centers, K-12, and college campuses.

• Recommendations include:
  – Vaccinations for those that can receive them
  – Students must stay home when sick
  – Conduct daily health checks on younger students
  – Keep facilities clean
  – Consider school, program, and event closures

• Further information may be obtained at:
  http://www.pandemicflu.gov/professional/school/childguidance.html
  http://www.pandemicflu.gov/professional/school/higheredguidance.html
Medical Providers

- Develop a business continuity plan
- Communicate with employees
- Ask sick employees to remain home
- Prepare to provide care to patients with H1N1, as well as surge in of patients and increased demand for care.
- Provide seasonal and H1N1 vaccine to staff
  - Register for H1N1 Vaccine
  - CalPanFlu.org
  - All providers must register on this site
  - Requires M.D. license
- Further information may be obtained at:
  [http://www.cdc.gov/h1n1flu/10steps.htm](http://www.cdc.gov/h1n1flu/10steps.htm)
Travelers

- Prepare for trip: Get vaccinated and consult with your provider.
- Check your own health: Do not travel if you are ill
- During your trip, follow local guidelines
- Practice healthy habits to stop the spread
- If you become ill with severe symptoms contact the US embassy or consulate to identify local medical care
- When you return, monitor your health for 7 days
- Further information may be obtained at: http://wwwnc.cdc.gov/travel/content/outbreak-notice/novel-h1n1-flu-global-situation.aspx
Let’s prevent the flu

- Public health is dedicated to serving the community
- By working together, we can prevent the spread of flu
  - Support vaccination efforts
  - Create and foster community partnerships
  - Ensure dissemination of information and recommendations to schools, health care providers, media, and the community
Resources

- www.cdc.gov/h1n1flu
- www.who.int
- www.pandemicflu.gov
- www.cdph.ca.gov
- www.rivcoph.org/h1n1
- Planning Tools: International, Federal, State and Local pandemic flu plans
- Individual, Business, School, Healthcare and Community pandemic flu plans
Riverside County Programs

Contact Information

helptalk@co.riverside.ca.us

Epidemiology Branch: (951) 358-5557
www.rivcohealthdata.org

Public Health Emergency Preparedness and Response Branch: (951) 358-7100
www.rivcophepr.org

Disease Control Branch: (951) 358-5107
www.rivco-diseasecontrol.org