Pandemic Influenza H1N1: What it means for Parks and Recreation Departments!

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Communicable Disease Branch
Outline

I. Seasonal and pandemic flu
II. How the flu spreads
III. Messaging
IV. Guidance
V. Control Measures
VI. Suggestions for Parks & Recreation Facilities
The Enemy
Pandemic H1N1 Virus

• Reassortment of avian + swine + human genes

• Origin--? Mexico (Veracruz)

• Current seasonal flu vaccine ineffective

* Few cases of oseltamivir resistance reported
What’s in a Name?

- Swine flu
- Swine-origin influenza virus (S-OIV)
- Mexican flu
- American flu
- H1N1
- Novel H1N1
- 2009 H1N1
- Pandemic H1N1
- Pandemic 2009 H1N1
- Others?
Confirmed NC Cases by County of Residence — September 16, 2009

Confirmed Cases (84 counties)
Influenza Surveillance

• High numbers affected each year; more during pandemic

• Most won’t seek care

• Few will be tested
Seasonal Flu is a Big Deal

- Affects 5–20% of US population each year
- 200,000 hospitalizations each year
- 36,000 deaths each year
  - More common in elderly
  - <100 pediatric deaths per year reported
Pandemic H1N1 vs. Seasonal Flu

• Similar severity
  – Not “mild”

• Similar transmissibility

• Affects younger populations

• Will likely infect more people than seasonal flu
  – More severe illnesses
  – More deaths
Summary of Events

• March 28–30, 2009: 2 children from California with influenza A virus not previously found in pigs or humans

• April 26, 2009: US Government declares Public Health Emergency

• June 11, 2009: WHO declares pandemic
Pandemic influenza: Waves

- 1957: second wave began 3 months after peak of the first wave
- 1968: second wave began 12 months after peak of the first wave
- Highly unpredictable
How Flu Spreads

• Most spread through coughing and sneezing
• Contact transmission also important
  – Hand to hand, contaminated surfaces
• Airborne transmission also possible
Epidemiologic Features

- Transmission routes similar to seasonal flu
  - Primarily droplet
  - Controversy re: airborne

- Data suggest household secondary attack rates 18–30%, comparable to seasonal flu

- Median incubation period 1.4 days
Pandemic H1N1: Clinical Features

• Most cases uncomplicated, typical influenza-like illness (ILI)

• Diarrhea and vomiting more prominent than with seasonal flu

• Underlying conditions recognized in most severe cases
  – >70% hospitalizations (US)
  – 80% deaths (US)

www.who.int/WER/2009/wer8439
Messaging

• Use proper hand hygiene

• Use respiratory etiquette
  – Sneeze in your sleeve
  – Cover your cough (not with your hands)

• Resources
  – CDC (for flyers)
Posters / Flyers

- [http://www.cdc.gov/germstopper/materials.htm](http://www.cdc.gov/germstopper/materials.htm)
  - Healthy Habits, Be a Germ Stopper, Cover Your Cough

- [http://www.cdc.gov/h1n1flu/flyers.htm](http://www.cdc.gov/h1n1flu/flyers.htm)
  - Brochures
    - 2009 H1N1 Flu and You; CDC Says “Take 3” Steps to Fight The Flu
  - Flyers
    - Clean Hands Save Lives; What To Do IF You Get Sick
  - Cover Your Cough Materials
Healthy habits help keep your family well.

Take care; Cover coughs and sneezes. Keep hands clean.

Healthy habits can protect you and your children from getting germs or spreading germs at home, work and school. Simple actions can stop germs and prevent illnesses.

Cover your mouth and nose. Use a tissue when you cough or sneeze and throw it in the trash. If you don’t have a tissue, cover your mouth and nose as best you can.

Clean your hands often. Clean your hands every time you cough or sneeze. Hand washing stops germs. Alcohol-based gels and wipes also work well.

Remind your children to practice healthy habits, too. Germs that cause colds, coughs, flu, and pneumonia can spread easily.

Healthy habits help reduce illnesses and sick days. Feel good about doing the right things to stay well.

Healthy habits stop germs. At home, work and school.

This message is from the Centers for Disease Control and Prevention and the Department of Health and Human Services. To learn more, please visit www.cdc.gov/germstopper.

Cover Coughs and Sneezes. Clean Hands.

Be a germ stopper at school — and home. Cover your mouth and nose when you cough or sneeze. Use a tissue and throw it away.

Clean your hands a lot
- After you sneeze or cough
- After using the bathroom
- Before you eat
- Before you touch your eyes, mouth or nose

Washing hands with soap and water is best. Wash long enough to sing the “Happy Birthday” song twice. Or, use gels or wipes with alcohol in them. This alcohol kills germs!

Stop germs. And stop colds and flu.

http://www.cdc.gov/germstopper/materials.htm
Stop the spread of germs that make you and others sick!

Cover your Cough

Cover your mouth and nose with a tissue when you cough or sneeze or cough or sneeze into your upper sleeve, not your hands.

Clean your Hands

Wash hands with soap and warm water for 20 seconds or clean with alcohol-based hand cleaner.

Clean Hands Save Lives!

♦ It is best to wash your hands with soap and warm water for 20 seconds.
♦ When water is not available, use alcohol-based products (sanitizers).
♦ Wash hands before preparing or eating food and after going to the bathroom.
♦ Keeping your hands clean helps you avoid getting sick.

When should you wash your hands?
- Before preparing or eating food
- After going to the bathroom
- After changing diapers or cleaning up a child who has gone to the bathroom
- Before and after caring for someone who is sick
- After handling uncooked foods, particularly raw meats, poultry or fish
- After blowing your nose, coughing, or sneezing
- After handling an animal or animal waste
- After handling garbage
- Before and after treating a cut or wound
- After handling items contaminated by food water or sewage
- When your hands are visibly dirty

Using alcohol-based sanitizers
- Apply product to the palm of one hand.
- Rub hands together.
- Rub over all surfaces of hands and fingers until hands are dry.
- Note the volume needed to reduce the number of germs on your hands.

Washing with soap and water
- Place your hands together under water (warm if possible)
- Rub your hands together for at least 20 seconds if possible
- Wash your hands thoroughly, including wrists, palms, backs of hands, and under the fingernails.
- Clean the dirt from under fingernails
- Rinse the soap from your hands.
- Dry your hands completely with a clean towel if possible (this helps remove the germs). However, if towels are not available it is okay to air dry your hands.
- Put your skin rather than rubbing to avoid chapping and cracking.
- If you use a disposable towel, throw it in the trash.

http://www.cdc.gov/germstopper/materials.htm
http://www.cdc.gov/h1n1flu/flyers.htm
#1
Take time to get a flu vaccine.
- CDC recommends a yearly seasonal flu vaccine as the first and most important step in protecting against seasonal influenza.
- While there are many different flu viruses, the seasonal flu vaccine protects against the three seasonal viruses that research suggests will be most common.
- Vaccination is especially important for people at high risk of serious flu complications, including young children, pregnant women, people with chronic health conditions like asthma, diabetes or heart and lung disease and people 65 years and older.
- Seasonal flu vaccine also is important for health care workers, and other people who live with or care for high risk people to keep from making them sick.
- A seasonal vaccine will not protect you against 2009 H1N1.
- A new vaccine against 2009 H1N1 is being made.
- People at greatest risk for 2009 H1N1 infection include children, pregnant women, and people with chronic health conditions like asthma, diabetes or heart and lung disease.
- Ask your doctor if you should get a 2009 H1N1 vaccine.

#2
Take everyday preventive actions.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water. If soap and water are not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Try to avoid close contact with sick people.
- If you are sick with flu-like illness, stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone without the use of a fever-reducing medicine.)
- While sick, limit contact with others as much as possible to keep from infecting them.
- Follow public health advice regarding school closures, avoiding crowds and other measures to keep our distance from each other to lessen the spread of flu.

#3
Take flu antiviral drugs if your doctor recommends them.
- If you get seasonal or 2009 H1N1 flu, antiviral drugs can treat the flu.
- Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu by keeping flu viruses from reproducing in your body.
- The priority use for antiviral drugs this season is to treat people who are very sick (hospitalized) or people who are sick with flu-like symptoms and who are at increased risk of serious flu complications, such as pregnant women, very young children, people 65 and older and anyone with certain chronic health conditions. (Most people have been able to recover at home from 2009 H1N1 without needing medical care and the same is true of seasonal flu.)
- Antiviral drugs can make illness milder and shorten the time you are sick. They may also prevent serious flu complications.
- Antiviral drugs are not sold over-the-counter and are different from antibiotics.
- For treatment, antiviral drugs work best if started within the first 2 days of symptoms.
- Visit the CDC 2009 H1N1 website to find out what to do if you get sick with the flu and how to care for someone at home who is sick with the flu.

http://www.cdc.gov/h1n1flu/flyers.htm
Governor's YouTube Message

• Prevention is the 1st line of defense!

• Protect yourself and others

• Sneeze in a tissue and throw it away
• Cough into your upper arm or elbow – never your hands
• Wash your hands well and often

http://www.youtube.com/watch?v=6SYFBP6UOZc
Where We Are Now

• WHO Phase 6 Pandemic
  – Determined by global spread, not severity

• Rapidly increasing flu activity across NC

• Planning for mixed season with several strains circulating

• Monitoring for increases in (1) severity, (2) transmissibility, or (3) antiviral resistance
NC State Lab Influenza Virus Testing Results by Week, 2008–2009

Influenza Positive Tests Reported by the N.C. State Laboratory of Public Health by Week

Week Ending Date

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Legend:
- **Seasonal A (H1)**
- **Seasonal A (H3)**
- **A unsubtypable***
- **Seasonal B**
- **Novel A (H1N1)**
- **Percent Positive†**

Notes:
- *Percent Positive† includes all positive test results, regardless of subtype or antigenic profile.
School Guidance: Goals

• Decrease disease; minimize disruption of social, educational, and economic activities

• Goal is NOT to eliminate all transmission of influenza in schools
  – Might change if severity increases
School Guidance: “Similar Severity”

• Stay home when sick
  – At least 24 hours after fever resolves without use of fever-reducing medicines
• Separate ill students/staff
• Emphasize hand hygiene
• Routine environmental cleaning
• Early treatment of high-risk students and staff
• Consider of selective dismissal of schools with predominantly high-risk students
Messaging

• Get vaccinated for
  
  – Seasonal flu
    • Vaccine is available now
  
  – Pandemic flu
    • First vaccine shipment should be available mid-October
    • Vaccines are distributed through schools, local health departments, physician offices, and some quick clinics (e.g. CVS)
Pandemic Vaccine: Priority Groups

1. Pregnant women

2. People who live with or care for children younger than 6 months of age

3. Health care and emergency services workers

4. Persons 6 months through 24 years of age

5. People 25 through 64 years of age at high risk for complications of influenza
Influenza Immunization Coverage Rates Among Adults, 2002 – National Health Interview Survey *

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<th>Group</th>
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<td>&gt;65 years</td>
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<td>50-64 years</td>
<td>34.0%</td>
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<td>18-49 years, high risk</td>
<td>23.1%</td>
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<td>Pregnant women</td>
<td>12.4%</td>
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<td>Health Care workers</td>
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<td>18-49 year old household contacts of high risk persons</td>
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*CDC MMWR 2004; 53 (No. RR-6)
Influenza Vaccine Myths

- The vaccine causes influenza
- The vaccine doesn’t work
- I don’t need a shot – it’s for the very sick
- The pandemic flu vaccine is “experimental”
- The pandemic flu vaccine is mandatory
Pandemic Vaccine Distribution

- All doses purchased by federal government, distributed directly to sites

- List of pandemic vaccine providers compiled by Local Health Departments
  - >2,500 sites listed in North Carolina
  - Minimum 100 doses per shipment

- Ancillary supplies included with vaccine

- School vaccination programs encouraged
Nonpharmaceutical Interventions

- Recommendations based on disease severity
- Guidance issued for specific settings
  - Workplace
  - Farms
  - Schools
  - Camps
  - Health care facilities
  - Long-term care facilities

- [www.flu.nc.gov](http://www.flu.nc.gov) and [www.cdc.gov/h1n1flu](http://www.cdc.gov/h1n1flu)
Public Health Resources for Pandemic H1N1

• Nationally
  – www.cdc.gov/h1n1flu
  – www.flu.gov

• Statewide
  – www.flu.nc.gov

• Local Health Department Website
Facility Cleanliness

• No need to clean beyond routine protocol

• No need to use special cleaning supplies

• If concerned, you can clean high contact areas like door handles or high contact tables.
Influenza Survival on the Environmental Surfaces

- Hard surfaces: 12–48 hours
- Cloth/paper: 8–12 hours
- Hands: 5 minutes

Survives longer with low humidity, low UV

What’s Next?

• Seasonal and pan flu vaccination campaigns

• Continue enhanced surveillance
  – Communicate information to partners

• Work with businesses, schools and others to decrease outbreaks

• Wait for May when influenza season usually ends!
What Can Parks & Recs Do?

- Recognize signs and symptoms of flu
- Encourage staff and patrons to stay home if ill
- Model and encourage good respiratory etiquette
- Get vaccinated for seasonal and pandemic influenza
- Stay in contact with Local Health Department
What Can Parks & Recs Do? (cont’d)

– Provide tissue

– Display respiratory etiquette flyers

– Encourage hand washing first

– If hand washing is not available, provide alcohol-based hand sanitizer as an option if possible

– Those with fever and cough or sore throat need to stay home and may return after they have been without a fever for at least 24 hours (without the use of a fever reducing medication)
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