

Novel Influenza H1N1: Update for the Education System.

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Please remember JT's Motto:

- What I said yesterday may not be true today,
- What I say today, may not be true tomorrow,
- What I will say tomorrow...
- Who are we kidding? Not even God knows what I'll say tomorrow!



Influenza Virus

- Spread
 - Aerosolized droplets from coughing or sneezing up to a 6 foot radius
 - Hand to face contact (nose, eyes, or mouth) after touching infected areas
 - Virus infectious only up to 2-3 hrs on surfaces
- Incubation period
 - 1 to 7 days (avg H1N1 3-4 days)
- Symptom duration
 - 3 to 7 days but up to 14 days (avg H1N1 3-5 days)
- Contagious
 - 1 day before symptoms to 10 days after symptoms
 - peak period while febrile



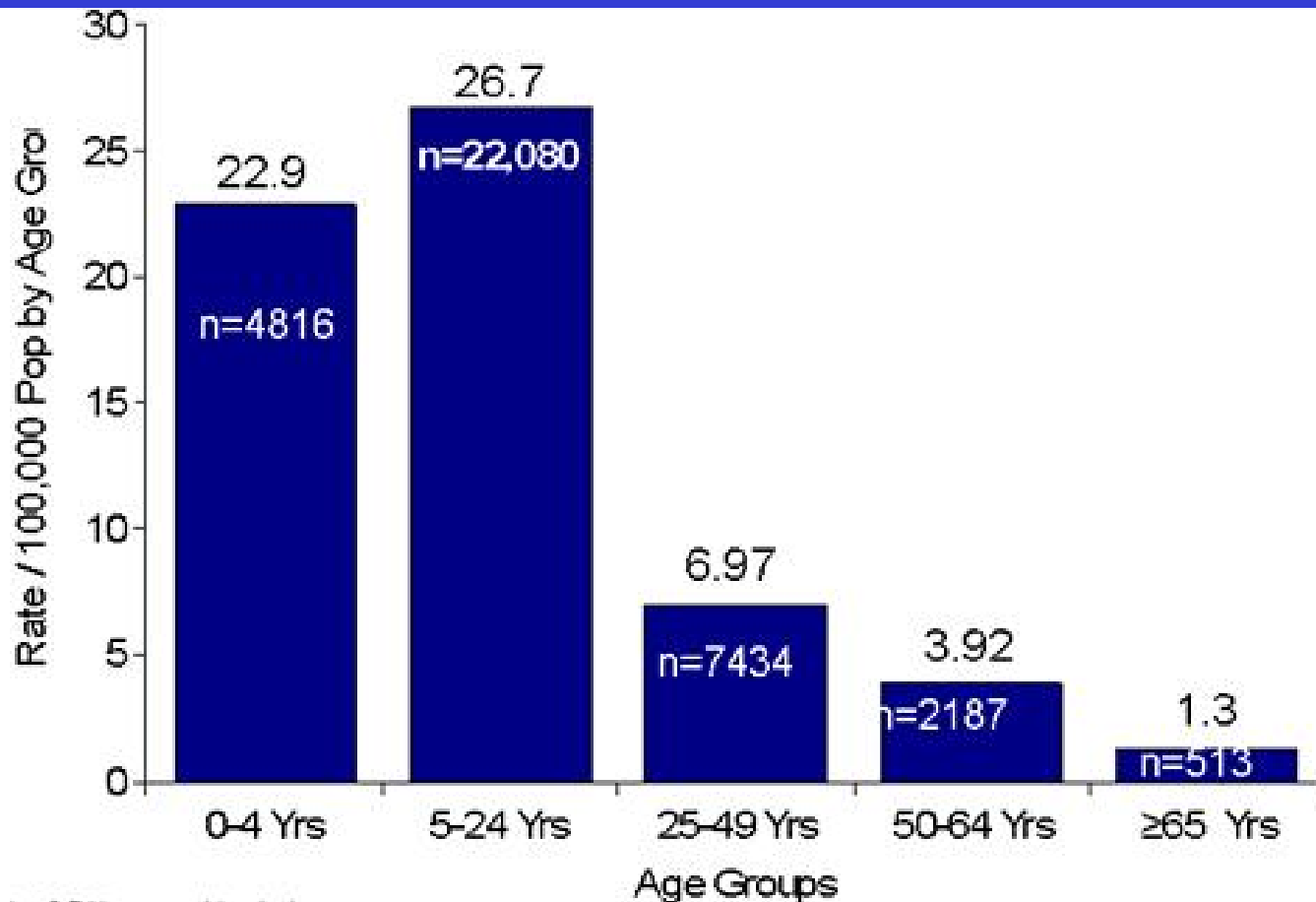
Influenza Like Illness

- Must-have symptoms
 - Fever plus sore throat or
 - Fever plus cough
- Other symptoms
 - Headache
 - Muscle & joint aches
 - Nausea, vomiting, or diarrhea
 - Fatigue
 - Pneumonia
 - Shortness of breath

H1N1 Influenza

- Novel (new) flu virus in humans
- High attack rate particularly among young
- Generally mild disease in healthy people
- Most hospitalizations & deaths in high risk groups
- Caused pandemic (e.g. worldwide spread)-
pandemic means wide spread /not severity

H1N1 Age Distribution



*Excludes 6,741 cases with missing ages.

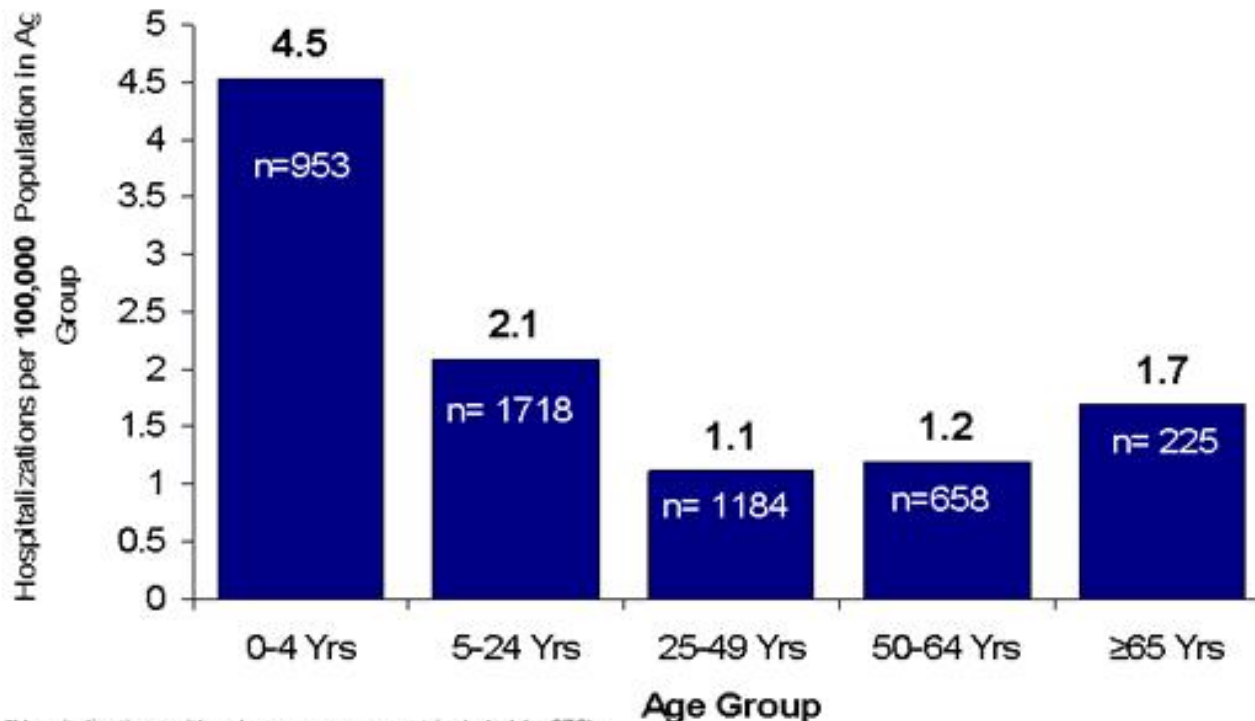
Rate / 100,000 by Single Year Age Groups: Denominator source: 2008 Census Estimates, U.S. Census Bureau at:

<http://www.census.gov/popest/national/asnhfiles/NC-EST2007-ALLDATA-R-File24.csv>

NH Department of Health and Human Services

Hospitalization Rates

Hospitalization rate by age per 100,000 population



*Hospitalizations with unknown ages are not included (n=273)

*Rate / 100,000 by Single Year Age Groups: Denominator source: 2008 Census Estimates, U.S. Census Bureau at:

<http://www.census.gov/popest/national/asrh/files/NC-EST2007-ALLDATA-R-File24.csv>

Main High Risk Groups for H1N1 Hospitalizations & Death

- Respiratory illnesses (e.g. Asthma, COPD)
- Cardiovascular Disease
- Diabetes
- Pregnancy
- Immunocompromised individuals



What to Expect

- Presently it is expected that the current pandemic will affect 30% population over six month period with <1% mortality rate
- Most cases will be mild:
 - People will be sick at home for a week
 - High risk groups more likely to be hospitalized or die
- Vaccines available for
 - Seasonal influenza (now)
 - H1N1 (in late fall)



Goals & Strategies

- Prevent people from becoming ill
 - Vaccination
 - Hand washing
- Prevent spread between people
 - Hand washing
 - Cover nose/mouth with arm/tissue: not with your hand
 - Stay home when you are ill until fever-free for 24 hrs
- Treat people who are ill
 - Mild disease: stay home, rest, fluids, acetaminophen
 - Call provider if development of complications or have chronic medical condition



NEW APPROVED Greetings - State Dept. of Health

Gary Varvel
THE MINNAPOLIS STATE
©2007 CREATOR: GND.



Long distance Wave



Elbow Bump



Sanitary Gloves



The Bow



The Bump

garyvarvel.com

- **Recommended Interventions:**

- Maintain overall health resiliency by eating well, getting enough sleep, minimizing the use of alcohol, managing stress

- Respiratory Etiquette

- Cover nose and mouth to cough or sneeze with elbow
 - Discard tissue after use

- Hand Hygiene

- Students and staff should be encouraged to wash hands often – especially after coughing or sneezing
 - Alcohol-based hand cleaners are also effective



- **Recommended Interventions (Continued)**

- Exclusion

- Individuals with ILI should remain home for at least 24 hours after they are free of fever or feverishness without the use of fever-reducing medications
 - 3 to 5 day exclusion period necessary in most cases
 - Stay home until the end of this period
 - Avoid contact with others
 - Upon returning to school continue to follow
 - Hand hygiene
 - Respiratory etiquette



- **Recommended Interventions (Continued)**

- Routine Cleaning

- Viruses may spread when persons touch respiratory droplets on hard surfaces and objects then touch their mouth, nose, or eyes
 - Not necessary to disinfect beyond routine cleaning
 - Regularly clean areas and items likely to have frequent hand contact
 - Clean when visibly soiled



- **Recommended Interventions (continued)**

- Self Isolation of sick individuals – strongly encourage students and staff to go home – preventing the infection of more people is our only option right now
 - Plans for offering an isolated location for sick students who cannot return home is in the planning process
 - Have sick student wear surgical masks when near others
 - Center for Health and Wellness will be triaging sick students by phone and seeing students in the clinic who need to be medically evaluated – most students will not need to be
 - This is a “virus” – it can not be cured with an antibiotic – treatment with antiviral medication is not being recommended for most people



- **Recommended Interventions (continued)**

- No current need/recommendation to stop mass gathering events or travel
- Talk to health care provider about ways to decrease exposure
- People who stay home also should decrease exposure in other ways
- Institutions must be prepared for parental concerns
- Faculty will need to be creative in managing absenteeism and course requirements as well as stressing attendance when well
- Be flexible according to the situation



Influenza-like Illness (ILI) Surveillance

- Faculty and supervisors will be expected to report to Sylvie Rice at srice2@keene.edu when they reach a 30% or greater absenteeism in their class or staff – this data will help us track trends and if/when we may need to change our response
- Center for Health and Wellness will track the # of students we treat or triage with ILI



School Closure Monitoring

- CDC and US DOE have established a system to monitor school closures due to influenza illness in a school
- Form is submitted by the closing school
 - Online reporting tool or via fax/email
- CDC/US DOE will ensure all reports received are provided to the point of contact in that state to confirm state health and education officials are aware of the closure
 - In NH, the point of contact will be NH DOE



Current Testing Guidelines for H1N1 in NH

- Hospitalized patients with influenza like illness
- Healthcare workers with ILI in direct care patient services after consultation with their healthcare provider
- Selected patients suspected to be part of a cluster of undiagnosed respiratory illness and only in consultation with public health
- Testing ongoing with Sentinel providers
- Mild cases will not / should not be tested: Result of a test does not change clinical or public health recommendations, management or outcome



Current School closure recommendations

- Present level of illness--no recommendation for school closure
 - schools and their communities have a responsibility to balance the risks of illness among students and staff with the benefits of keeping students in school.

Technical Report for State and Local Public Health Officials and School Administrators on CDC Guidance for School (K-12) Responses to Influenza during the 2009-2010 School Year



Increase in Disease Severity

- Selective school dismissal—School comprised of high-risk students
- Reactive dismissals—high levels of absenteeism in students and/or staff and unable to function normally
- Preemptive school dismissals—decrease the spread of the influenza virus or to reduce demand on healthcare system
- Authority is at the institutional level



Influenza Vaccine Programs

- Seasonal flu vaccination
 - Expected in September
 - Will begin prior to H1N1 vaccination program
 - Usual recommendations for who should get it
- H1N1 flu vaccination
 - Initial supply expected in fall
 - Human trials currently underway
 - Likely two shots, one month apart
 - Given to priority groups first



H1N1 Vaccination

- Current Tier I priority groups identified by CDC
 - Pregnant women
 - Caregivers & household contacts for children under 6 months of age
 - Children 6 months to 24 yrs of age
 - Healthcare workers & first responders
 - Adults 24 to 65 with chronic medical conditions at risk for influenza complications



Information Resources

- HEALTH

- www.dhhs.state.nh
- For General Public Health related Questions, including H1N1:
603-271-4496, 8:30 AM - 4:30 PM regular business days
603 –271 –5300, or 1-800-852-33345 ext 5300 after hours
- Report regular outbreaks @ 603-271-4496

- Federal Resources

- Centers for Disease Control and Prevention (CDC)
 - www.cdc.gov
- Flu.gov
 - www.flu.gov



THE MORE WE REASSURE THEM, THE MORE
THE PUBLIC GET WORRIED. I DON'T KNOW
WHY...

PANDEMIC

PAN IC

W. J. ... 1998



Division of Public Health Services
NH Department of Health and Human Services



Thanks a lot



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