

FIGHT FEAR WITH FACTS




Sponsored by DMI, September 2009

Objectives


1. Overview of current H1N1 Situation in USA and WI
2. Overview of the disease process – how contagious
3. The importance of having incorporating H1N1 into a college-wide *contingency* preparedness plan
4. Prevention strategies and training tools
5. Family preparedness
6. Recommendations for communications with students, faculty and staff

Purpose and Scope

- Provide direction and facts to enable continuity of operation
- Adopt practical, consistent protocols WTC-wide
- Allow our colleges to operate at highest level of efficiency and learning

Put Things into Context – Global Pandemics

- Millions die each year (examples)
 - HIV and complications
 - Heart disease
 - Malaria
 - Motor vehicle accidents
 - Suicide and homicide



WHO Tracks Many Diseases

Acute respiratory syndrome	Acute watery diarrheal syndrome
Anthrax	Botulism
Tularemia	Cholera
Creutzfeldt-Jakob disease	West Nile fever and Yellow fever
Dengue fever	Diphtheria
Ebola Virus	E.Coli 0157
Encephalitis	Foodborne disease
Hantavirus	Typhoid fever
Legionellosis	Malaria
Marburg hemorrhagic fever	Measles
Monkey pox	Pertussis
Plague	Rabies
Rift Valley fever	SARS



The Risk of Over-reaction

“H1N1 is Unstoppable”

“Two Billion Could be Infected”

“50% of the U.S. Population May Become Ill”

“It’s Not If, But When”

Haven't We Been Down This Road Before?

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Smallpox Anthrax HIV - AIDS
Lyme Disease
SARS Y2K West Nile Virus

1. Current Flu Potential

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- H1N1 Novel, or 'Swine' Flu
- H5N1, 'Bird' or Avian Flu
- Seasonal Flu
- Other possible strains (H3N2)
- Symptoms classified as ILI (Illness-like-Influenza)

Current Information

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- H1N1 is the dominant flu strain being reported (97%); not expected to mix
- Stable hospitalization and mortality rates continue
- At-risk populations are identified

At-Risk Populations

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1. Children 6 months – 5 years old
2. Persons 65 years and older
3. Children 5 – 18 years old receiving long-term aspirin therapy
4. Pregnant women
5. Persons with chronic or immunosuppressant conditions
6. Nursing home residents

Priority: recognize the overall condition of the person

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>

Current Global and USA Figures (9/3/2009)

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- Globally: 209,438 cases, with at least 2,185 deaths (underestimated, under-reporting acknowledged)
- USA: 9,079 hospitalizations and 593 deaths reported

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>

March - August 2009

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- New influenza stain appearing in Mexico results in increased pneumonia deaths
- Rapid spread through the USA
- Reported proportions of cases resulting in death
 - ▣ Global = 0.4%
 - ▣ Wisconsin = 0.1%
- Median age of those becoming ill in WI is 13

http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html#endemic_wisconsin.gov/

September 2009

- Relatively low numbers of cases
- Antiviral medications and infection controls increased
- Novel influenza H1N1 vaccine expected 10/09
- Seasonal influenza vaccine available


Current WI H1N1 Situation (9/2/2009)

- 6441 Cases, majority (63%) in Milwaukee County
- Rate of 115 cases per 100,000
- 4.3% cases hospitalized
- Highest case rates in Milwaukee, Columbia, Dane, and Marathon Counties

<http://pandemic.wisconsin.gov/>


2. Overview and H1N1 Considerations

- Rapid, global spread and transmission
- Unpredictable and not trending seasonally
- Will occur in waves
- Shedding of virus 24 hours prior to and following resolution of fever – up to 7 days



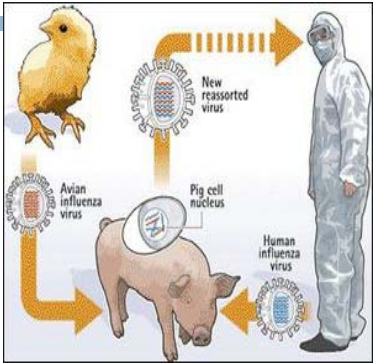
H1N1 is Dynamic and Evolving

- Re-assortment
- Mutations
- Secondary infections



Best practices for communicating with the public during an outbreak. Report of the WHO Expert Consultation on Outbreak Communications held in Singapore, 21–23 September 2004

Re-assortment of the Virus



Possible Impact

- Antiviral drug resistance
- Reduced vaccine effectiveness
- Changes in severity of illness and death rates
 - Even small increases could impact healthcare capability

The 'W' Curve – Cytokine Storm (H5N1)

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<http://www.cytokinesstorm.com>

Transmission

- Generally through large-particle respiratory droplets (when an infected person coughs or sneezes near a susceptible person)
- Aerosol transmission (smaller droplets) also occurs
- Incubation period 1 – 7 days

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>

HOW THE VIRUS WORKS

Influenza is a highly contagious virus and a pandemic flu could affect up to half the population

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<http://www.jpohk.gov.my/English/UPDATE%20SWINE%20FLU.htm>

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Influenza A Virus Replication

<http://www.jpohk.gov.my/English/UPDATE%20SWINE%20FLU.htm>

Impact to be Determined

- Illness rates (normal flu is 5-10%)
- Absenteeism rates – consider 25 – 35% of employees away for 3-5 days or longer at a time
- Potential disruptions and shortages
 - ▣ Includes fuel, travel, food, and health care

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3. The importance of having a college-wide contingency preparedness plan

Challenges to Planning

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- Consider “What if...”
 - We can’t send all students home?
 - We have students who are ill and the local health systems becomes overwhelmed?
 - We operate with a reduced staff?
- Allocate resources
 - Stockpile supplies...how much is needed?
 - Ethics – who receives and who is left out?

Plan for the Present

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- Base on current conditions and knowledge
- Local and community emphasis
- Flexible, adaptable, and unique
- Test and exercise

Identify

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- Key members in the contingency and pandemic planning process
- Essential functions and personnel
- Appropriate channels of communication and chain of command (NIMS)
- The role of student services

Determine Action Triggers

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- Limited span for critical decision-making
- Weigh strategies of closing campuses or reducing student numbers
- Once closed, for how long?
 - Repercussions
 - Define closing – no classes, no research, lock down, limit community access?

4. Know The Enemy

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“Know the enemy and know yourself; in a hundred battles you will never be in peril **100%**”

When you are ignorant of the enemy, but know yourself, your chances of winning or losing are equal **50%**

If ignorant both of your enemy and yourself, you are certain in every battle to be in peril” **Zero**

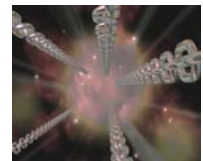
Sun Tzu, “The Art of War”



Goal: Disrupt the Chain of Infection

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- Isolate ill persons
- Quarantine exposed persons
- Social distancing
 - Discourage close social contact
- Awareness and education
 - Accurate and precise
 - Consistent with public health



Strategies for Reducing Transmission

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- Persons who are ill are to stay home from work and other activities
- Consider accommodations for high-risk persons to reduce contact
- Provide masks, PPE, and access to sanitizers
- Education and capabilities for:
 - ▣ Hand washing, covering coughs and sneezes, and avoiding hand-to-face contact
 - ▣ Disinfecting frequently-touched surfaces
 - ▣ At-risk students and staff to seek prompt treatment if symptomatic

Respirator Protection?

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- Tissues and gauze coverings are ineffective
- 'Surgical masks' are questionable – designed to protect the patient not the wearer
- Fit-testing required?
- Communications and comfort
- Availability and inspections
- Eye protection is needed as well



<http://www.bea.gov/pressroom/2009/09/090809.htm>
<http://www.who.int/csr/don/20090908>
<http://www.who.int/csr/don/20090908>

Vaccine Considerations in a Population of 307,000,000+

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- First large-scale inoculation campaign since 1976
- Limited H1N1 vaccinations (100,000,000 doses)
- Number of shots – once or twice to achieve immunity?
- Logistics and distribution (through county health)
- No cost for vaccine, but possible fee for delivery*
- Different target populations and distribution pathways
- Uncertainty of quantities and delivery dates

*the vaccine is paid through tax dollars

Initial H1N1 Vaccine Prioritization

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1. Pregnant women
2. Persons who live with or provide care for infants younger than 6 months
3. Healthcare and emergency medical services personnel who have direct contact with patients or infectious material
4. Children aged 6 months to 4 years
5. Children and adolescents aged 5 to 18 years who have medical conditions that put them at higher risk for influenza-related complications

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>

Antivirals

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- Recommended for persons at risk or hospitalized
- Best when administered within 48 hours of onset
- Recommended duration of treatment is 5 days

5. Family Preparedness

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- Maintain normal routines
- Identify isolation areas and practice good hygiene
- Out-of-area family contact link
- Model positive and constructive behaviors

Family Preparedness

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- Get to know county health department
- Avoid national, commercial news – rely on competent sources
- Follow local news for updates and direction

Best practices for communicating with the public during an outbreak. Report of the WHO Expert Consultation on Outbreak Communications held in Singapore, 21–23 September 2004

Emergency Supplies List

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<http://www.cdcemergencypedia.com/images/prepare/prepare01.jpg>

http://www.cdcemergencypedia.com/images/emergency_supplies.jpg

Recommended Individual To Do List

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- Obtain seasonal (“regular”) influenza vaccine soon
- Identify those in your household who are:
 - early targets for the new H1N1 vaccine
 - at higher risk for serious influenza complications
- Monitor local media for up-to-date information
 - Wisconsin’s pandemic website (see link below)
 - Local Health Department
 - Dial “211” for questions
- “Call before you go” to clinic or hospital, except for life-threatening symptoms
- Make a household plan for illness or other possible emergencies

<http://pandemic.wisconsin.gov/>

CDC Recommendations For Time Away

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- Remain at home at least 24 hours fever-free (100 F or 37.8 C), or from signs of a fever without the use of fever-reducing medications
- Most H1N1 cases not requiring hospitalization had a fever 2 – 4 days, so would require a **3 – 5 day** exclusion period
- Stay at home until end of exclusion period, even if antivirals are used
- Guidelines do not apply to health care settings

6. Recommendations for communications with students, faculty and staff

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The Myth of Public Panic

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- Panic is an emotion driving irrational action
- Even during very severe outbreaks, public panic is rare
- Societies have considerable coping skills when confidence in those managing the outbreak is high
- When the goal is preventing public panic, the tendency to over reassure and mislead, and the legitimate reasons for public anxiety are not addressed
- Messages that assure the public there is no need for panic have been shown to increase the level of fear

Best practices for communicating with the public during an outbreak. Report of the WHO Expert Consultation on Outbreak Communications held in Singapore, 21–23 September 2004

New York City Post-911: "Rules We Try to Live By"

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- The first communication is critical
- Go public quickly even if you have incomplete information
- Don't wait for a press release to be written
- Say what you know, what you don't know, and what you're doing
- Explain that the information may change when you know more
- Keep talking and communicate often
- Promise and deliver timely, regular updates
- Be clear (no jargon) and consistent
- Act reassuring and calm
- Recognize that the risk may be small, but people will be frightened

Best practices for communicating with the public during an outbreak. Report of the WHO Expert Consultation on Outbreak Communications held in Singapore, 21–23 September 2004

School Closings or Restrictions?

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- Closing schools in the early phases of an outbreak were effective for reducing within-school transmission, but were not necessarily effective for reducing overall community transmission
- Legal issues regarding school closures and non-discrimination need to be closely monitored
- Care needs to be taken when evaluating how school closures will impact transmission on the community

<http://www.who.int/csr/disease/swineflu/en/index.html>

School Closings or Restrictions?

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- When considering suspending school or restricting mass gatherings, ask "what is the legal authority and processes?"
- Any decision that results in social isolation, restrictions on the right to travel and assemble, and impacts on commerce, trade and economic stability need to be carefully associated

<http://www.who.int/csr/disease/swineflu/en/index.html>

School Closings or Restrictions?

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- School closings have major ramifications for students, parents, and employers
 - ▣ Child-care
 - ▣ Parent or guardian absenteeism*
 - ▣ Dependence on school transportation and meals

Pandemic Flu Preparedness: Lessons from the Front Lines, June 2009; Trust for America's Health, www.healthpartnercons.org

*48% of US populations have no paid sick days

School Decision-Making

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- Address allowing staff to teach online or virtually
- Provisions for using sick days when supply is gone
- Students to make up assignments or participate without being in a face-to-face environment
- Ability to make-up work or class (be careful and spell out consequences for misuse)

Student and Staff Services

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- Selected Activities
 - ▣ Engage in pandemic plans and exercises
 - ▣ Provide regular updates on latest news
 - ▣ Vaccinations
 - ▣ Fit testing for N95 respirators
 - ▣ In-service on PPE
 - ▣ Assist with personal emergency plans
 - ▣ Identify resources for food and shelter

Counseling Services

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- Anticipate high need
- 24/7 counseling for staff, faculty, students – possible PTSD services
- Protocols for providing service via telephone, Internet, and other platforms



Housing and Dining Services

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- Identify rooms and buildings that could be used to quarantine, isolate and house students who cannot go home
- Develop a procedure for closing and evacuating residence halls
- Procedures for notifying and relocating students
- Train housekeeping staff in personal protection and proper cleaning
- Stockpile and store non-perishable food and fluids
- Use volunteers to perform duties if paid staff is away

Campus Security

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- Procedures for securing buildings and protecting stored supplies
- Communication with local police, fire and emergency response
- Protocols for transporting ill students
- Fit-testing for N95 respirators
- Equip cars with disinfectants, gloves, etc.

Physical Plant

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- Contingency plans in case of fuel, water and energy shortages
 - Emergency generators?
- Building ventilations systems



Human Resources

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- Identify essential personnel and chart depth
- Call-in, vacation and sick leave guidelines
- Return to work or telecommuting guidelines
- Use of unpaid time and volunteers
- Communications with administration, staff, faculty and students
- Healthy Families Act of 2007



Academic Affairs

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- Policies for student absenteeism due to illness or quarantine
- Alternative procedures for completing course work



Research Labs

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- Can research continue?
- Plan for maintaining security in labs
- Plan for care of lab animals
- Plan for specimen storage and managing experiments in progress



<http://neurosurgery.ucsf.edu/images/ResearchLaboratories2.jpg>

Business and Finance

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- Procedures for rapid procurement of goods
- Continuation of payroll functions
- Financing and emergency funding issues
- Plan for reviewing applications and recruiting in absence of face-to-face interviews or campus visits
- Contingency plans for dealing with financial aid, withdrawal from school, other factors related to tuition and registration

Recovery

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- Criteria for calling an end to the event and resuming campus business
- Communication plan for advising students, staff, faculty of plan to resume business
- Timeline for restoring operations
- Methods for updating and evaluation
- Structure for measuring the effectiveness of the plan

Selected Resources

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- <http://pandemic.wisconsin.gov/>
- <http://www.who.int/en/>
- <http://www.pandemicflu.gov/>
- <http://www.baesa.org/pandemic.htm>
- <http://www.cdc.gov/h1n1flu/>
- <http://health.blogs.foxnews.com/category/dr-siegels-take>
- <http://www.cidrap.umn.edu/cidrap/content/influenza/>
- <http://www.osha.gov/dsg/topics/pandemicflu/index.html>



<http://www.futura.com/lebens/gesund/lebensstil/>

Specific to Higher Education

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- <http://www.pandemicflu.gov/professional/school/higheredguidance.html>
- <http://www.pandemicflu.gov/professional/school/higheredtoolkit.html>
- <http://www.pandemicflu.gov/professional/school/higheredtechreport.html>



<http://www.convergint.com/images/higher-education.jpg>

Notes and Next Steps

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