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H1N1 Global Update:
What we have learned so far –
Preparing for the Fall flu season

August 11, 2009



Agenda

1. Update on H1N1
 - Global spread
 - Lessons learned - New study by Trust for America's Health
2. Why you should care and do something
3. With limited time...
 - Five things to focus on...
 - Next Steps



Two Important Things to Keep in Mind

1. We don't know what exactly will happen when the flu season begins:
 - Best case – it is like the 1957 pandemic
 - Worse case – it is like the 1918 Spanish flu
2. There are no immediate medical fixes:
 - Vaccines will not be available till late winter and in limited supplies
 - Only medical solution is antivirals
 - There have been cases of Tamiflu resistance

Mexico Reports Outbreak

- March 18, 2009 surveillance systems in Mexico reported unusual numbers of influenza-like illness.
 - The event was an outbreak of acute respiratory illness in the states of Veracruz and Oaxaca Mexico



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- On 3/30/09, 10 y.o. boy had onset of fever, cough and vomiting.
 - No exposure to pigs.
- Taken to outpatient clinic who just happen to be doing a clinical study on influenza.
 - Initial test revealed Influenza A, unable to type it
 - CDC notified on April 13





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Imperial County



- On 3/28/09 9 y.o. girl had onset of cough and fever (104.3F), taken to outpatient clinic also participating in a influenza study
 - April 17 CDC received sample of an unsubtypable A virus.
 - CDC ID'ed it as H1N1 novel (same as the boy in LA)
 - No smoking pig.



The Net-Net

- Week of April 17 - 23
 - Mexico outbreak continues
 - Two cases confirmed in California
 - One case confirmed in Texas
 - Additional cases reported in California and first hospitalization on April 23, 2009
 - No epidemiological link to any of the cases
 - Geographically distinct /isolated
 - No smoking pig (no pig exposure in the cases)
 - Net-net = probably a much bigger problem and could be.....
- CDC opens its EOC April 20, 2009

US Flights from Mexico

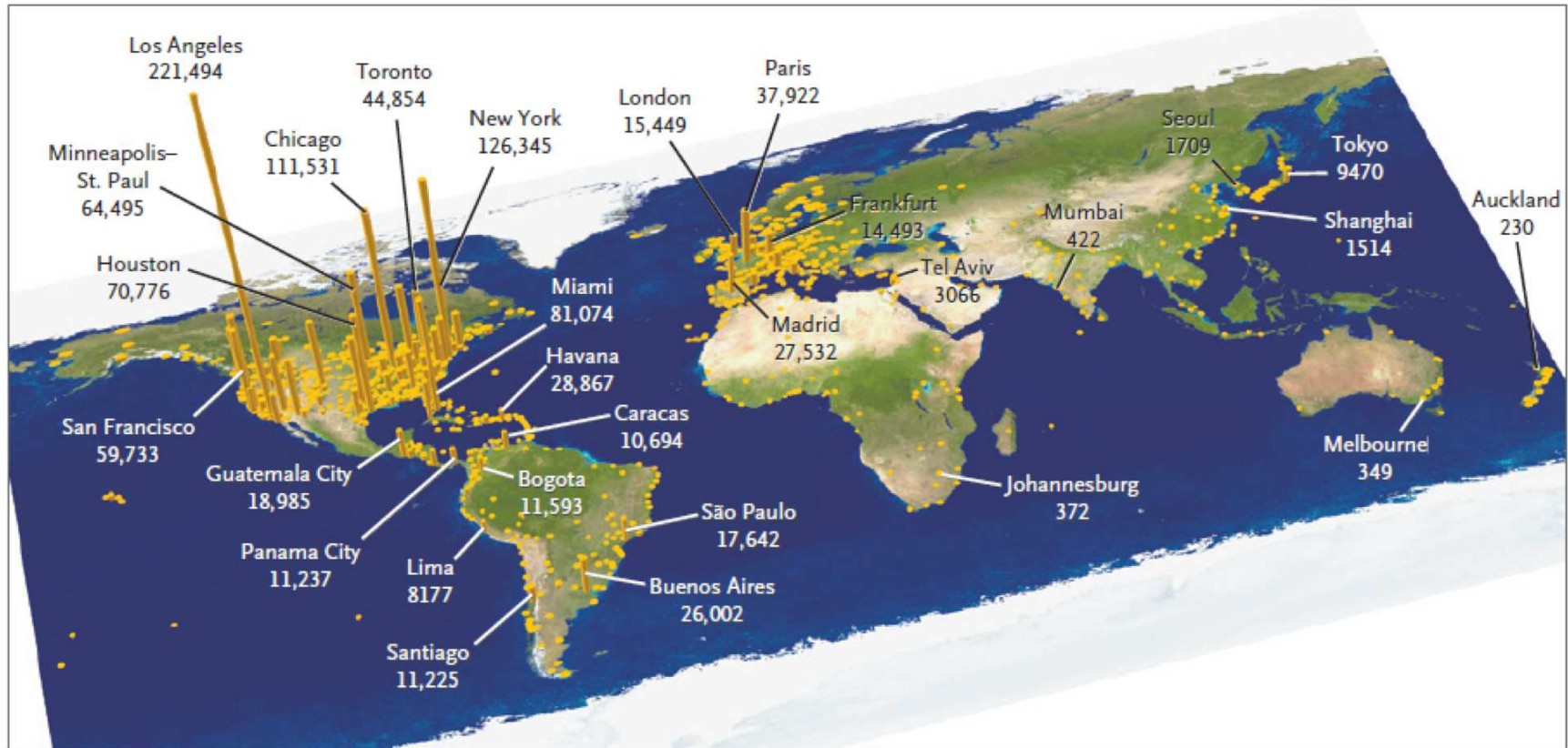


Figure 1. Destination Cities and Corresponding Volumes of International Passengers Arriving from Mexico between March 1 and April 30, 2008.

March and April 2008, a total of 2.35 million passengers flew from Mexico to 1018 cities in 164 countries – New England Journal

April 24, 2009



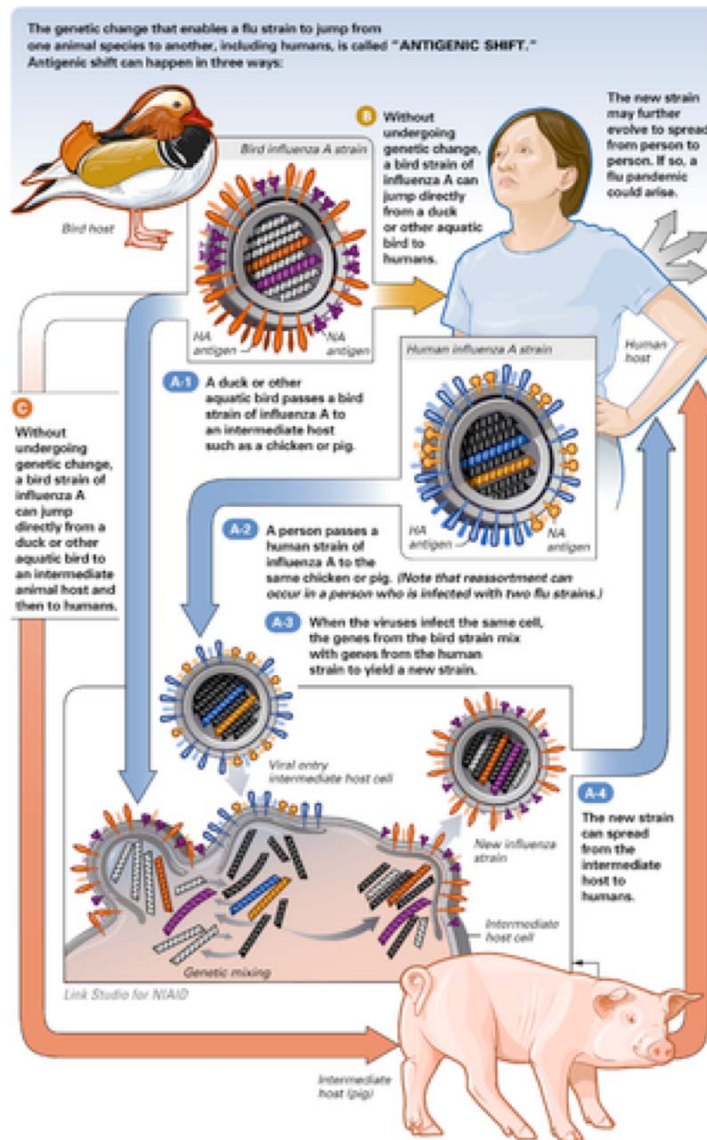
- A mysterious illness is reported in the national news – a respiratory illness in Mexico, spreading quickly...
 - People in the streets with masks...
 - Hey wait, they are next door, wasn't this supposed to happen in Asia?



Out of
Danger
Comes
Opportunity

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Novel H1N1 Virus



- A unusual reassortment of three different flu viruses –
 - North American avian influenza
 - Human influenza
 - Swine influenza virus typically found in Asia and Europe



How Quickly Things Changed

- WHO 3 1997 – April 26, 2009
- WHO 4 – April 27, 2009
- WHO 5 – April 29, 2009
- WHO 6 – June 11, 2009 – a worldwide pandemic



**World Health
Organization**

WHO Confirmed Cases

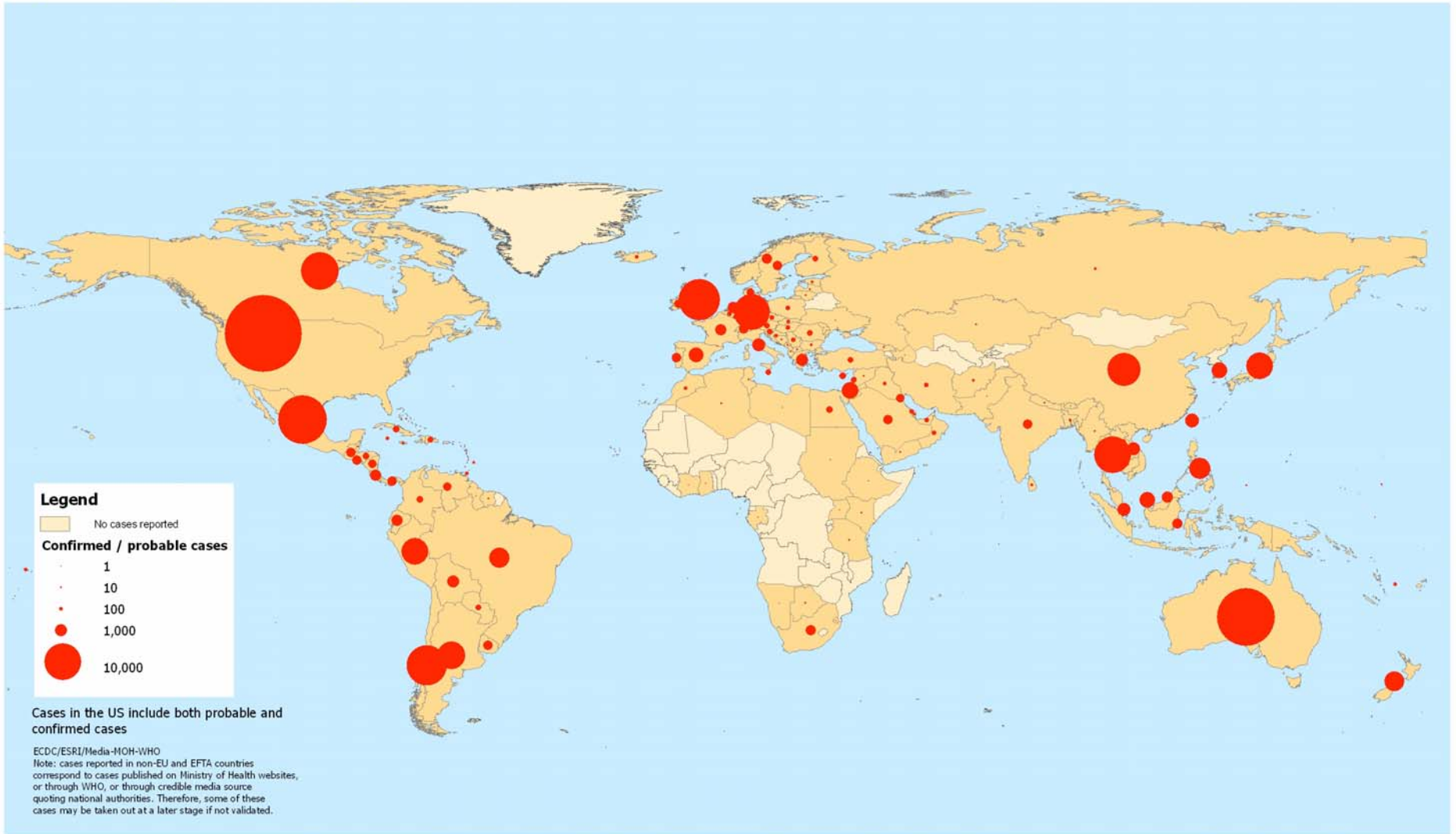


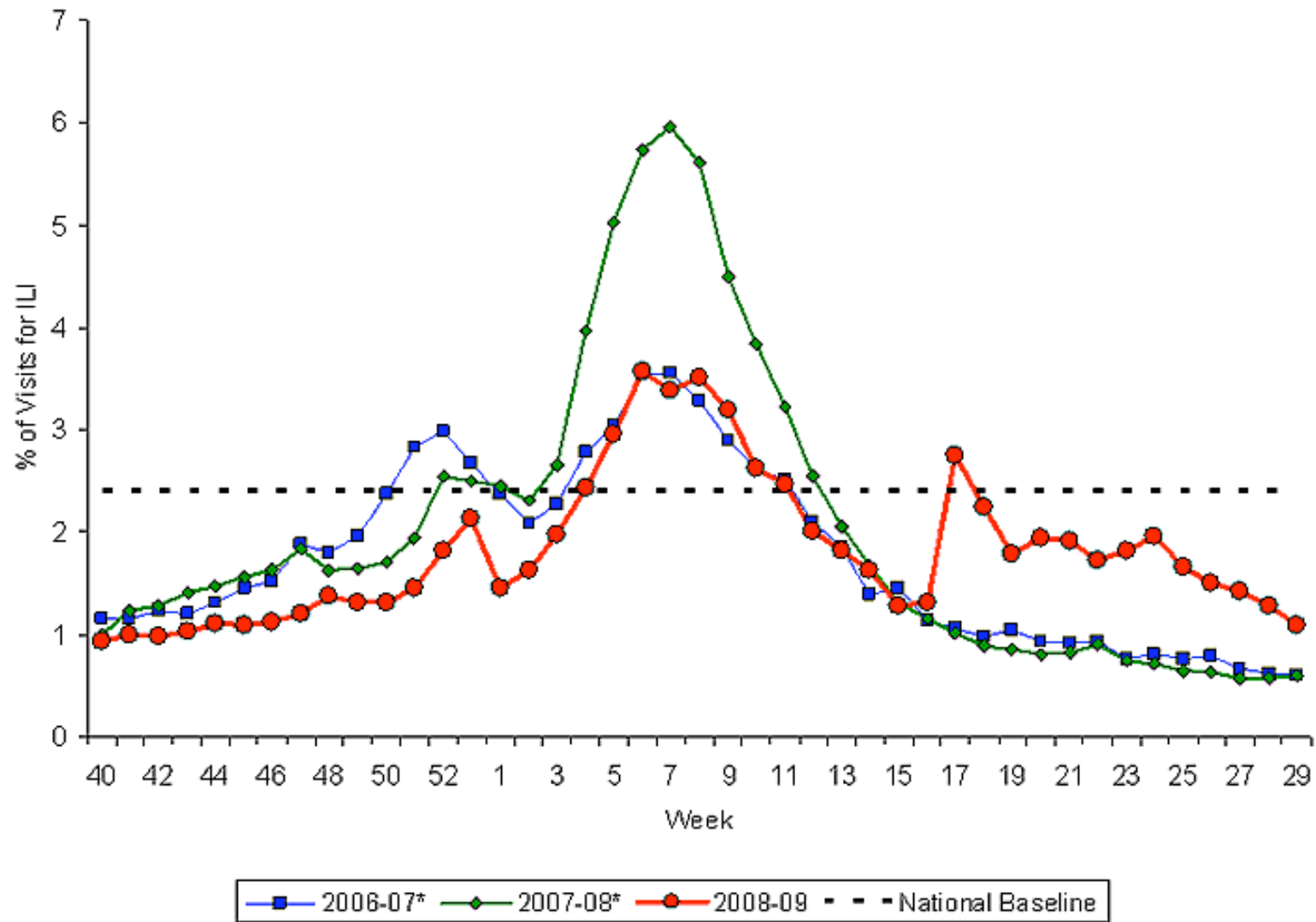
- World Health Organization (WHO) is no longer reporting the number of cases globally as of July 16, 2009
 - “At this point, further spread of the pandemic, within affected countries and to new countries, is considered inevitable.”
 - Now in 150+ countries (out of a possible 194).
- Numbers vary greatly by different agencies around the world and due to the change in testing, no longer meaningful.



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Reported cumulative number of confirmed cases of influenza A(H1N1)v by country, as of 9 August 2009, 16:00 hours CEST

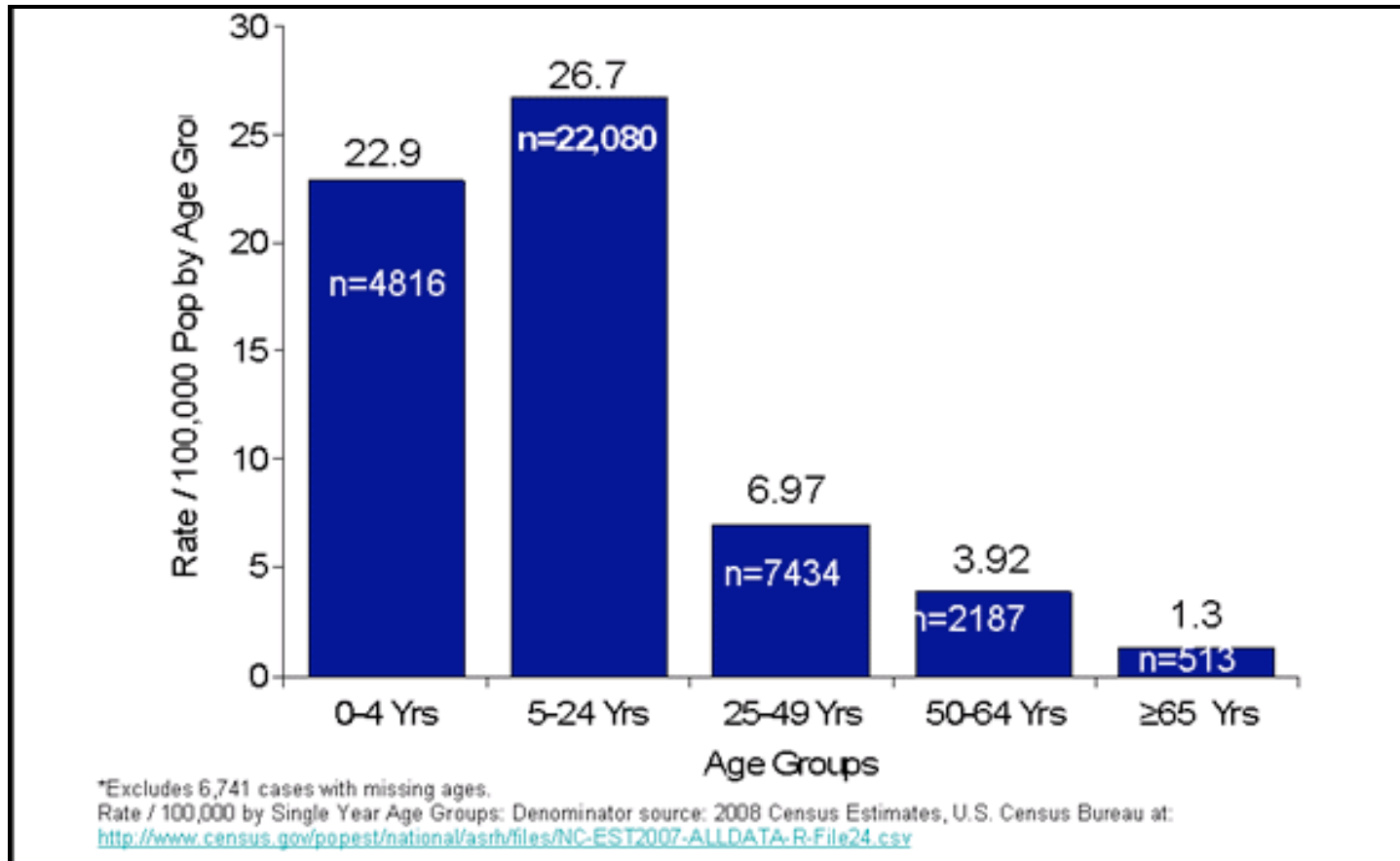




*There was no week 53 during the 2006-07 and 2007-08 seasons, therefore the week 53 data point for those seasons is an average of weeks 52 and 1.

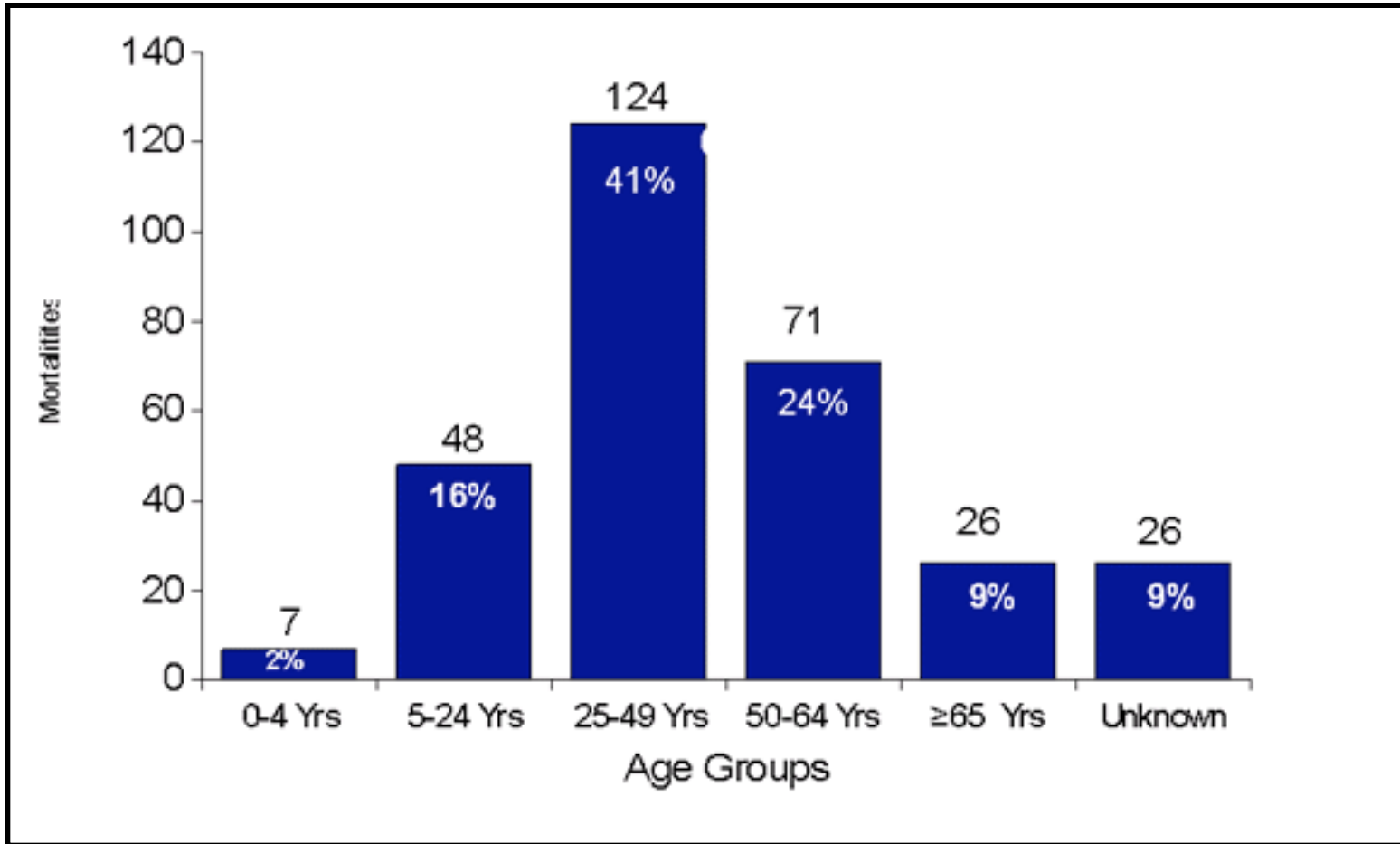
% of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), National Summary 2008-2009 and Previous Two Seasons

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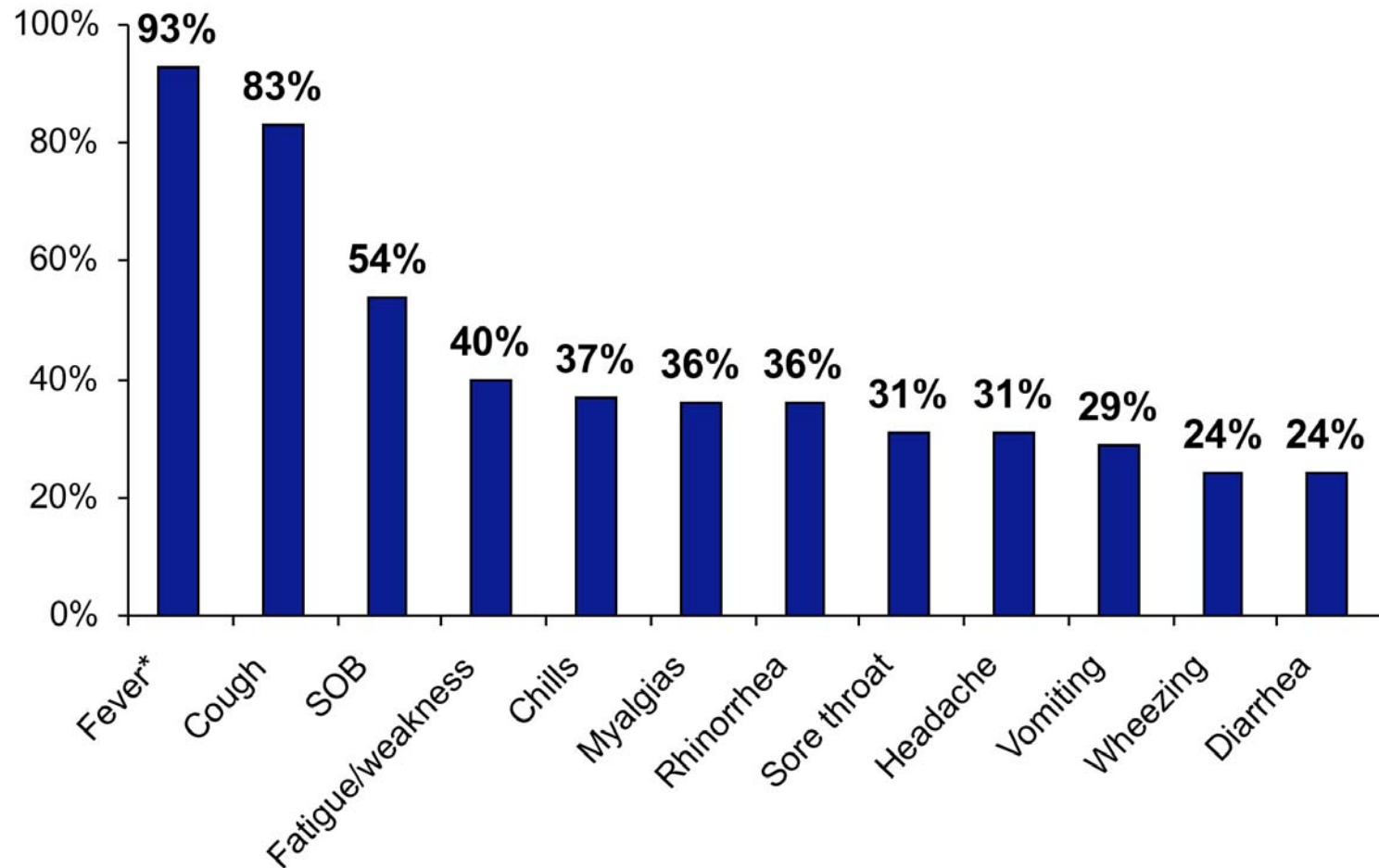
Novel H1N1 Confirmed & Probable Case Rate in the US

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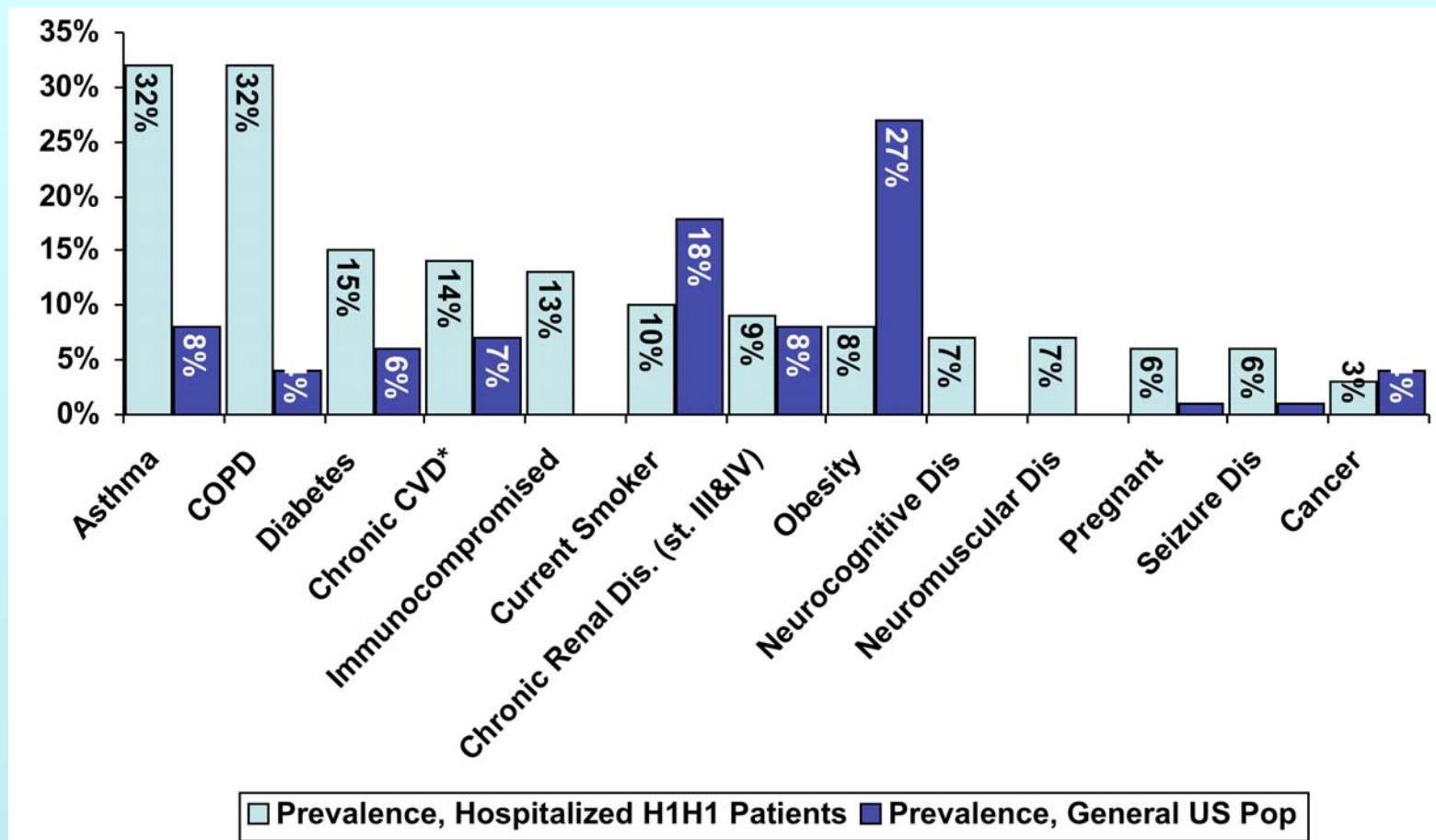


Novel H1N1 U.S. Hospitalization Rate per 100,000 Population, By Age

Clinical Characteristics



Underlying Conditions





CDC* Summary

- It's uncertain at this time how serious or severe this novel H1N1 virus will be in terms of:
 - How many people infected will develop serious complications or die.
 - How this new virus may affect the U.S. during its upcoming influenza season in the fall and winter.
- Because this is a new virus, most people will have little or no immunity against it, and illness may be more severe and widespread as a result.
- Vaccines are expected to be available in limited supply sometime this fall.
- CDC anticipates associated with this new virus that there will be:
 - More cases.
 - More hospitalizations.
 - More deaths.

** Centers for Disease Control*

H5N1 Update



- Remains a threat.
- All countries that have had human cases of H5N1 also now have H1N1
 - Start praying now that they don't hook up



Lessons From the Frontlines

1. Investments in pandemic planning and stockpiling antiviral medications paid off;
2. Public health departments did not have enough resources to carry out plans;
3. Response plans must be adaptable and science-driven;
4. Providing clear, straightforward information to the public was essential for allaying fears and building trust;
5. School closings have major ramifications for students, parents and employers;
6. Sick leave and policies for limiting mass gatherings were also problematic;
7. Even with a mild outbreak, the health care delivery system was overwhelmed;
8. Communication between the public health system and health providers was not well coordinated;
9. WHO pandemic alert phases caused confusion; and
10. International coordination was more complicated than expected.

Trust for America's Health, 5 June 2009

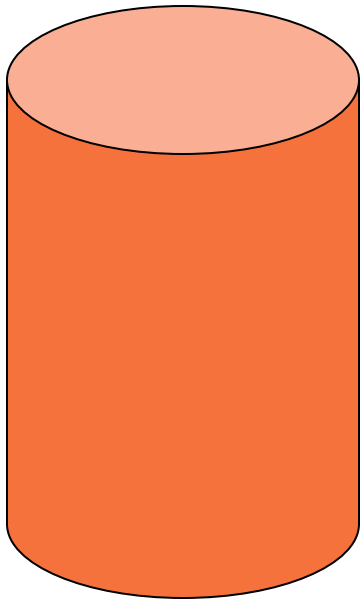
What could happen next?

- H1N1 will disappear (most agree **very unlikely**).
- H1N1 continues its spread into the southern hemisphere for their flu season (happening now).
- H1N1 will become:
 - Our next pandemic (already is).
 - Like 1957 or 1968 global pandemics (already is).
 - Like 1918 (would require a mutation over the next few months).

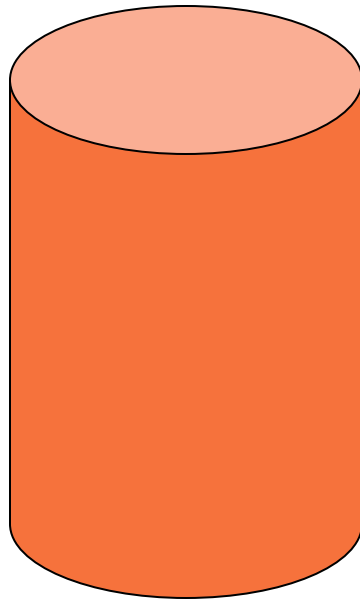
What does this mean for you?

- If we have a **“really bad”** flu season (ala 1957 or 1968):
 - Lots of sick employees, vendors and on-site contractors.
 - Higher than usual absenteeism.
 - Possibly employee or family member deaths.
 - May impact your ability to conduct business.

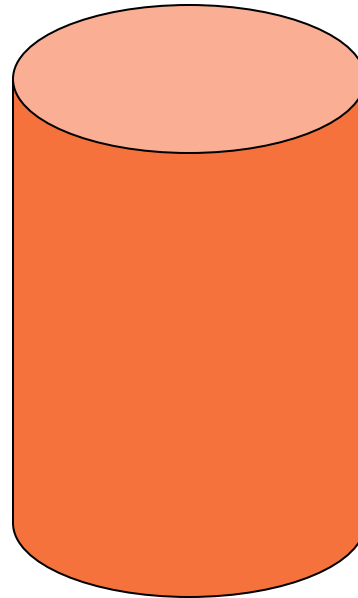
Employee Categorization



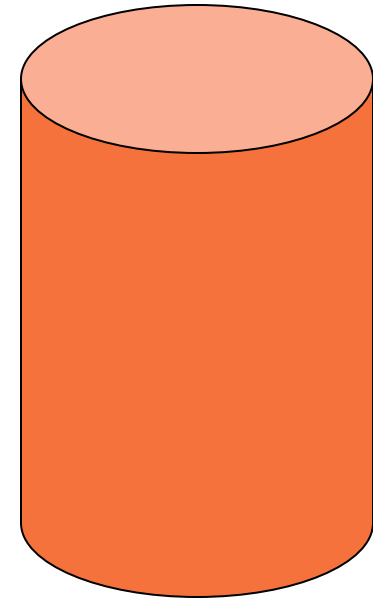
Category One
Essential & “must”
be @ work



Category Two
Essential & “must”
work **BUT** can work
remotely



Category Three
Can work
remotely but not
essential



Category Four
Not essential- no
need for them to
work at this time

Category One Employees

- **Essential staff who must be work:**
 - Social Distancing
 - Masks
 - Health education on handwashing
 - Spread people out on different shifts to spread them out
 - Employee cleans area frequently
 - Eliminate all face-to-face meetings
 - Antivirals?



Category Two Employees

- **Essential staff but can be remote:** install a robust work from home program:
 - High-speed connection
 - Company sponsored computer and all necessary peripherals
 - Work from home at least one day a month
 - Demonstrate in advance that can work from home
 - Desktop support for the home
 - Plan for what to do if working remotely fails



Category Three and Four Employees

- **Not essential to work:**
 - How long do you pay those who aren't working?
 - Pay partially?
 - How long do you continue benefits?
- **Other HR issues**
 - What if they refuse to come to work?
 - What if a family member is sick but the employee is well - do you have them come in?
 - If a person comes down with the flu after being at work it is a workers comp issue?
 - What if schools are closed?

Expatriate Employees & Families

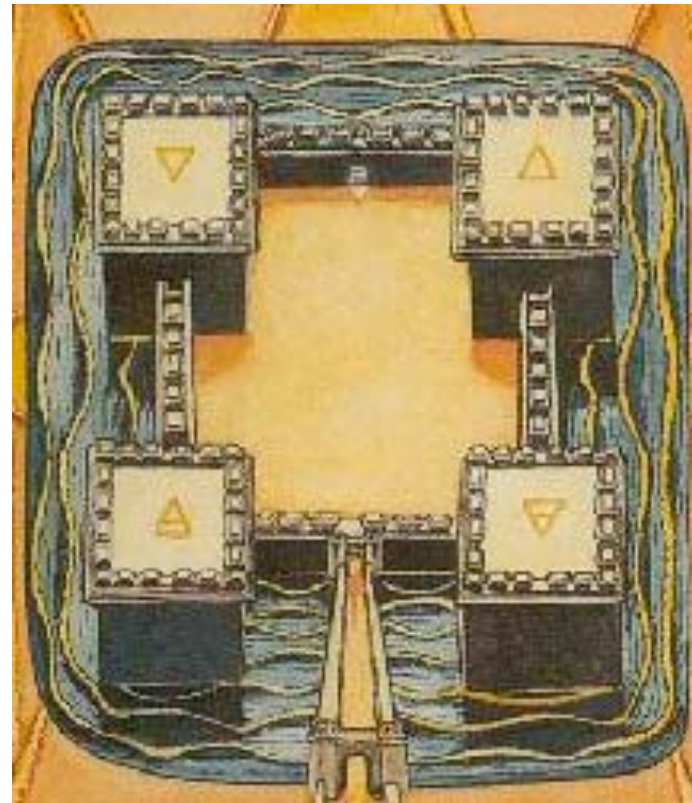


Chronicle / Michael Macor

- Employees abroad - Do you bring them back?
 - When?
 - Families earlier?
- Employees in US – When do you send them back?
- What if they want to come back and you don't think it is appropriate?

Four Pillars

1. Education and communication
2. Social Distancing
3. Cleaning
4. Personal Protective Equipment (PPE)





Communicate

- A consistent message is critical.
- What impacts your messaging?
 - Different local conditions, varying infection rates and diverse public health instructions may require different actions.
- Proactive versus reactive communication is critical to “get in front” of the situation.
 - Employees, clients other key stakeholders need to hear a consistent message from your company.



WHO Communication Guidelines

1. Communicate in ways that build, maintain or restore trust.
2. Announce early – message timing, candor and comprehensiveness is essential.
3. Maintaining trust throughout requires transparency.
4. Understand your audience – “this is a dialogue.”
5. Communication is most effective when it is integrated with analysis and planning.

Education

- Influenza Basics
- Workplace cleaning
- Hand washing technique
- “Cover Your Cough” campaign
- Polite social distancing
- Stay Home if you are sick policy
- Virtual meeting techniques and strategies
- Strategies to minimize face to face contact with customers

WEAR A MASK
and Save Your Life!

The Emergency That Now Confronts Our City
Is Beyond the Facilities of the Health Department

+ The RED CROSS **+**

has come to the assistance of the Board of Health. Doctors and nurses can not be obtained to take care of the afflicted. You must wear a mask, not only to protect yourself but your children and your neighbor from influenza, pneumonia and death.

**A GAUZE MASK IS 99%
PROOF AGAINST INFLUENZA**

Doctors wear them. Those who do not wear them get sick. The man or woman or child who will not wear a mask now is a dangerous slacker.

WEAR MASKS GOING TO WORK
AT WORK
GOING HOME
AT HOME

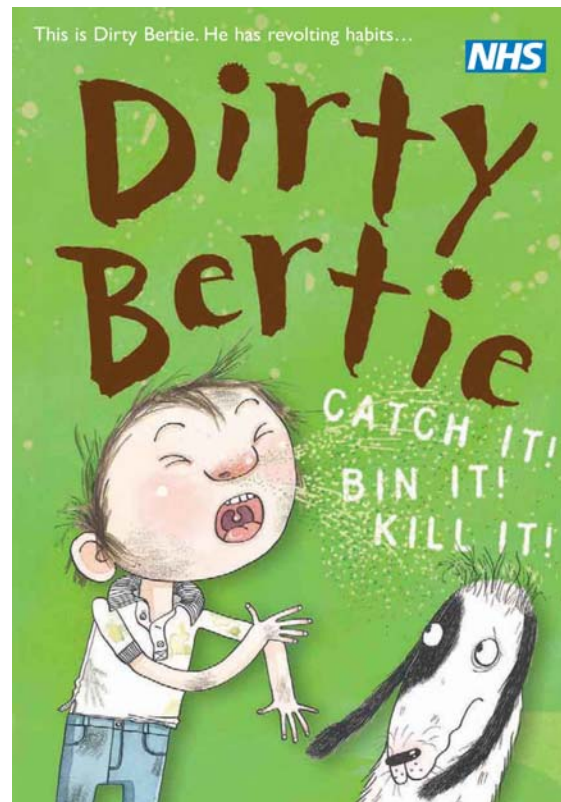
Education- Hand Sanitizers



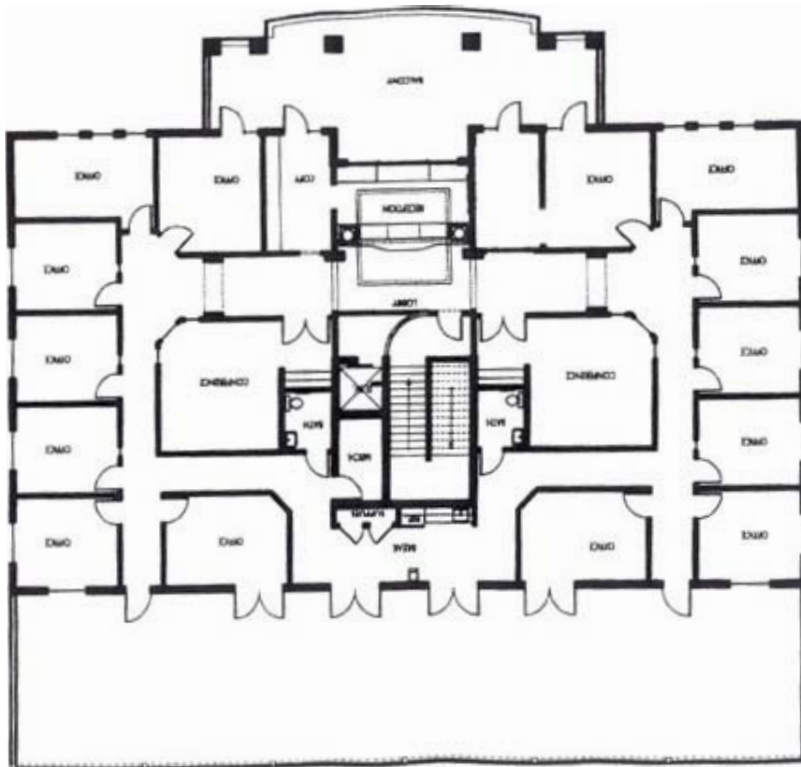
- Work by stripping away the outer layer of oil on the skin.
 - Must be at least 60% alcohol.
- 99.9% effective
 - Not exactly, tested on inanimate objects, not human hands.
 - Good alternative when you can't wash your hands
 - NO substitute for good hand washing.

Education Programs to Emulate

- UK
 - Catch It, Bin It, Kill It
 - Dirtie Bertie

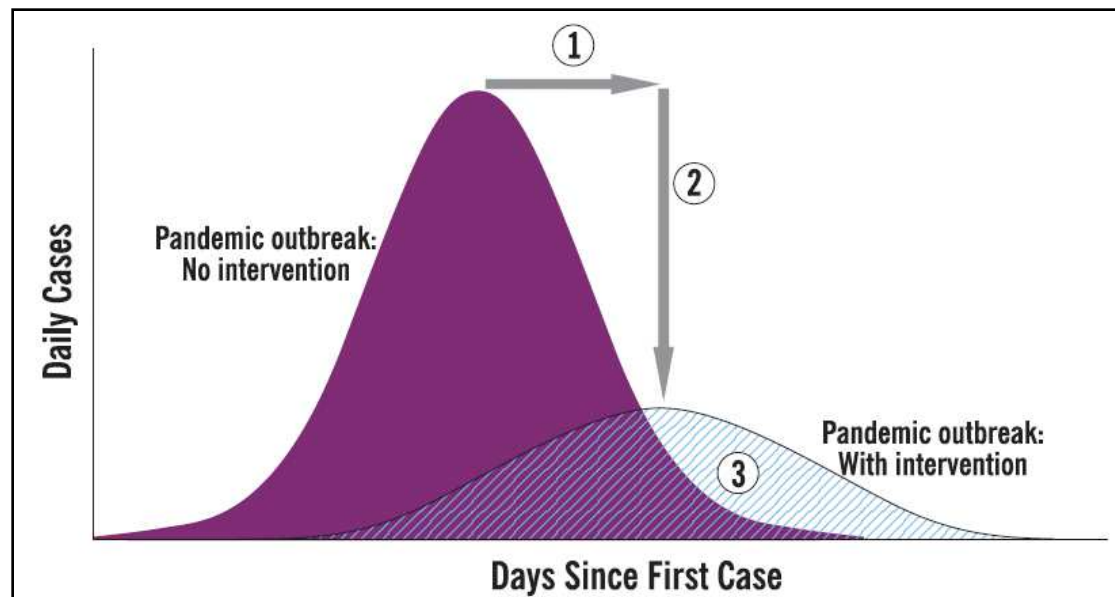


Social Distancing



- Develop guidelines for social distancing.
 - Floor plans for spreading staff out at least six feet from each other.
 - Investigate shift work, weekends.
 - No shared equipment.

The Impact of Social Distancing



1. Delay outbreak peak
2. Decompress peak burden on hospitals & infrastructure
3. Diminish overall cases and health impacts

Cleaning



- Cleaning
 - Cleaning procedures
 - Disinfectants that match the surface needs.
- Virus survival:
 - Virus lives on hard non-porous surfaces > 24 hours
 - On porous surfaces 24 - 48 hours
 - Swiss banknotes up to 17 days!

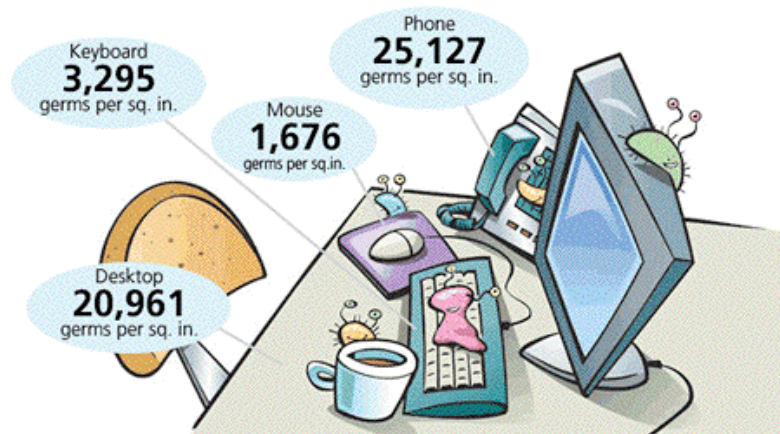
Cleaning



- Surface cleaning and disinfecting
- **High Touch Areas and surfaces** require increased frequent and more intense cleaning
 - Doorbells
 - Intercoms
 - Handrails
 - Door handles
 - Elevator buttons
 - Steering wheels
 - Common controls (levers, buttons)

Cleaning - Infection Control at Work

- Cleaning work areas
 - What are the top four germy office work areas?
 - Telephone
 - Keyboard/Mouse
 - Desk surface
 - Doorknob



Personal Protective Equipment (PPE)



- Should you wear PPE?
 - When
 - Why?
- Masks
 - N95
 - Surgical masks
- Gloves
 - Latex
 - Nitrile

PPE Recommendations

- CDC encourages employers to stockpile facemasks so they can protect employees during a pandemic.
- Discusses various types of respirators and facemasks available for use.
- Provides estimates of the quantity of N95 respirators and/or facemasks employers should stockpile.





What should you be doing?

- Evaluate your preparedness.
 - Revisit your plans.
 - Be ready to react to a host of different issues and situations.
 - Communicate.
- Stay tuned.
 - What happens next in anyone's best guess.
 - Anyone that tells you that know what is going to happen is kidding themselves.
- This is a wake up call
 - We only have a few months to be ready.
 - Imagine a serious seasonal flu season...

Flu Season

- The Northern Hemisphere Flu Season is from October – May:
 - That is roughly a little more than a month away!
 - And this year will likely be early!



Your Challenge

- Be ready for what could possibly happen – no one knows the likely results.





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Thank you

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