



H1N1 PANDEMIC FLU: MINIMIZING RISKS

Dan Roehl

Public Affairs Specialist
National Restaurant Association

Bruce Cords, Ph.D.

Vice President Environment
Food Safety & Public Health, Ecolab

September 2009



Disclaimer

As part of the Association's continuing effort to educate and inform webinar participants, NRA members and the public, the Association has arranged these webinar sessions. Speakers and webinar Presenters are solely responsible for the content and accuracy of any materials they present; that the same contain no libelous or unlawful matter; and that they either own or have the right to use/distribute any materials presented at the Association webinar. Speakers and Presenters are also solely responsible for any statements and remarks they make and present. The Association does not give any opinion on or assume any responsibility for the content of any Speaker or Presenter's remarks, content or materials.

Agenda

▲ Introduction

Dan Roehl
NRA, Public Affairs Specialist

▲ Topic Speaker

Dr. Bruce Cords
Ecolab, VP Environment, Food Safety & Public Health

▲ Question & Answers

- Moderated by Beth Johnson
- Answers by Dr. Cords

What We Will Cover

- ▲ What is Human Influenza?
- ▲ What is H1N1 Pandemic Flu?
- ▲ Prevention
- ▲ Additional Resources



Human Influenza

What is Human Influenza?

- ▲ A **respiratory infection** with fever and often respiratory complications
 - More frequent in immunocompromised and elderly populations
- ▲ It is transmitted **human-to-human**
- ▲ Each year a **vaccine cocktail** is assembled for the expected flu strains
 - 2009 - 10 vaccine does not include the 2009 H1N1 novel strain
- ▲ Each year, approximately **250,000 – 500,000 people die** of seasonal influenza globally. **36,000 deaths** occur in the U.S.
 - As of 04 September 2009, 593 H1N1 deaths in the U.S.

Source: CDC 2004 <http://www.cdc.gov/mmwrhtml/rr54e713a1.htm>

<http://www.cdc.gov/flu/keyfacts.htm>

Human Influenza Transmission

When

- ▲ One day prior to showing symptoms
- ▲ Up to seven days after symptoms first appear
- ▲ Most infectious during first three days of illness

How

- ▲ Droplet transmission
 - Large droplets generated by sneezing, coughing or talking
 - Occurs over a distance of 3 - 6 feet (0.9 – 1.8 meters)
- ▲ Contact transmission
 - Direct – touching an infected human
 - Indirect – touching an object that an infected human touched or contaminated with droplets



How Long Does Influenza Virus Survive?

▲ Stainless steel and plastic

- Survives 24 - 48 hours
- Transferred to hands up to 24 hours

▲ Cloth, paper, tissues

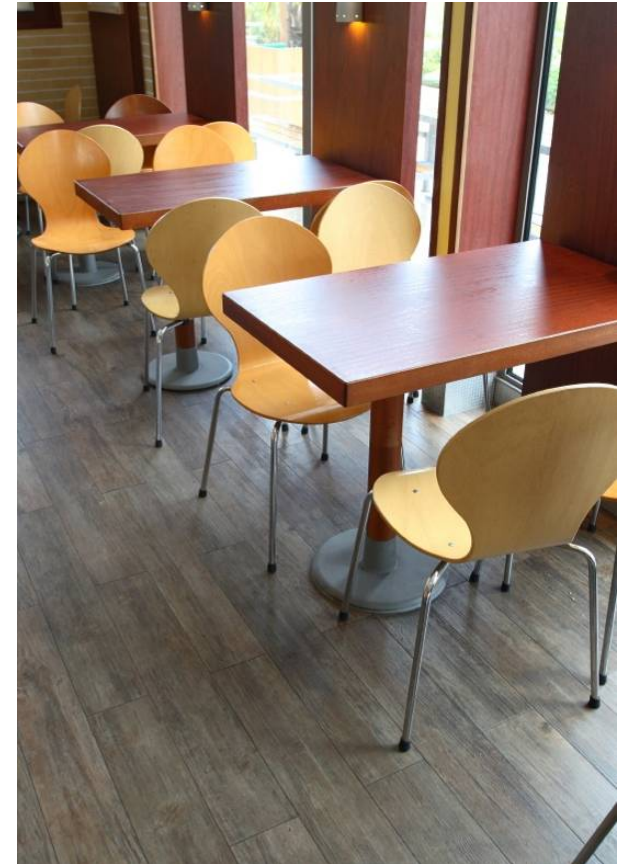
- Survives 8 - 12 hours
- Transferred to hands up to 15 minutes

▲ Hands

- Survives up to 5 minutes

▲ Implications

- Increase frequency of disinfection and hand hygiene



Source: Bean et al. 1982. J. Infect Dis. 146(1):47-51.



H1N1 Pandemic Flu

What is H1N1 Pandemic Flu?

- ▲ H1N1 (Influenza A) commonly affects pigs
- ▲ A Novel Influenza A “H1N1” strain developed the ability to **transmit from human-to-human**
- ▲ When humans have not previously been exposed to a particular virus, widespread sickness can result, triggering a **pandemic**
- ▲ Pandemic influenza severity can vary and may come in waves (down in summer, increase in fall)

Initial Spread of H1N1 Flu

2009 (April to June)



Week 6



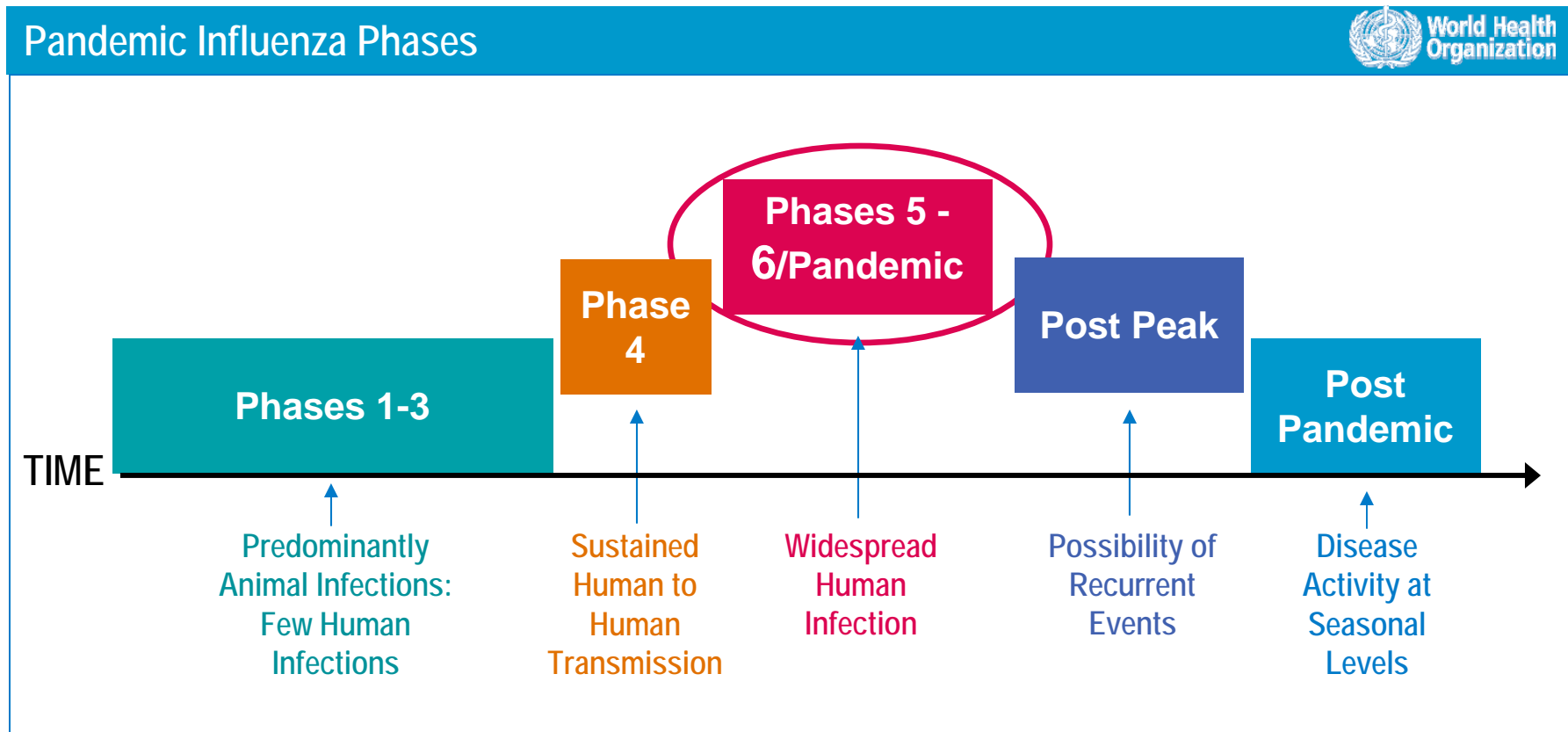
© Copyright World Health Organization (WHO), 2009. All Rights Reserved.



© 2009 World Health Organization, accessed at
<http://gamaserver.who.int/h1n1/atlas.html> on 3 September 2009.



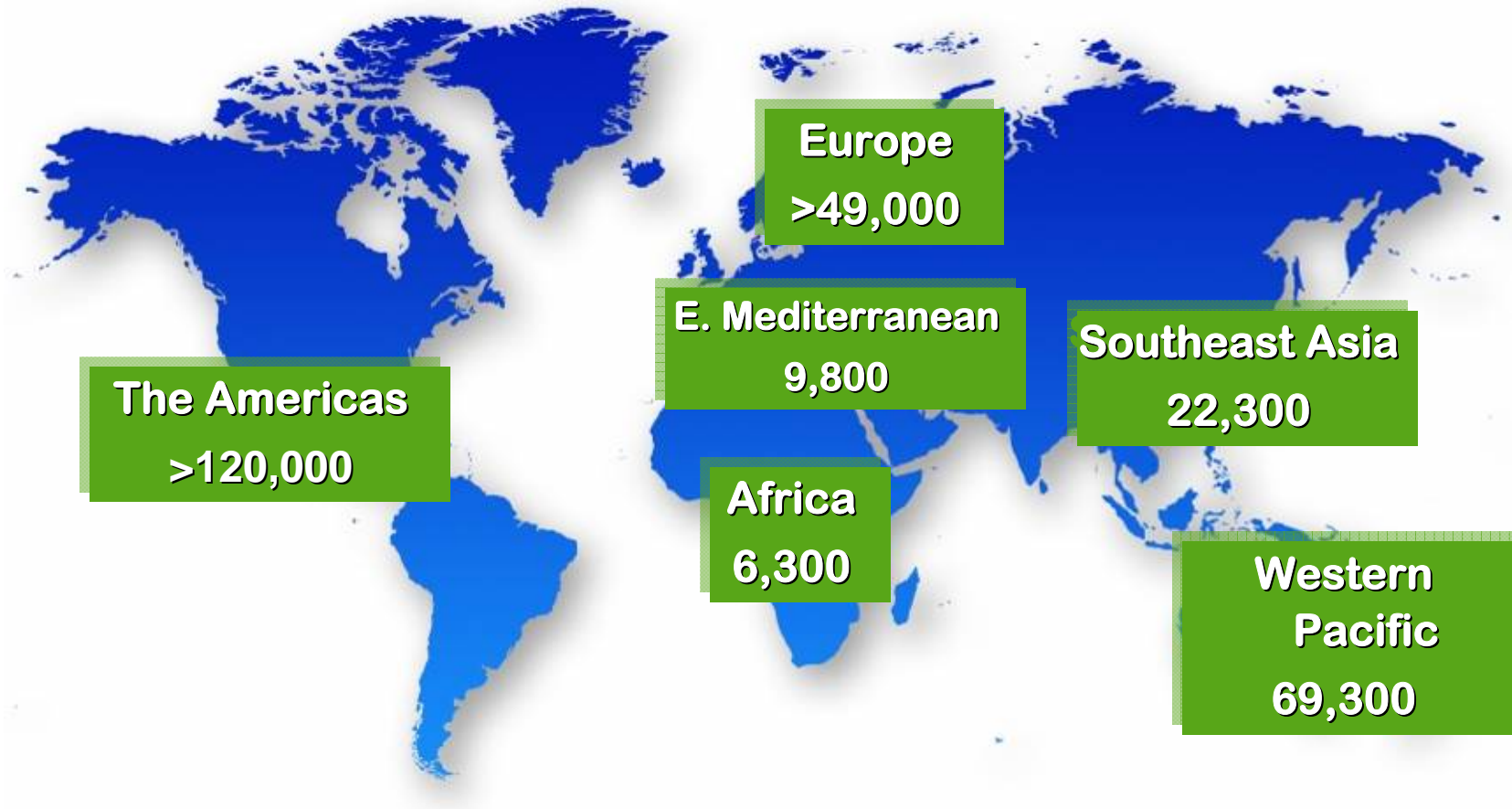
World Health Organization Raised the Pandemic Threat Level to Phase 6 on 11 June 2009



http://www.who.int/csr/disease/avian_influenza/phase/en/index.html

Reported Cases Across the Globe

6 September 2009: 277,000 ill; 3,205 deaths



Accessed 11 Sept 2009 <http://www.who.int/csr/disease/swineflu/updates/en/index.html>

H1N1 Spread

WHO Update 62: 13 August 2009

- ▲ Pandemic flu has spread to every continent
- ▲ The 2009 influenza pandemic has spread with unprecedented speed
 - In past pandemics, influenza viruses needed more than six months to spread as widely as the new H1N1 virus spread in less than six weeks
- ▲ In July, the WHO stopped publishing confirmed cases by country
 - Reporting H1N1 cases caused a strain on the healthcare infrastructure
 - Deaths and first confirmed cases in new areas of infection continue to be reported

Symptoms and Risk Factors

- ▲ Symptoms typical of seasonal and H1N1 influenza
 - Fever (usually high), headache, extreme fatigue, dry cough, sore throat and chills
 - Some reported diarrhea and vomiting
- ▲ Rare cases, progression to pneumonia and respiratory failure, leading to death
- ▲ Average age increasing
 - Median age 12 – 17 for illness; average age increasing with community spread
- ▲ Risk factors contributing to:
 - Serious case
 - Cardiovascular
 - Respiratory
 - Diabetes
 - Cancer
 - Severe case
 - Asthma and other respiratory disease
 - Obesity
 - Pregnancy

How Does Pandemic Flu Compare to Seasonal Flu?

Differences

- ▲ Initially no human vaccine or natural immunity
- ▲ Potentially higher virulence, affecting broader age groups
- ▲ Potentially more contagious
- ▲ Potentially more people infected

Similarities

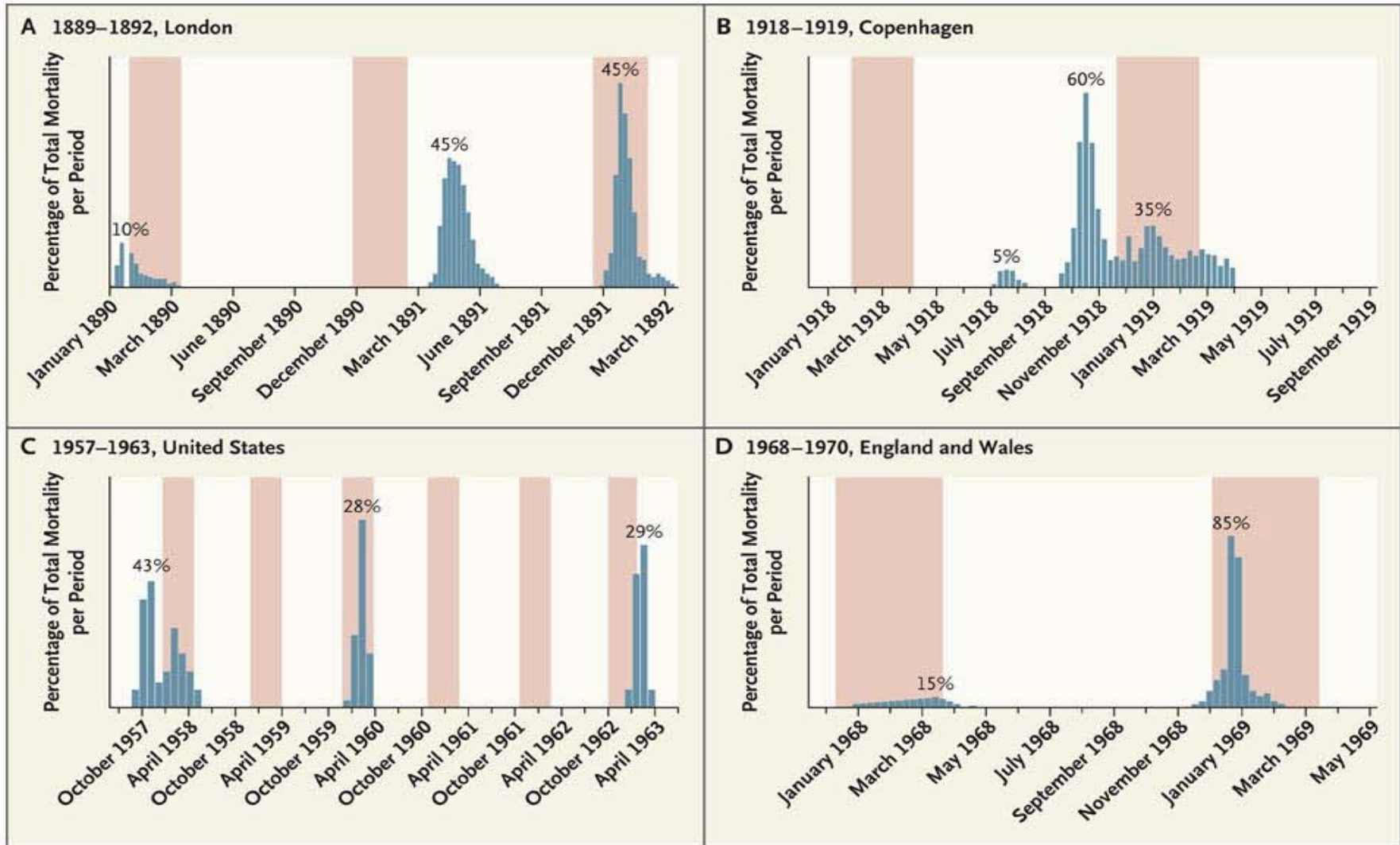
- ▲ Personal hygiene is critical
- ▲ Same products
- ▲ Same procedures
- ▲ Same mode of transmission
- ▲ Similar survival

NET RESULT: Increase frequency of cleaning and disinfection

Why The Concern?

- ▲ Influenza pandemics are inevitable but unpredictable: Recur at cyclical intervals
- ▲ Outbreaks occur simultaneously in many areas
- ▲ Can cause:
 - High levels of sickness and potentially death
 - Drastic disruption of critical services
 - Severe economic losses
- ▲ Impact can occur in waves and last for weeks to months
- ▲ Implications during actively spreading pandemic:
 - Public health authorities may close businesses
 - Public may stay home out of fear
 - Need to plan accordingly!

Mortality Distributions and Timing of Waves of Previous Influenza Pandemics



Source: Miller M et al. N Engl J Med 2009;10.1056/NEJMp0903906

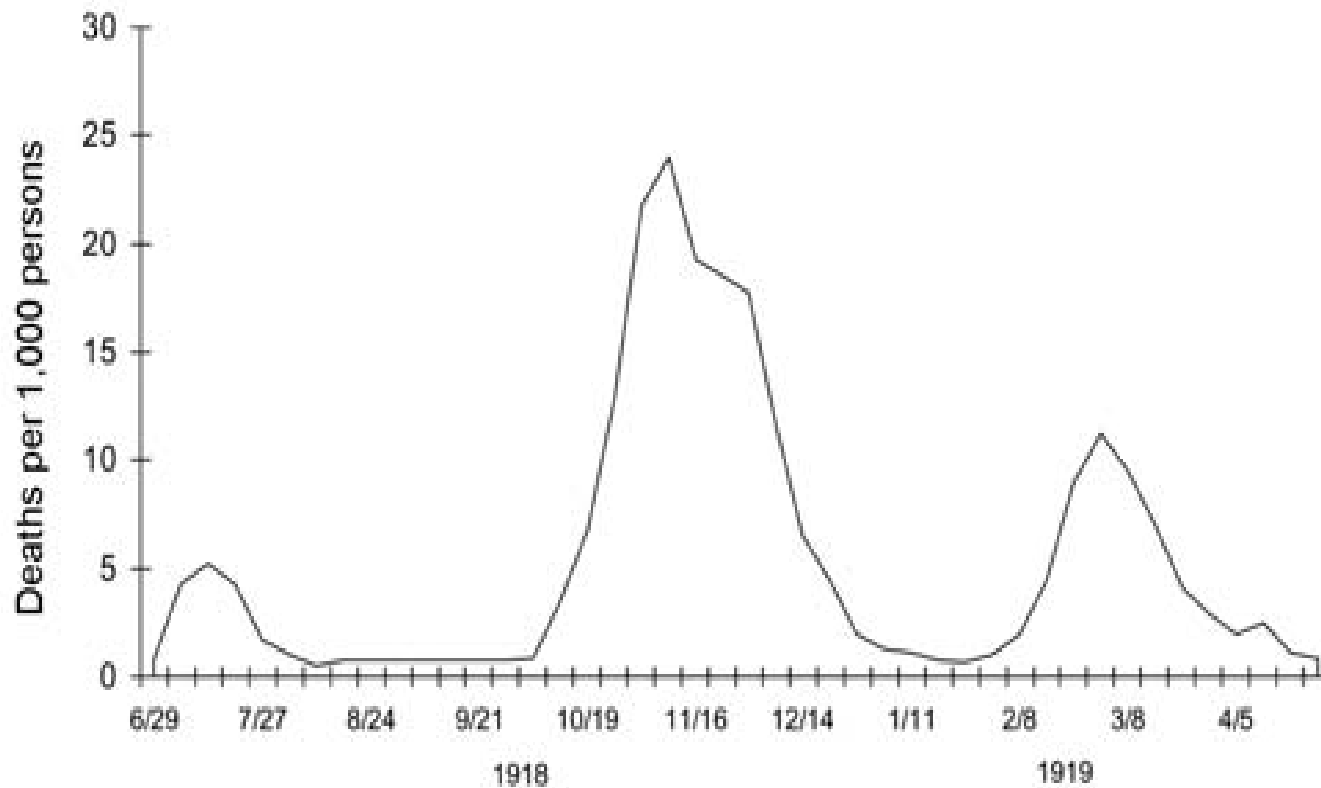


© Copyright 2009 Ecolab and the National Restaurant Association. May not be reproduced or distributed without consent from both parties.



Pandemics Can Hit in Waves

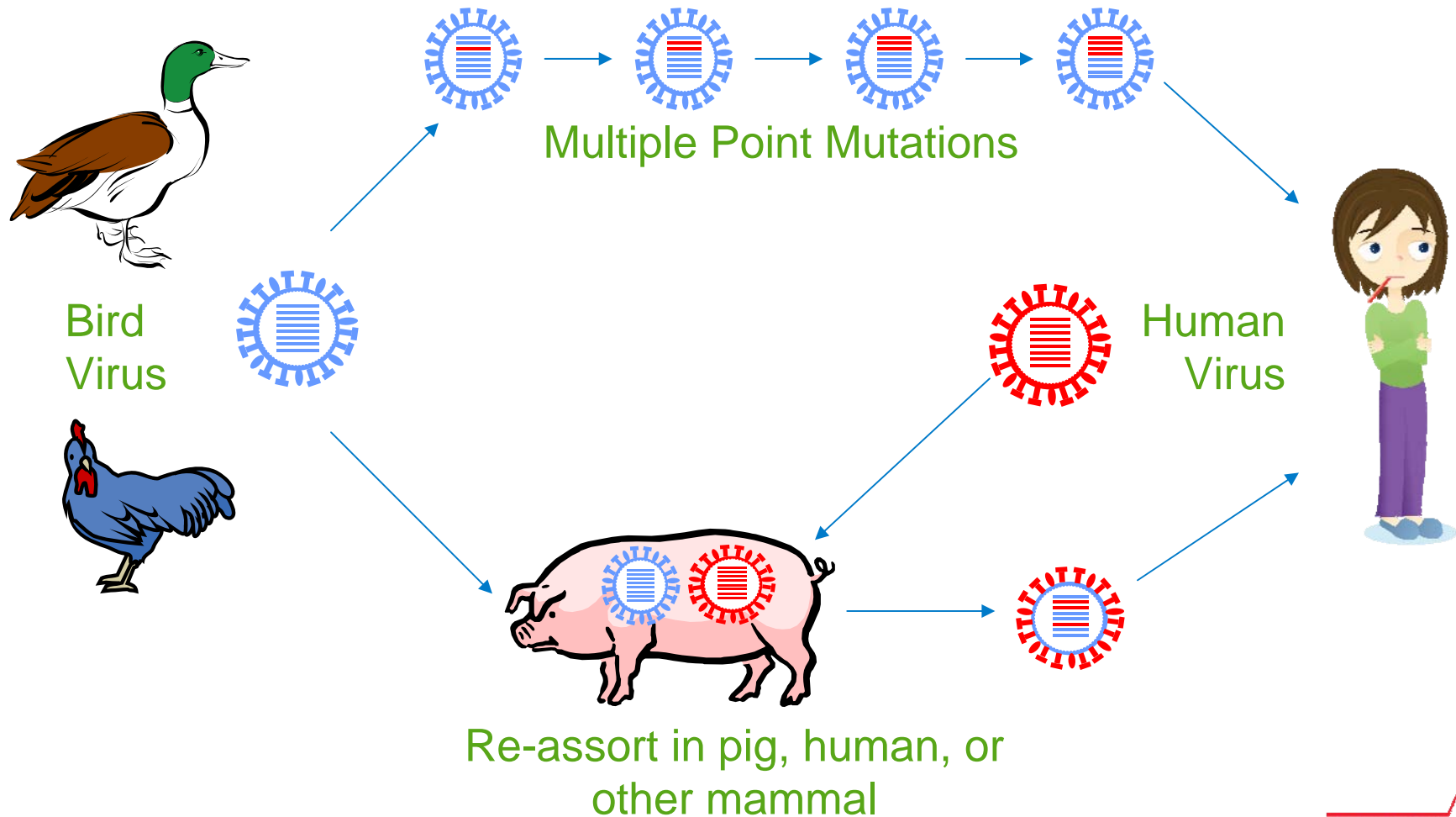
Weekly influenza & pneumonia mortality, United Kingdom 1918 to 1919



Source: Taubenberger & Morens. 2006. EID 12(1):15-22.

Virus Can Mutate

Variety of Routes



Potential Impact on Business

Example from Southern Hemisphere

▲ Argentina, July 2009

2,927 Cases reported with 94 deaths

- Restaurant activity decreased by 50 – 60%
- Lodging saw a drop of 20 – 30% in occupancy
- Schools were closed for an additional month
- Most cinemas and theaters closed for two weeks
 - Those that remained open only filled 50% of seats





Prevention

Control of H1N1 Pandemic Flu in Humans

- ▲ Follow **precautions** for seasonal influenza to control spread of disease
- ▲ **Antiviral drugs** oseltamivir (Tamiflu®) and zanamivir (Relenza®) can lessen the symptoms of this virus
- ▲ **Vaccines**
 - Vaccine approved 15 September by US FDA
 - Clinical trials ongoing
 - Inoculation protocols will be determined by health officials
 - Priority for vaccination is being established
 - Likely scenario:
 - Limited amounts available in October/early November – more in late November/December
 - High priority:
 - Health care workers / pediatric care givers
 - Pregnant women
 - Schools (staff and students)
 - Under age 65 with risk factors



Source: http://www.cdc.gov/swineflu/general_info.htm

General Influenza Prevention

Steps to Minimize Risks

- ▲ Receive flu vaccination when available
- ▲ Wash your hands often
- ▲ Avoid touching eyes, nose and mouth
- ▲ Avoid close contact
 - Avoid contact with people who are sick
 - Keep distance (6 feet; 1.8 meters) from others to protect from getting sick
- ▲ Cover your mouth and nose when coughing or sneezing
- ▲ Stay home when you are sick
 - With cold or flu symptoms, stay home and get plenty of rest
 - Check with your local health care provider as needed
 - Previous guidance required flu patients to stay home for 7 days

General Influenza Prevention

Personal Hygiene – Proper Hand Washing Procedures

- ▲ Wet hands with warm water
- ▲ Apply soap to hands
- ▲ Rub hands together vigorously for 15 - 20 seconds, covering all surfaces of hands and fingers
- ▲ Rinse hands with warm water
- ▲ Thoroughly dry hands with disposable towel or air blower
- ▲ Use towel to turn off faucet



General Influenza Prevention

Hand Washing – Think About the Faucet

- ▲ You touch the faucet to turn it on with potentially contaminated hands, you wash your hands according to perfect protocol and then what do you do???
- ▲ Touch the faucet again!



General Influenza Prevention

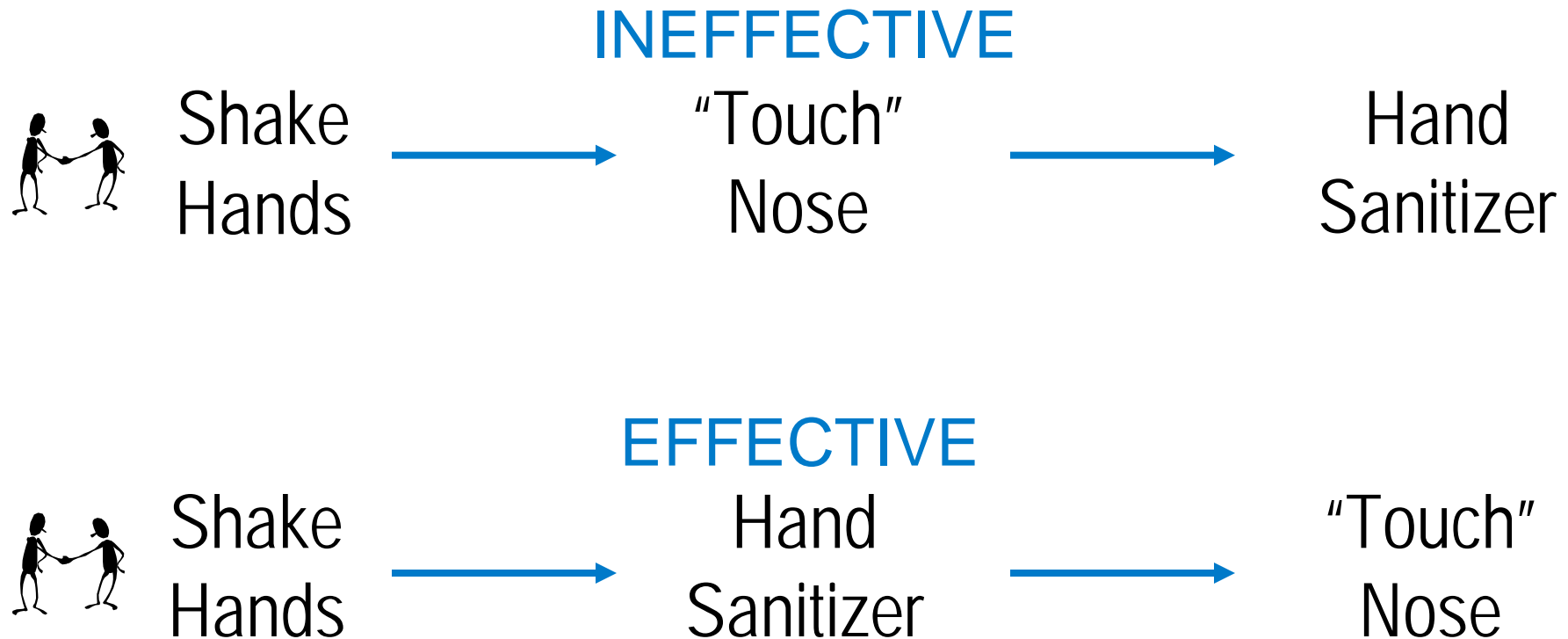
Personal Hygiene – Use of Hand Sanitizer

- ▲ Considerations
 - Use on visibly clean hands
 - Consider offering in high traffic public areas
- ▲ Procedures
 - Apply product to palm
 - Rub hands together covering all surfaces of hands and fingers
 - Rub 15 - 20 seconds



General Influenza Prevention

Proper Hand Sanitizing Sequence



General Influenza Prevention

Personal Protective Equipment (PPE)

▲ Disposable Gloves

- Use while cleaning and disinfecting
- Wash hands frequently (before and after gloving) with soap and water and/or an alcohol-based hand sanitizer
- Discard gloves after use

▲ Masks

- Advised for direct contact with influenza patients in healthcare settings
- WHO & CDC: Benefit of mask not established in non-healthcare settings



Source: http://www.cdc.gov/swineflu/general_info.htm

General Influenza Prevention

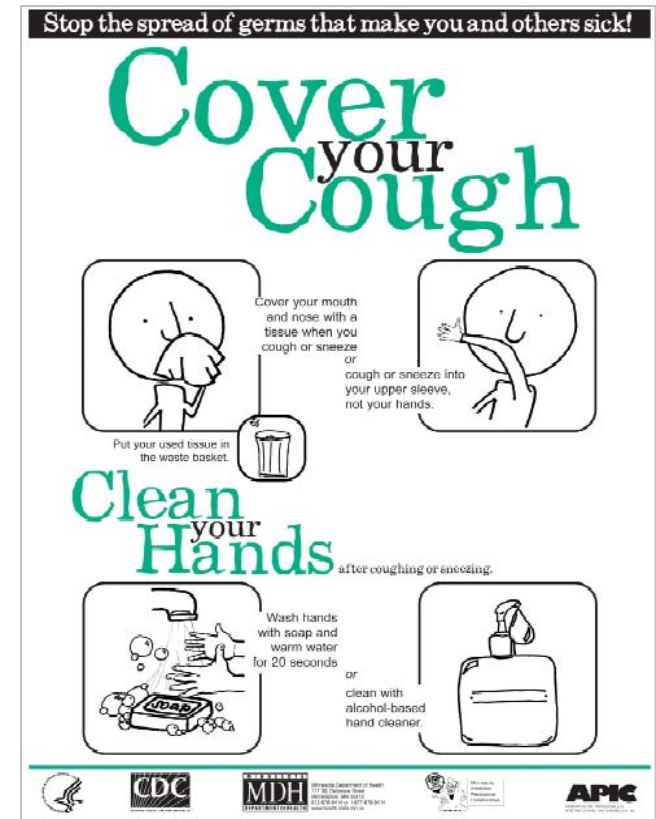
Cough Etiquette

- ▲ Posters available in several languages

<http://www.cdc.gov/flu/protect/covercough.htm>

- ▲ Handwashing posters available from NRA ServSafe™, Ecolab and others

http://www.restaurant.org/fluinfo/handwashing_poster.pdf



Influenza Prevention In A Restaurant

Be Ready *Before* the Next Outbreak Occurs

- ▲ Don't underestimate the value of:
 - Pre-planning
 - Training & education
 - Good communication
 - Flexibility
 - Responsiveness
- ▲ Know where you'll get information
 - NRA website
 - CDC
 - WHO
 - Ecolab.com/publichealth
- ▲ Assess your current risks
 - Understand your strengths *and* weaknesses
 - Procedures, practices and behaviors
 - Where are your greatest pandemic touch points?
 - Front *and* back of the house
 - Be thorough and deliberate – it will pay off!

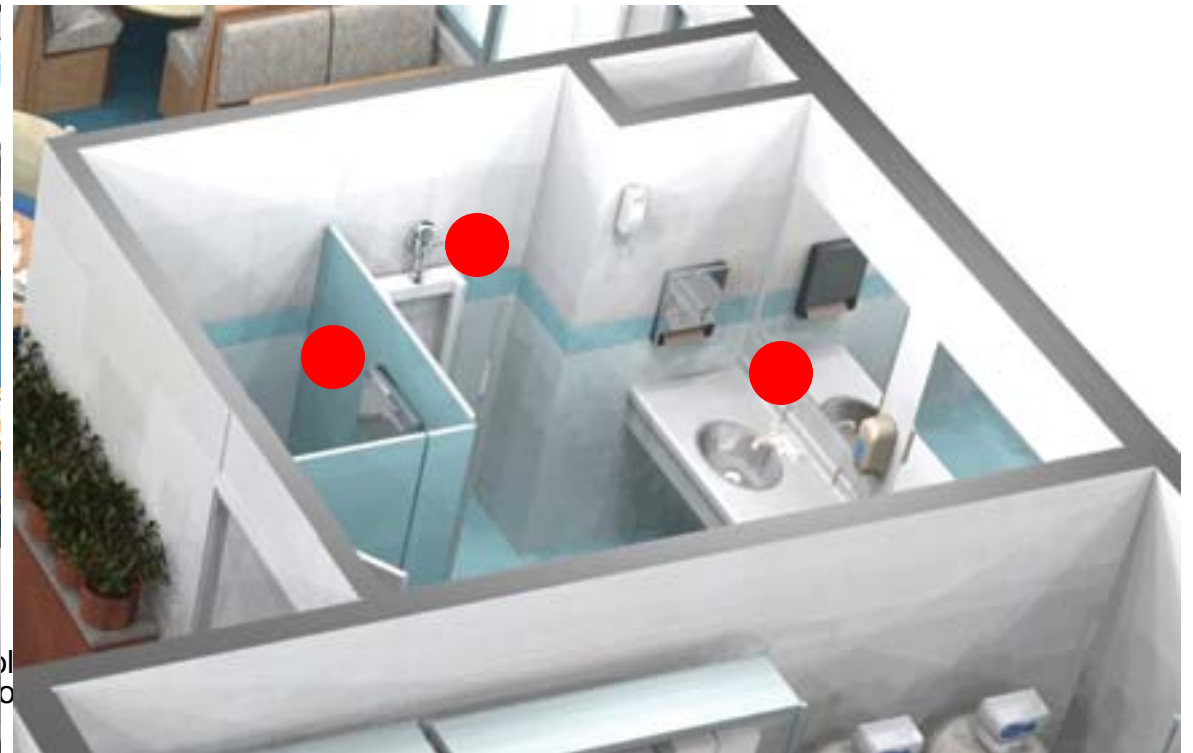
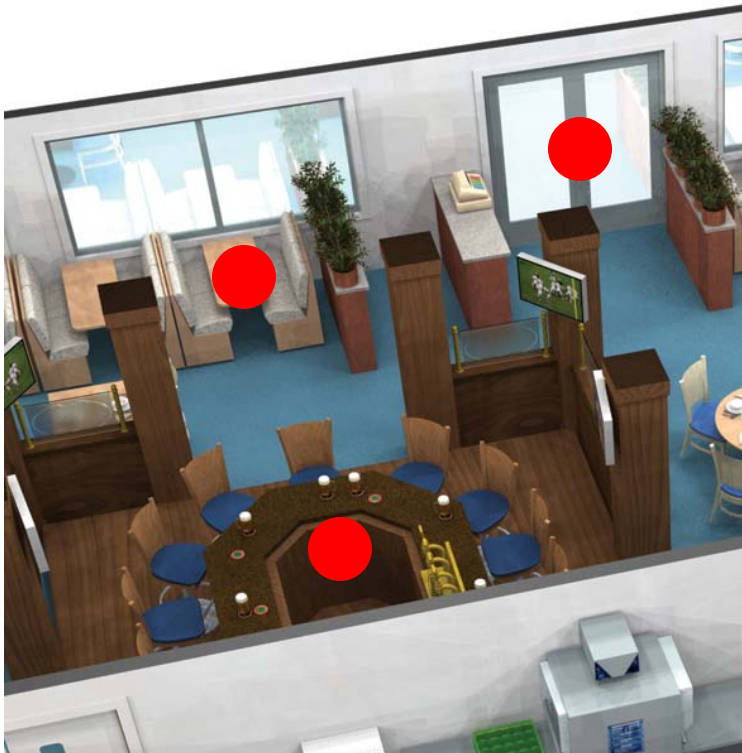
Understanding the Risk to Your Restaurant

- ▲ Think about your risk profile
 - Locations
 - Services
 - Operations
 - People



Understanding the Risk to Your Restaurant

- ▲ Identify your most vulnerable spots
 - Locations
 - Operations
 - Services



Have a Plan and Prepare Now

Pandemic Preparedness Planning Considerations - Foodservice QSR					ECOLAB
	DINING AREA	RESTROOMS	KITCHEN/BACK OF HOUSE	PLAYLAND	EMPLOYEES
Phase 1 - Low risk of human cases	Follow Current Procedures				
Phase 2 - Higher risk of human cases	Follow Current Procedures				
Phase 3 - No or very limited human-to-human transmission	<p>Follow Current Procedures. Assess your preparedness status and collaborate with vendor partners on response readiness. CDC's Pandemic Influenza Planning Checklist may be useful - http://www.pandemicflu.gov/plan/businesschecklist.html. Consider planning for conversion to delivery or drive thru services only during pandemic.</p> <p>Evaluate facility usage, lead times and stock shelf life and their impact on ordering supplies. Identify essential employees and visiting vendors. Reinforce hand hygiene and cough etiquette.</p> <p>Begin employee training regarding infection control, essential employee status, PPE use and communicate Influenza Control Procedures.</p>				
Phase 4 - Evidence of significant human-to-human transmission (localized)	<p>Follow Phase 3 procedures in impacted areas.</p> <p>Consider ordering any supplies needed for possible pandemic, including additional cleaning, sanitation and PPE. Redefine plans for conversion to delivery or drive thru only, if applicable.</p> <p>Facilities receiving visitors from impacted areas should follow Phase 3 procedures as appropriate. Finalize and educate all associates on Influenza Control Procedures.</p>				
Phase 5 - Evidence of significant human-to-human transmission (regional)	<p>Follow Phase 3 procedures in impacted area.</p> <p>1) Follow local public health recommendations related to local activity and need for isolation and closing. Consider offering masks for symptomatic guests.</p> <p>2) Limit face-to-face contact between employees, customers, and vendors and modify practices (e.g., handshakes, workstation layout, etc.).</p> <p>3) Consider providing alcohol-based hand sanitizer through stores.</p> <p>Facilities receiving visitors from impacted areas should follow Phase 3 procedures as appropriate.</p>				
	Consider providing alcohol-based hand sanitizer.	Follow current procedures.	Follow current procedures.	Consider providing alcohol-based hand sanitizer.	<ul style="list-style-type: none"> ➤ Closely monitor employee health. ➤ Reinforce personal hygiene. ➤ Consider only essential travel to and from affected region.
Phase 6 - Efficient and sustained human-to-human transmission (global)	<p>Follow local public health recommendations related to local activity and need for isolation for closing. Consider offering masks for symptomatic guests.</p> <p>Limit face-to-face contact between employees, customers, and vendors and modify practices (e.g., hand care, etc.).</p>				
	<ul style="list-style-type: none"> ➤ Consider closing and converting to delivery and drive thru service only. ➤ Increase cleaning and disinfection frequency especially for touch points such as door handles, tables, etc. ➤ Provide alcohol-based hand sanitizers in public areas (dispenser preferred), especially near touch points. ➤ Close self-service offerings such as beverage and condiment dispensers. 	<ul style="list-style-type: none"> ➤ Deep clean at least 3 times/day with hourly touch point disinfection used frequently. 	<ul style="list-style-type: none"> ➤ Diligently practice food safety 	<ul style="list-style-type: none"> ➤ Close if at all possible, 	<ul style="list-style-type: none"> ➤ Provide personal hygiene
Ecolab, 370 Wabasha Street N St. Paul, MN 55102 www.ecolab.com					© 2009 Ecolab. All rights reserved.

Deep clean at least 3 times/day with hourly touch point disinfecting when used frequently.

Pandemic Cleaning, Disinfection and Hygiene Considerations

QSR and Full Service Restaurants

General Guidelines

- ▲ Follow local public health recommendations
- ▲ Reinforce personal hygiene (hand and cough) throughout your organization
- ▲ Provide hygiene materials such as tissues and hand sanitizer stations (front and back of house)
- ▲ Stock properly applicable disinfectant products
- ▲ Closely monitor employee health
- ▲ Encourage symptomatic employees to stay home



Pandemic Cleaning, Disinfection and Hygiene Considerations

QSR and Full Service Restaurants

Specific Guidelines

▲ Dining Room

- Provide alcohol-based hand sanitizer stations
- Increase cleaning and sanitizing frequency (note high touch points)
- Consider offering only take-out service

▲ Restrooms

- Clean at least three times daily
- Provide alcohol-based hand sanitizer stations (just outside restroom)

▲ Kitchen and Back of House

- Diligently practice food safety procedures to prevent cross contamination by infected people
- Provide alcohol-based hand sanitizer stations

General Influenza Prevention

Surface Cleaning and Disinfecting

▲ Clean

- Organic material could protect the virus from sanitizers or disinfectants
- Removal of the organic material is a key part of control!

▲ Rinse (if necessary)

- Some disinfectants can be inactivated by cleaners – follow the directions on the product label
- A disinfecting cleaner can minimize this issue

▲ Disinfect

- Use a registered disinfectant with claims for Influenza A
- Follow directions for use on the product label

Hard Surface Disinfection Procedure

- ▶ **Wipe down** frequently touched surfaces with a properly registered disinfectant
 - Door knobs, telephones, touch screens
 - Light and HVAC control switches
 - Faucets and toilet flush levers
 - Commonly touched surfaces as needed
 - ▶ **Disinfect** all surfaces in the bathroom that may have contacted respiratory secretions, urine or feces according to standard infection control procedures
 - ▶ **Carefully read and follow** all product directions according to the product label
 - ▶ EPA states: "Currently registered influenza A virus products will be effective against the 2009-H1N1 flu strain."
 - Must follow label instructions
- <http://www.epa.gov/oppad001/influenza-disinfectants.html>

ECOLAB

INFLUENZA CONTROL PROCEDURES

HAND HYGIENE PROCEDURES

Proper hand washing is a primary intervention to minimize the transfer of infectious disease. 12-3 The US Food & Drug Administration does not allow specific antiviral claims for hand care products.² However, in some cases (e.g., when hands are not visibly soiled) a waterless hand sanitizer is suggested as an alternative to handwashing.⁴ For non-food handlers or in critical situations, for extra protection, hand washing followed by use of hand sanitizer may be considered. Hand sanitizers used by food handlers must meet additional regulatory requirements.^{5,6}

FREQUENCY

When to wash hands:

- When hands are visibly soiled.
- Before and after eating or using tobacco.
- After using a restroom.
- After touching any part of the body.
- After coughing, sneezing, and using a tissue or handkerchief.
- Before and after gloving.

Additional for food handlers

- At the beginning of the work shift and after breaks.
- After handling soiled equipment or utensils.
- When switching from handling raw food and working with ready-to-eat food.

When to use a hand sanitizer:

- Only when hands are not visibly soiled.
- After washing soiled hands.
- Before and after gloving.
- When moving from a container.

Additional for food handlers

- Dry after washing hands.

© 2009 Ecolab Inc. All rights reserved.

ECOLAB

INFLUENZA CONTROL PRODUCTS

Handcare products are recommended by the CDC as part of good hygiene practices, but the products do not carry antiviral claims.

Market Segment	Product Name	Geography	United States
Products	Size	Code	
Hand Wash:			
Digiclean AB Foam	6/750ml	23672	
Digiclean E Foam	6/750ml	23673	
Digiclean E Gel	8/950ml	23514	
Digiclean Healthcare Professional Handwash	6/750ml	22638	
Antibacterial Clean & Smooth	16/450ml 4/lgal	14894 14886	
Hand Sanitizer:			
Digisan Aerosol Foam Hand Sanitizer	12/7oz	24832	
Digison Aerosol Healthcare Foam Hand Sanitizer	12/75oz	22644	
Digisan E Hand Sanitizer	6/750ml	23674	
Endure 300 Gel Sanitizer for Touch-Free Dispenser	10/100ml	61430349	
Endure 300 Gel Sanitizer	72/4oz 144/1.25oz	61430315 61430352	

© 2009 Ecolab Inc. All rights reserved.

General Influenza Prevention

Food Contact Surfaces & Equipment



- ▲ Follow current procedures for food contact surfaces and ware washing
- ▲ Reinforce the importance of thorough & frequent cleaning and sanitation with associates

<http://www.cdc.gov/h1n1flu/qa.htm#antibacterial>

Pandemic Planning



Checklist for Businesses

- Plan for the impact of a pandemic on your business
- Plan for the impact of a pandemic on your employees and customers
- Establish policies to be implemented during a pandemic
- Allocate resources to protect your employees and customers during a pandemic
- Communicate to and educate your employees
- Coordinate with external organizations and help your community
- Spanish version is also available to download

<http://www.pandemicflu.gov/plan/businesschecklist.html>

BUSINESS PANDEMIC INFLUENZA PLANNING CHECKLIST

In the event of pandemic influenza, businesses will play a key role in protecting employees' health and safety as well as limiting the negative impact to the economy and society. Planning for pandemic influenza is critical. To assist you in your efforts, the Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklist for large businesses. It identifies important, specific activities large businesses can do now to prepare, many of which will also help you in other emergencies. Further information can be found at www.pandemicflu.gov and www.cdc.gov/business.

1.1 Plan for the impact of a pandemic on your business:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify a pandemic coordinator and/or team with defined roles and responsibilities for preparedness and response planning. The planning process should include input from labor representatives.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify essential employees and other critical inputs (e.g. raw materials, supplies, sub-contractor services/ products, and logistics) required to maintain business operations by location and function during a pandemic.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Train and prepare ancillary workforce (e.g. contractors, employees in other job titles/descriptions, retirees).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop and plan for scenarios likely to result in an increase or decrease in demand for your products and/or services during a pandemic (e.g. effect of restrictions on mass gatherings, need for hygiene supplies).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determine potential impact of a pandemic on company business financials using multiple possible scenarios that affect different product lines and/or production sites.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determine potential impact of a pandemic on business-related domestic and international travel (e.g. quarantines, border closures).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Find up-to-date, reliable pandemic information from community public health, emergency management, and other sources and make available links.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish an emergency communications plan and revise periodically. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement an exercise/drill to test your plan, and revise periodically.

1.2 Plan for the impact of a pandemic on your employees and customers:

Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reforecast and allow for employee absences during a pandemic due to factors such as personal illness, family member illness, community containment measures and quarantines, school and/or business closures, and public transportation closures.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement guidelines to modify the frequency and type of face-to-face contact (e.g. hand-shaking, zoning in meetings, office layout, shared workstations) among employees and between employees and customers (refer to CDC recommendations).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Encourage and track annual influenza vaccination for employees.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evaluate employee access to and availability of healthcare services during a pandemic, and improve services as needed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evaluate employee access to and availability of mental health and social services during a pandemic, including corporate, community, and faith-based resources, and improve services as needed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify employees and key customers with special needs, and incorporate the requirements of such persons into your preparedness plan.

December 6, 2005
Version 3.6



Your Questions Answered

Q&A

Q: Could a sick restaurant or retail worker, or other food handler, transmit 2009 H1N1 Flu virus to customers in a restaurant, supermarket or other food-service venue?

A: Influenza viruses are spread through inhalation or through touching contaminated surfaces and then touching the mouth, nose, or eyes. Transmission of the virus in a food service venue could occur through the normal routes of infection that could happen in any public or private setting—inhalation of the virus expelled by infected individuals when coughing or sneezing, and, by touching any surface that is contaminated with the virus and then touching the mouth, nose or eyes.

Q: Can people get 2009 H1N1 flu virus by eating food products?

A: No, influenza viruses are not known to be spread by eating food items. Influenza viruses are spread through inhalation or through touching contaminated surfaces and then touching the mouth, nose or eyes.

Q: Should individuals or restaurants alter cooking methods to decrease the risk of 2009 H1N1 flu virus?

A: No, it is not necessary to alter cooking times or temperatures for any food products in order to reduce chances of contracting 2009 H1N1 flu virus, because eating food is not a known method of transmission of influenza viruses.

Q&A

Q: What is Ecolab doing to prepare itself for a possible pandemic?

A: Ecolab is committed to managing the potential impact of a flu outbreak on our organization and workforce. We are developing comprehensive plans to ensure that our operations continue to run smoothly and reliably, and that our customers and associates are equipped and informed.

We have an H1N1 Readiness Task Force in place and will continue to provide the most up-to-date information through your Ecolab representative and at Ecolab.com. We have plans in place to help ensure that critical hand soaps, hand sanitizers and surface disinfectants are available when and where you need them. We will work with you to identify the products and services most relevant to your needs, and will teach you how to apply them to protect your businesses.

We are partnering with industry leaders like the National Restaurant Association to tailor information to specific customer segments as events unfold.



Additional Resources

Additional Resources

Operator Preparedness Hotline

For more information on developing a public health outbreak or pandemic preparedness operating plan, please call the Ecolab Operator Hotline!

- ▲ Operator Hotline: 866-848-1939
- ▲ Hours Staffed: 8:00am-5:00pm CST
Monday through Friday

Additional Resources

www.ecolab.com

- ▲ Ecolab brings you the most up to date information with links to the WHO, CDC, FDA, ECDC, CPHA and other news sites
- ▲ Ecolab representatives can provide site specific procedures for influenza mitigation and pandemic preparedness suggestions

www.restaurant.org/fluinfo/

- ▲ NRA provides information and resources regarding the H1N1 flu virus, its impact on human health, and how the restaurant industry is responding to protect their employees and customers

Notations

- ▲ The information contained in this presentation is in accordance with U.S. Centers for Disease Control and Prevention (CDC) and World Health Organization (WHO) recommendations
- ▲ Recommendations are offered as a set of best practices to help lower the probability of contracting influenza type A viruses