



# Pandemic Planning

## How to Implement a Company Pandemic Plan



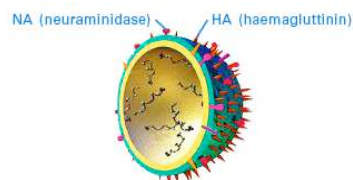
## Agenda

- Planning assumptions
- Where to begin?
- Trigger points
- Task force
- Challenges you need to plan for



## Influenza A - A Tutorial

- Influenza is a **highly contagious** respiratory disease.
- Influenza A has two subtypes determined by proteins on the outer surface of the virus
  - Hemagglutinin (H) – helps virus attach to respiratory cells (H 1 - 16).
  - Neuraminidase (N) – helps virus penetrate into the cells once it is attached (N 1 - 10).
  - 144 different H and N combinations
- An example a description of a subtype would be the H3N2 virus



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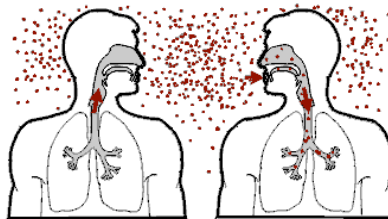
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## How You Become Infected

- Influenza is spread by droplet nuclei within 3 - 6 foot.
- When an infected person breaths, talks, coughs or sneezes, tiny particles containing droplet nuclei are expelled into the air.
  - 1 - 5 microns in size.



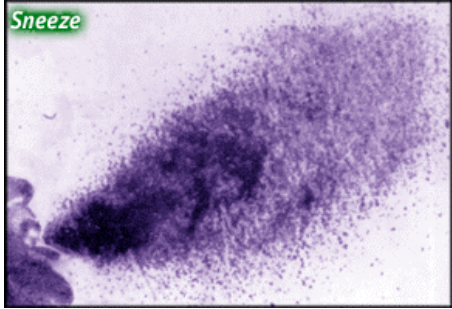
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## Achoo!




- Droplet nuclei can remain suspended in the air for *several hours*, depending on the environment.
- Talking for **five minutes** can generate 3000 droplet nuclei.
- Singing can generate 3000 droplet nuclei in **one minute**
- Sneezing generates tens of thousands of droplet nuclei which can spread up to 10 feet away.

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## Current Human Death Toll

- These summary of cases and deaths is as of June 19, 2006
  - Vietnam 93/42 (45.2%)
  - Thailand 22/14 (63.6%)
  - Cambodia 6/6 (100%)
  - Indonesia 50/38 - 9 clusters (75.8%)
  - China 19/12 (66.7%)
  - Turkey 12/4 (33.3%)
  - Iraq 2/2 (100%)
  - Azerbaijan 8/5 (62.5%)
  - Egypt 14/6 (38.5%)
  - Djibouti 1/0 (0%)
  - Total 227 cases/129 deaths
  - 55.3% fatality
- Thailand and Vietnam have had no cases in 2006.
- The total number of cases/deaths includes only WHO laboratory confirmed cases.



Reuters / Nir Elias

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# Indonesia - The Hot Spot



- 18,108 islands (6,000 inhabited)
- 242 million people
- Jakarta - 12 million people
- 32 cases with 27 fatalities so far in 2006 (50/38)
- 3 significant clusters (one resulting in 7 deaths)

The Jakarta Post quoted several local health experts as saying that “the government was not disclosing how widespread the disease was or how many times human-to-human transmission might have occurred.” NYTimes 6.16.06

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# Business Planning

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## BCP Basic Assumptions

- Business Continuity Planning generally has two assumptions:
  - Back to “business as usual” in 30 days or less
  - Go from the “affected” site to the “unaffected site” and resume business
- ***Neither apply with Pandemic Influenza***

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## Pandemic Planning Assumptions

1. 30% absenteeism of staff, vendors, services within the community such as health care, police, fire, etc.
2. The pandemic may last as long as eighteen months in three separate waves; mortality and morbidity will increase and decrease in spurts.
  1. The first three to four months (90-120 days) will likely produce the greatest deaths and illnesses.
3. Critical functions carried out by contractors, consultants and vendors cannot be guaranteed.
4. Civil society infrastructure will be stressed, but remain functional.
5. Potential closure of gathering places in the community including schools, churches, events, malls, etc.

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## Pandemic Planning Assumptions

6. Will likely have less than six weeks of warning from the time the pandemic is announced before it reaches the United States.
7. No remedies will be immediately available. Tamiflu and other antivirals will be in very limited supply.
  1. Vaccinations will take 9-10 months and antibiotics are only for the treatment of a secondary bacterial infection.
8. Current WHO Alert Levels do not provide any indication regarding the time interval between levels.
  1. Current thinking among experts is that while it may take a significant amount of time for a virus to reach Alert Level 4 (small clusters of human to human viral spread), the time interval between Alert Levels 4, 5 and 6 may be rapid (ranging from days, to weeks, to months).

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## Where to Begin?

- Top down approach?
- Bottom up?
- Need to have senior management support before getting to far forward
  - Will need to go back for approval and funding once draft completed
- All of your pandemic planning will make your organization much more resilient

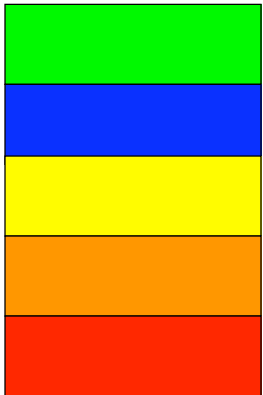
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## Pandemic Levels - Terrorist Threat Levels



Phase One

Phase Two

Phase Three

Phase Four

Phase Five & Six

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## Interpandemic Period

- **Phase 1.** No new influenza virus subtypes have been detected in humans.
  - An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered to be low.
- **Phase 2.** No new influenza virus subtypes have been detected in humans.
  - However, a circulating animal influenza virus subtype poses a substantial risk of human disease.

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## Pandemic Alert Period

- **Phase 3.** Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.
- **Phase 4.** Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.
- **Phase 5.** Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).

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## Pandemic Period

- **Phase 6.** Pandemic: increased and sustained transmission in general population.
  - Pandemics usually last approximately 18 months and come around the globe three distinct times in that time period (which are referred to as waves).
  - The first 90 - 120 days are likely to be the most deadliest.

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## Develop A Task Force

- Business Continuity Planning
- Security
- Safety
- Human Resources
- Travel
- Key lines of business
- Corporate Communications
- Purchasing
- Legal
- Telecommunications
- Technology
- Risk Management

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## Challenges You Need to Plan For...

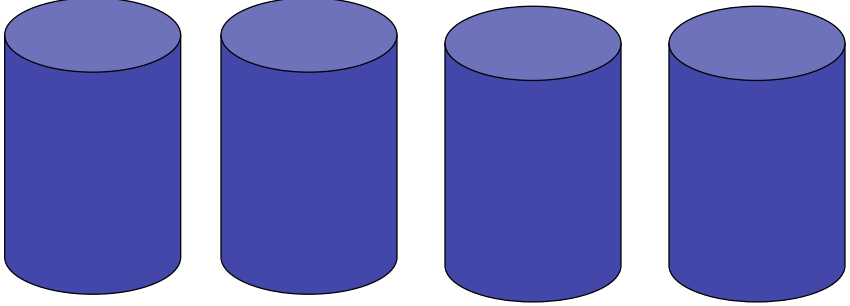
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## Human Resources



**Category One**  
"Must" be @ work

**Category Two**  
"Must" work & can work @ home

**Category Three**  
Can work @ home but not essential

**Category Four**  
Not essential- no need for them to work

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## Human Resources

- Category One
  - 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



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## Human Resources

- Category Two - Work from home: install a robust work from home program
  - Broadband 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

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## Human Resources

- Category Three and Four:
  - How long do you pay those who aren't working?
    - Pay partially?
    - How long do you continue benefits?
    - What are those the others issues?

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## Human Resources

- Other HR issues:
  - What if employees 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? How to deal with day care issues?
  - Ex-pats and their families...what if they want to come home?

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## Travel



- Do you restrict travel?
  - If so, when?
- What about personal travel?
- Can you make travel safe?
  - PPE
- Strategies could include:
  - Home quarantine for 10 days
  - Work from home

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## Jet Travel to Avoid?



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## Travel

- What if a countries borders are closed?
- Do you have a relationship with an international medical provider?
- How do you conduct a:
  - Medical evacuation?
  - Evacuation of remains?

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## Communication

- Communication is essential
  - How to communicate (what tools)?
  - How often?
  - To whom?
  - What is the message?
  - When to communicate?
  - Who does the communicating?

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## Communication

- Update employee information including all forms of home contact - home cell, home email.
- Develop strategies if the phones are overloaded
  - Text messaging
  - VoIP [www.skype](http://www.skype)
  - Instant messaging

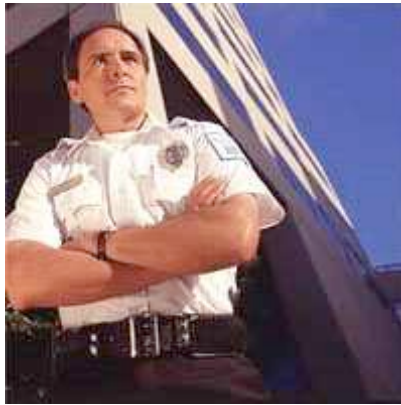
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## Security



- Visitor restrictions:
  - When?
  - How?
  - Exceptions?
  - Who can authorize?
- Visitor/vendor screening:
  - When?
  - How?
- Training
  - PPE

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## Facilities



- Janitorial
  - Cleaning procedures
  - PPE
  - Disinfectants
- HVAC system
  - How often to change filters
  - Changing filters
  - How much recycled air?

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## Purchasing

- Procure necessary equipment: masks, antiseptic solutions, hand gel, gloves
- Supply chain analysis - where do your critical supplies come from?
  - What if ports are closed 90 - 120 days?

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## Risk Management

- Insurance
  - Do you have coverage?
  - If not, do you need/want to acquire it?
- Assess impact to company
  - Do modeling showing reductions in revenue by 10-20-30% for 90-120 days; up to 18 months.

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## Management Approval

- Once the draft plan has been completed:
  - Develop cost estimate for plan implementation
  - Present to management for funding
  - Adjust as necessary

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## Incident/Crisis Management Team

- Virtual EOC
  - Conference bridge
  - Web meetings
- Succession planning
  - For the Incident/Crisis Team
  - Senior executives

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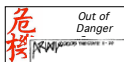
## Plan Implementation

- Employee education
- BCP tabletop exercise
- Work from home requirements
  - How often?
- Crisis management team tabletop
- Periodic management briefings

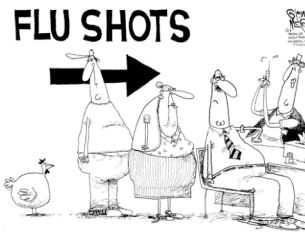
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**Thank You!**

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