



Pandemic Flu: Are you ready?

Dr. Harry Overstreet, Ph.D.

 **-zone Consulting**

Where Knowledge, Skill, and Ability Come Together

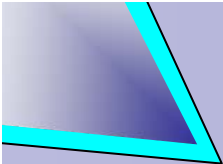
overphd@yahoo.com
(806) 787-7857

Desired Outcomes

By the end of this session we will:

- **Explain what a pandemic is**
 - ✧ **Characteristics of Human Influenza**
 - ✧ **Characteristics of Swine Influenza**
 - ✧ **Descriptors of a Pandemic**
- **Explain the triggers that should activate a pandemic response plan**
- **Explain different philosophies of operation during a pandemic**

So that all members have a better appreciation of the opportunity in front of you and how best to approach it.



Pandemic Flu Continuation Plan Objectives

- **Protect employees' health and safety**
- **Continue to safely maintain core business functions**
- **Educate and communicate on situation status**

WHO Criteria for Pandemic Influenza

- The emergence of a disease (or strain/subtype) new to a population
- The agent infects humans, causing serious illness
- The agent spreads easily among humans
 - ✧ Becomes contagious

Pandemic Phases

Inter-Pandemic (period of time between pandemics)

- | | |
|---|---|
| 1 | No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in humans. If present in animals, the risk is considered to be low. |
| 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. |

Pandemic Alert Period

- | | |
|---|---|
| 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. |
| 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. |
| 5 | Large 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). |

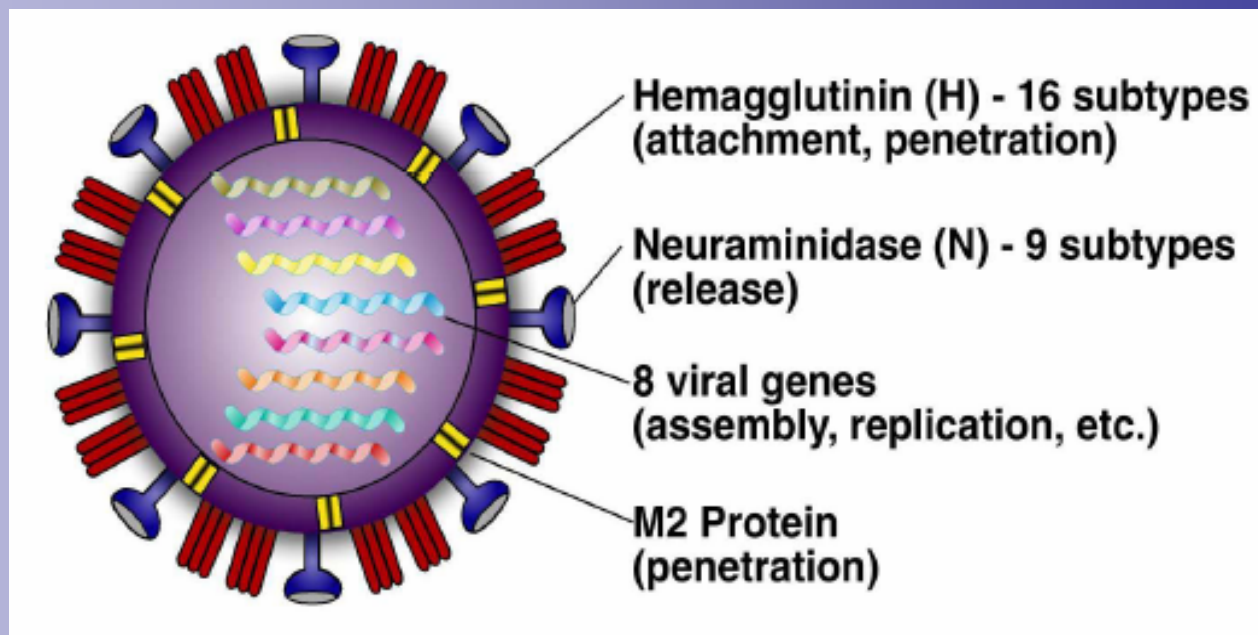
Pandemic Period

- | | |
|---|---|
| 6 | Pandemic phase: increased and sustained transmission in general population. |
|---|---|

What is Swine Flu (H1N1)

Type A (RNA Influenza type) Virus

1 hemagglutinin, 1 Neuraminidase



Influenza Virus

Swine flu is caused by influenza viruses naturally occurring among swine

- Occasionally infect humans
- Occasionally, a pathogenic strain emerges, such as H1N1

Seasonal flu is a contagious respiratory illness caused by influenza viruses infecting humans

- Generally, most susceptible to severe illness and death are very young and very old (36,000 deaths/year)
- Get your flu shot every year

Pandemic flu a global outbreak of a highly pathogenic strain

- Spreads easily from person to person
- Otherwise healthy young adults severely affected

How do you get Swine Flu ?



How do you get Swine Flu ?



Humans become infected with the H1N1 virus
due to **VERY** close contact with infected swine

How do you get Swine Flu ?



Humans become infected with the H1N1 virus
due to **VERY** close contact with infected swine

How is it spread?

Cough/Sneeze Spray



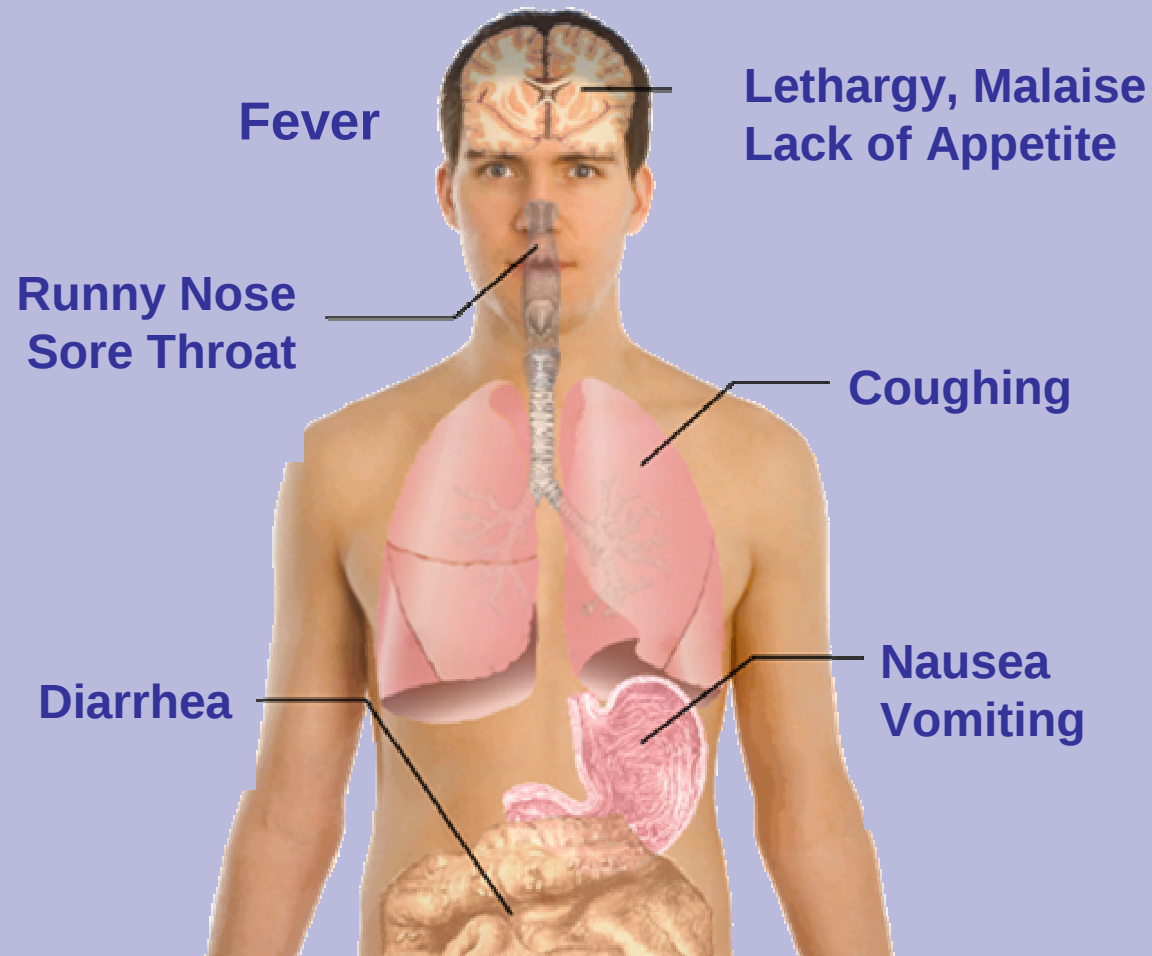
VIRUS SURVIVES

- 24-48 hours hard surface
- 8-12 hours clothes
- 5 minutes – hands

INFECTION ROUTES

- Touching nose
- Fingers in mouth
- Rubbing eyes

Symptoms of Swine Flu



Pandemic Continuation Plan, Strategy

Task

- Establish Core Team and gain commitment
- Engage Organization-Purpose & Planning
- Develop Plan
 - ✧ Framework
 - ✧ Draft plan
 - ✧ Proceduralize
 - ✧ Tabletop and review
 - ✧ Training and implement
- Develop Communication Plan
- Establish Hygiene Program
- Develop Training Programs
- Conduct Tabletop Drills
- Participate in local/regional integrated workshops
 - ✧ Stay engaged

Pandemic Planning Assumptions

- Key to maintaining domestic infrastructure
- Consistent with WHO Pandemic Influenza Plan
- Possibly comes in two/three waves, each lasting up to eight weeks, no vaccine
- Waves 3-9 months apart, second stronger than first
- Attack rate of 35% (severe enough to take at least ½ day off work)
- Absenteeism rate 40-60% over the course of the wave
 - ✧ Sick, caring for sick, due to school closures, hypochondria
- Death rate ~ .5%-2%

Pandemic Planning Framework

- **Organization Structure**
- **Philosophy of Operation**
- **Human Resource Policies**
- **Supply Chain**
- **Communication**
- **Medical**

Organizational Structure

Pandemic response is a business disruption and the organizational structure should be developed to replicate a business disruption plan with a few nuances.

Key Stakeholders

- Federal, State and County Health
- WHO and CDC
- Local Law Enforcement
- Local Business
- Hospitals and Medical Facilities
- Food Supply Outlets and Chains
- Faith-Based Organizations
- Schools
- Pandemic Coordinator
- International Maritime Org.
- Stevedores
- Seaman Center
- Receiving and distribution
 - ✧ Shipping Lines/organizations
 - ✧ Trucking Lines/organizations
 - ✧ Rail Lines/organizations
- Local Vendors
 - ✧ DOW, BASF, LNG (examples)
- Internal Supply Chain

Needs and expectations

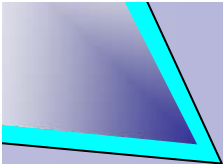
- Identify within your organization those positions that are:
 - ✧ Essential to operation
 - ✧ Essential to daily business
 - ✧ Non-essential personnel
- Identify within your organization essential materials, consumables, and supplies REQUIRED for continued operation
- Name a primary and backup individual for the pandemic response plan
- Be proactive, call if you have questions
- Don't work in a vacuum

Pandemic Philosophy of Operation

- **Do Nothing**
- **Establish special shifts for continued operation**
- **Sequestering**
- **Social Distancing**
- **Social Distancing & work from home**

Human Resource Policies

- Travel
- Visitors
- Meetings
- Telecommuting
- Critical Deliveries
- Crew Work Teams
- Infection Prevention
- Employee Compensation
- Daily Wellness Screening



Communication Plan

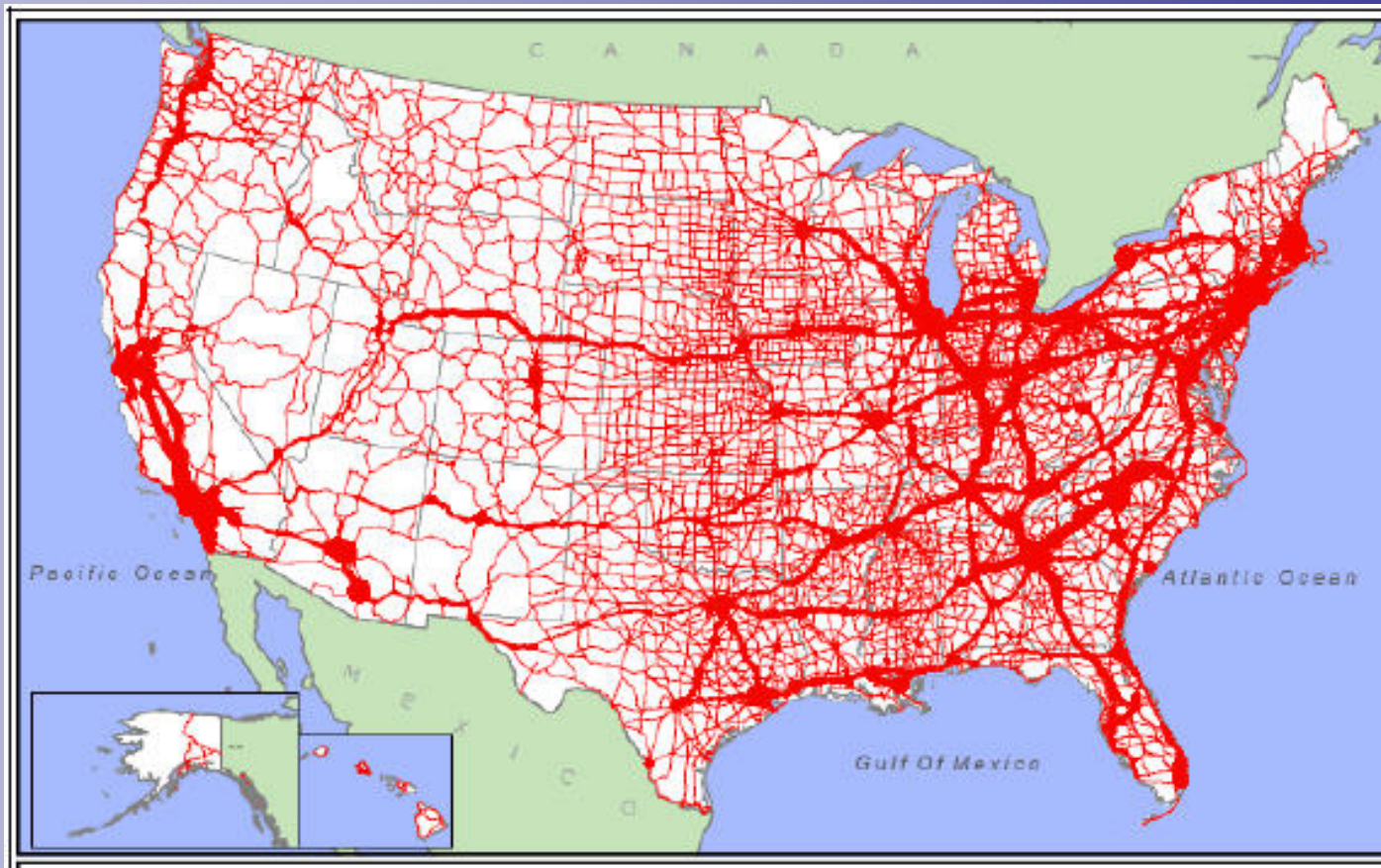
**Develop pre-scripted messages.
Stay in daily communication with**

- **Employees**
- **Key Stakeholders**
- **County Health**

Medical Plan

- Daily wellness screening of all employees at the port
- Turn back authority
- Identifying and managing the sick at work
- Assisting the sick at home

Estimated Average Annual Daily Truck Traffic (1998)



Spread of swine flu far from over, officials warn

Dudley Althaus
Houston Chronicle, July 3, 2009

World health experts warned Thursday, July 2, that the global swine flu outbreakis all but certain to worsen in the coming months.

Keiji Fukuda, assistant director general of the World Health Organization stated, "This is a very humbling virus. We are really at the start of a global phenomenon."

Hundreds of specialists from 40 countries were plotting strategies for what many dread could become an outbreak rivaling a 1918 flu pandemic that killed tens of millions of people.

Health officials in the United States, Mexico and Canada fear that a strengthened virus will return north with the winter cold.

Thomas Frieden, director of the U.S. Centers for Disease Control and Prevention stated, "We need to plan for the most extreme scenarios as well as for the likely scenarios. Influenza is perhaps the most unpredictable of infectious diseases."

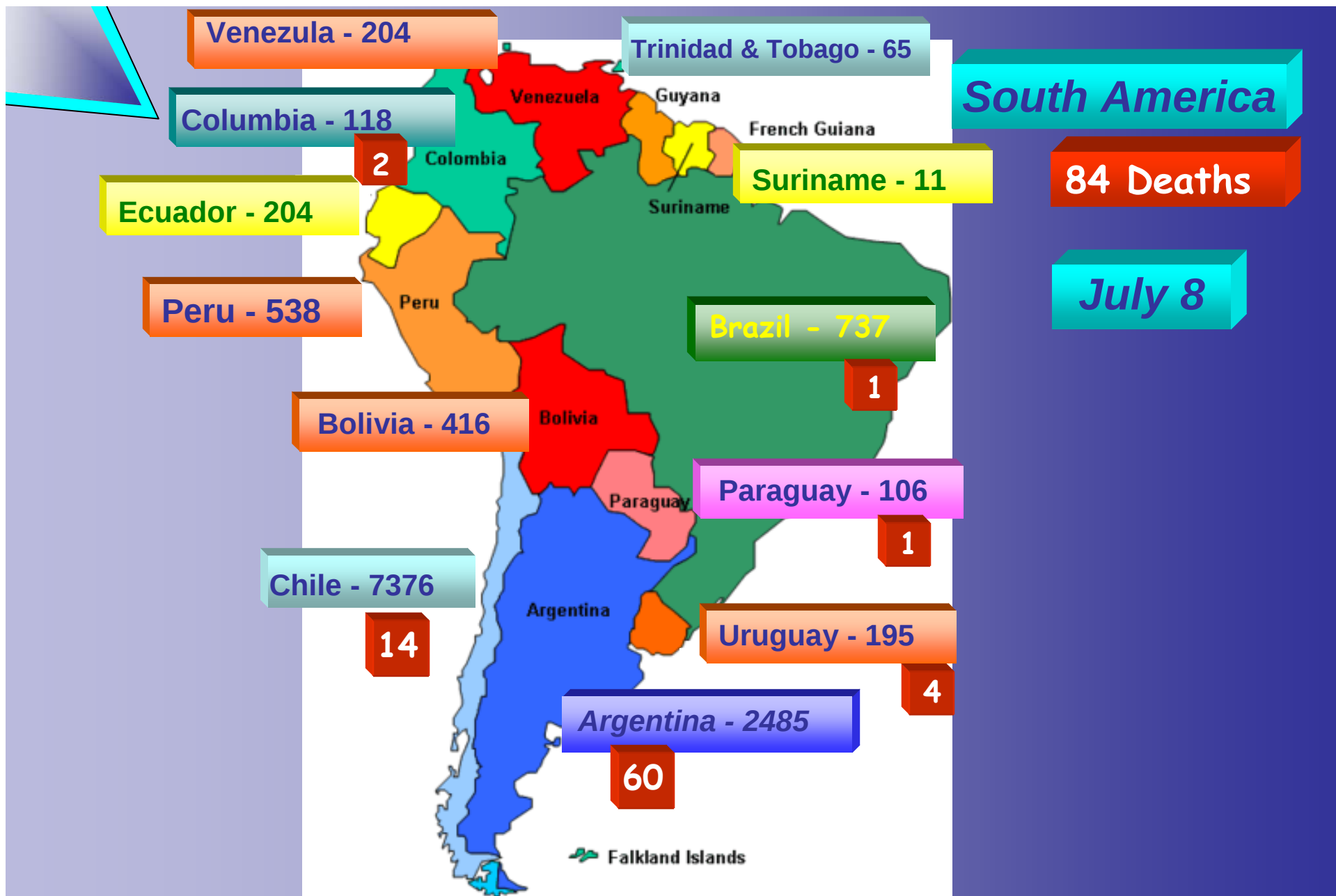
This swine flu strain — which scientists call A-H1N1 — was first noticed in late April in Mexico City. In just three months the virus has zipped around the world, sickening at least 80,000 and killing 327 in 121 countries. [Presently we stand at 94,443 confirmed cases, 133 countries with 429 deaths.]

It now stalks the southern hemisphere, where winter flu season rages.

Unlike seasonal flu, which kills tens of thousands of toddlers and the elderly each year, H1N1 has mostly sickened young adults and been deadliest in older children and teens. Experts worry that it could mutate into strains for which most people have no immunity.

"Watching how quickly H1N1 spread globally was quite disconcerting," said Canada's Health Minister Leona Aglukkaq. **"It is so important for countries to have a plan in place to be able to respond."**





H1N1 Swine Flu

July 17, 2009

40,617 Confirmed Cases in 55 States*

263 Deaths

Mexico 10,262 Cases

119 Deaths

World -133 Countries, 94,443 Cases

481 Deaths



**World Health
Organization**



Helpful Websites

Flu.Gov

<http://pandemicflu.gov/>

World Health Organization

<http://www.who.int/en/>

Centers for Disease Control and Prevention

<http://www.CDC.gov>



**World Health
Organization**



STAR TRIBUNE
S&K

THE FIRST TIME
ONE OF THEM
SNEEZES,
CUT THE
ROPE



Questions?