

# Pandemic Influenza Briefing



## Overview

- Why are we Talking About Pandemic Flu?
- Current Avian Influenza Outbreak (Global)
- Pandemic Influenza Response Plan
- Public Health and Health Care System Preparedness
- Community-wide Preparedness

## Definitions

- An epidemic - is an increase in disease above what you would normally expect
- A pandemic - is a worldwide epidemic



## How Do Influenza Pandemics Arise?

- Wild birds are natural reservoirs of flu viruses, including those that infect people
- Flu viruses undergo slight changes each year, requiring us to update our vaccines
- Periodically, avian flu viruses will undergo major genetic changes (“shift”)



## How Do Influenza Pandemics Arise?

- When avian influenza viruses experience sudden changes in genetic structure  
And
- Are capable of infecting humans  
And
- Can reproduce and spread from person to person....**a pandemic occurs**



# Why Are We Talking About Pandemic Flu?



# Planning Assumptions

- Illness will spread quickly and globally
- Vaccine will be non-existent or very limited for 6 to 8 months – antivirals will be very limited
- The health care delivery system will be completely overwhelmed – restructuring and prioritization of services will be necessary

# Planning Assumptions

- Alternate facilities will be needed to:
  - Conduct triage of ill people
  - Provide a supportive care environment for patients
  - Temporarily store bodies
- Health care workers and EMS responders may face staff shortages exceeding 30%
- Significant disruptions of critical infrastructure, first response systems, and social services may occur

# Planning Assumptions

- Social distancing strategies aimed at slowing the spread of disease may be implemented countywide
- Local Emergency Management Plans will be activated countywide directing the management of non-medical information and non-medical resources
- Mutual aid from outside south Idaho will be limited or unavailable

# History of Influenza Pandemics



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## US Deaths in Previous Pandemics

- 1918 - 19: 500,000 - 650,000
- 1957 - 58: 70,000
- 1968 - 69: 34,000
- Typical annual influenza season: 36,000

# 1918 Influenza Pandemic

- Spread around the globe in 4 - 6 months
- At least 40 - 50 million people died worldwide
- Death rate 25 times higher than previous epidemics
- Pandemic affected and killed younger, healthy people

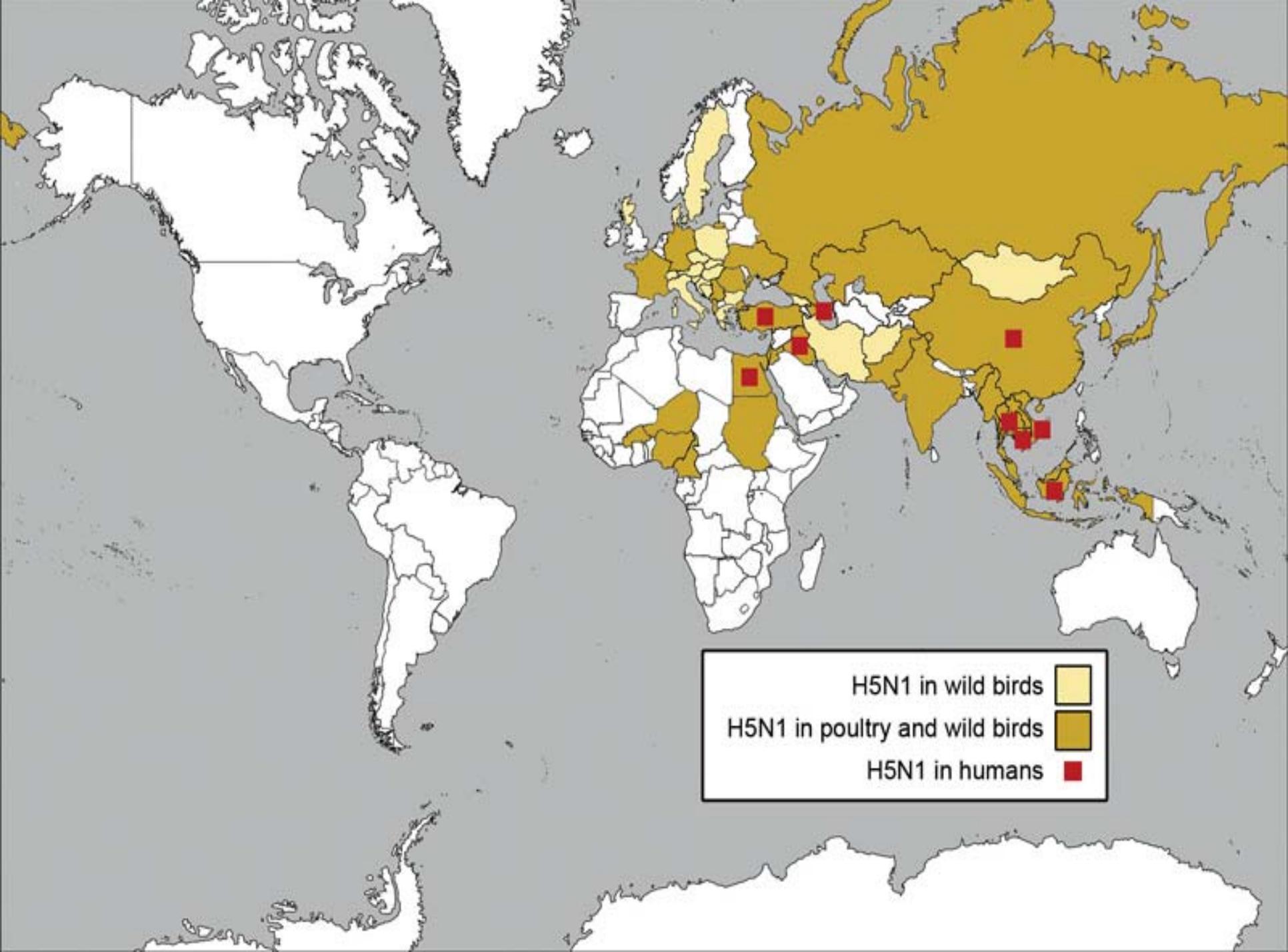


# Current Avian Influenza Outbreak



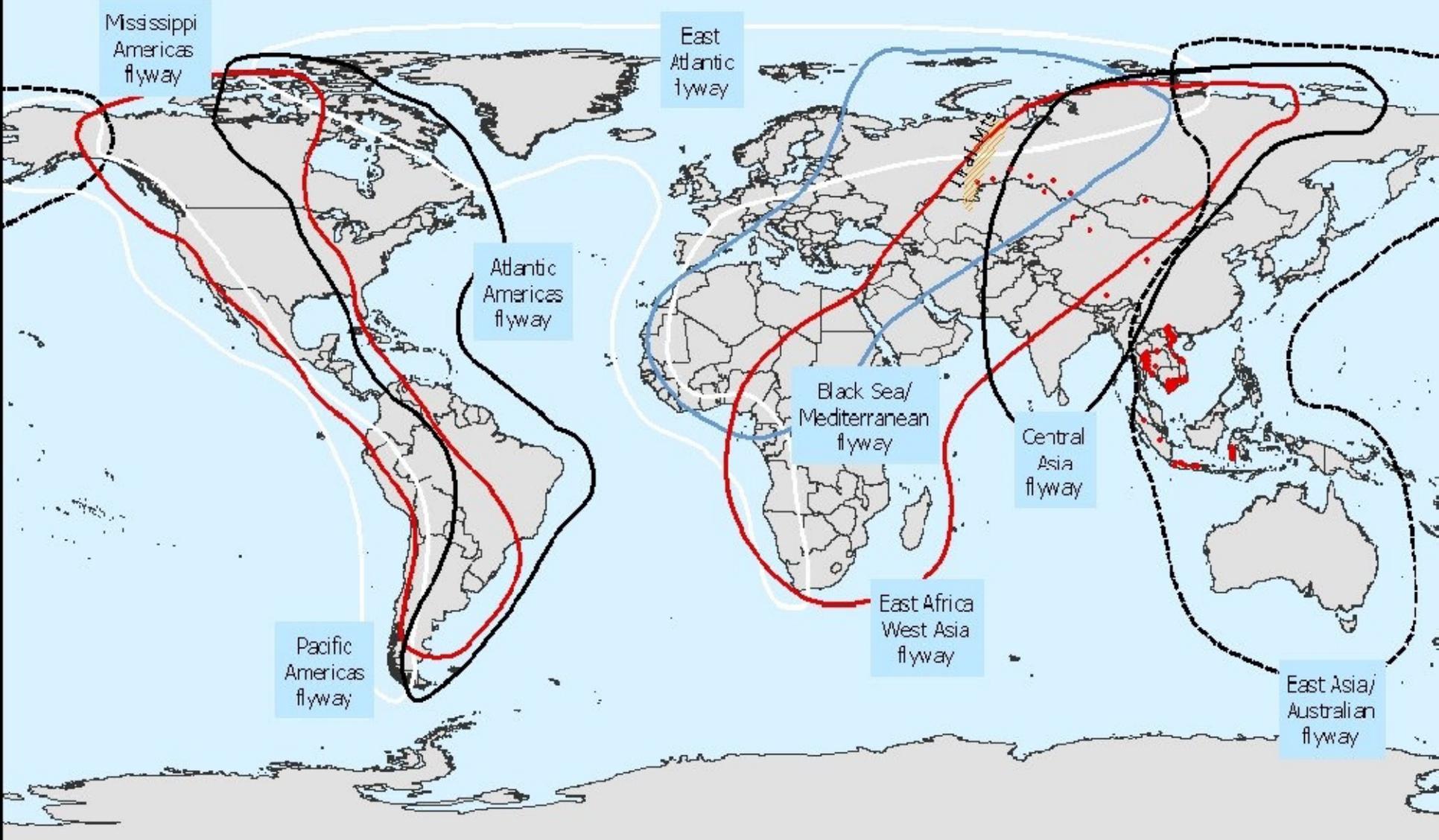
## Current Outbreak of Avian Influenza (H5N1) Across Several Continents

- 204 confirmed human cases, 113 deaths  
[Nine Countries, as of April 21, 2006)
- No sustained person-to-person transmission
- Avian outbreak is not controlled
- No pre-existing immunity in humans



# H5N1 outbreaks in 2005 and major flyways of migratory birds

Situation on 30 August 2005

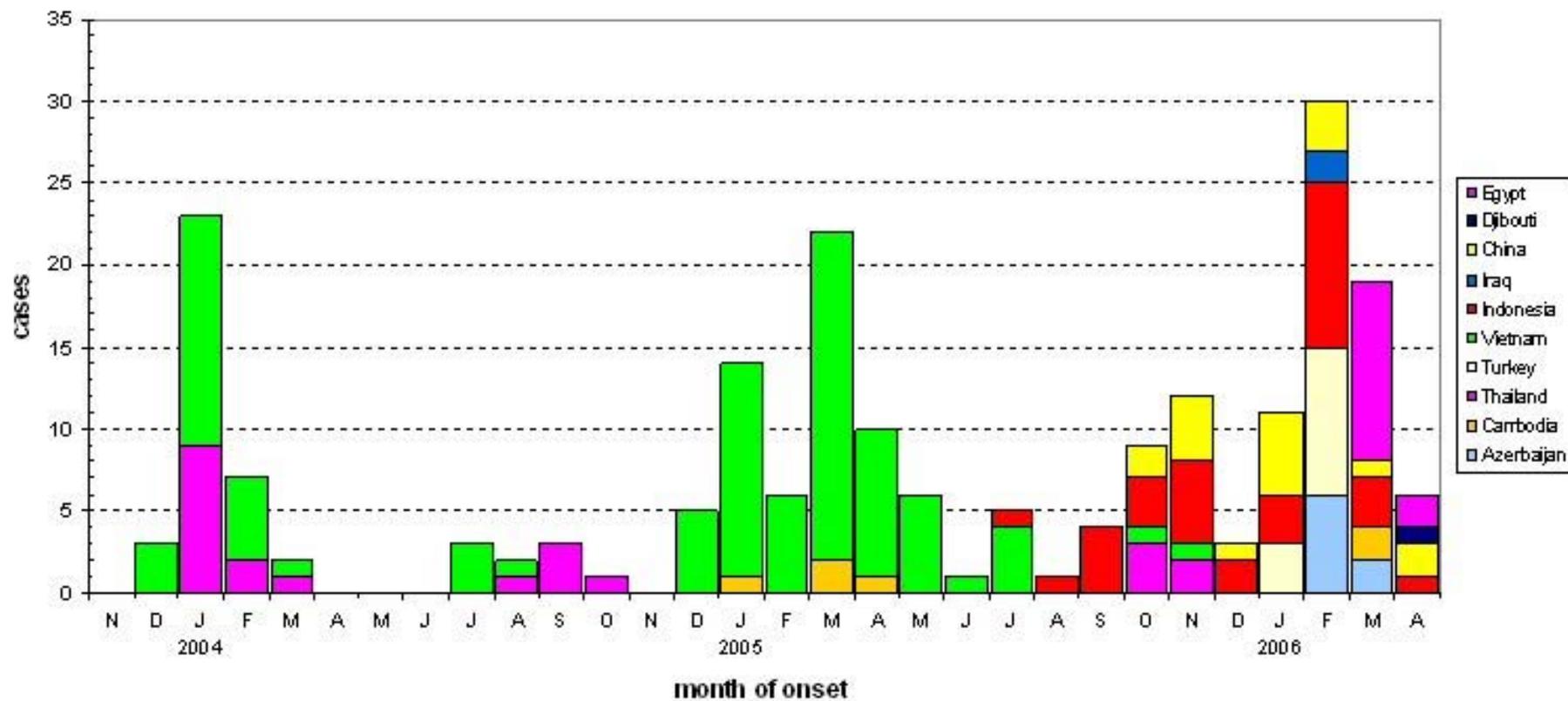


● Districts with H5N1 Outbreaks since January 2005

Sources: AI outbreaks: OIE, FAO and Government sources.  
Flyways: Wetlands International

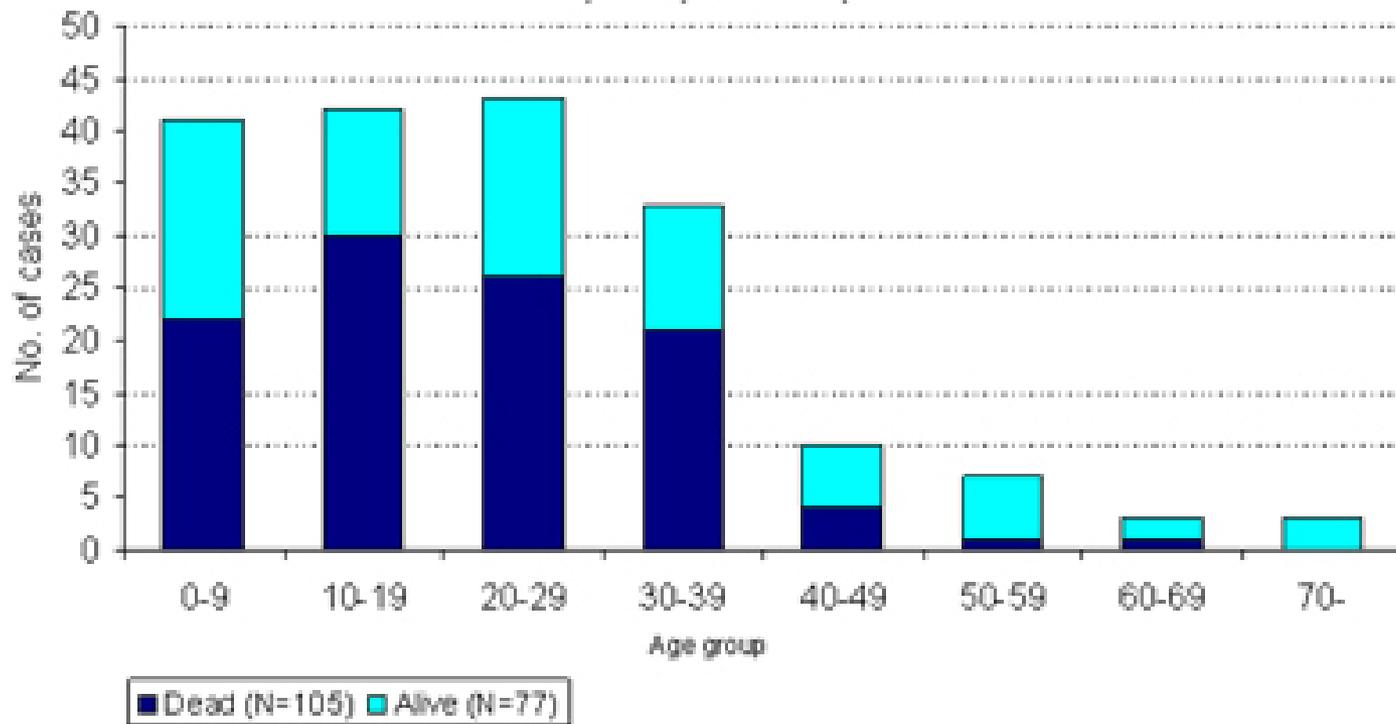


Human cases of A/H5N1 by date of onset and country  
as of 12 May 2006



# Human Avian Influenza A/H5N1 Cases by Age Group and Outcome

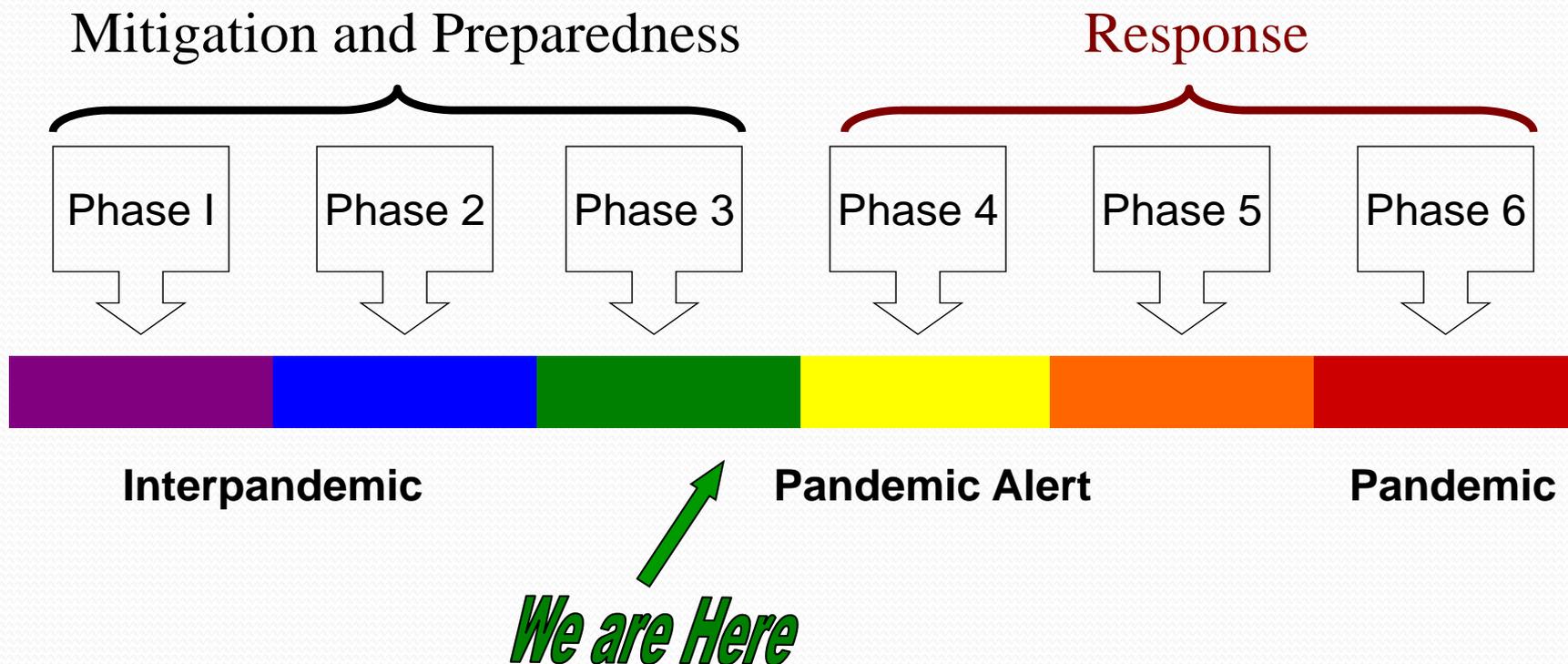
(12 April 2006)



- As of 12 April 2006, total of 194 cases were reported officially to WHO.
- The 12 cases in Turkey were excluded.

# Phases of a Pandemic

## World Health Organization



*Declared globally by the World Health Organization*  
*Declared nationally by the Department of Health and Human Services*

# Impact of Pandemic Flu Today



# Pandemic Impact

<b>Characteristic</b>	<b>Severe Flu (Like 1918)</b>
Total Population in South Central Idaho	165,000
Illness	25,000
Home care	19,800
Hospitalization	5,000
Deaths	1,400

Estimated numbers of Illness, Hospitalization, and Deaths  
Severe Pandemic – South Central Idaho

# Pandemic Impact

## **Consequences will effect all organizations:**

- Extreme staffing shortages (30%)
- Overwhelming demand for services
  - (health care, first responders)
- Limited supplies (transportation disrupted)
- Reduced reliability in communications, power, water, fuel availability, transportation service
- Reduced reliability on contractor services
  - (maintenance and repair)

# Pandemic Impact

## **Impacts on Law Enforcement:**

- 25% - 35% of officers absent due to illness, death, caring for family members
- 911 dispatch centers operating with reduced staff, higher call volumes
- Large numbers of people unable to purchase food, pay bills – high unemployment and schools closed
- Potential for civil unrest over weeks / months
- Hospitals may become high security areas
- No mutual aid available

# Pandemic Impact

## **Impacts on Transit / Transportation:**

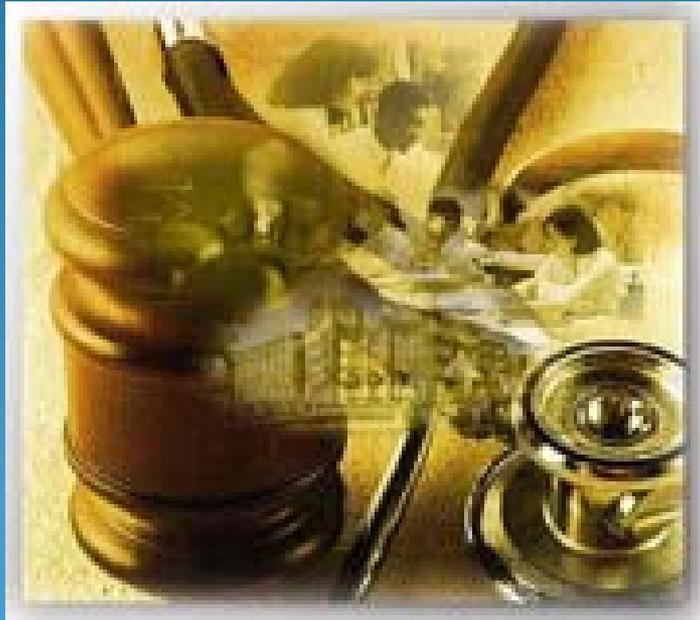
- 25% - 35% of drivers, maintenance crews, leadership absent due to illness, death, caring for family members
- Mechanics unavailable to affect repairs
- Fuel deliveries reduced in frequency or erratic
- Contractors normally relied upon also impacted

# Pandemic Impact

## **Impacts on Airports:**

- 25% - 35% of all workers absent due to illness, death, caring for family members :
  - air traffic controllers
  - baggage handlers
- Access to critical supplies such as fuel, spare parts, other services will be limited
- School closures – how many workers have children in school or day care?
- No mutual aid available

# South Central District Health Pandemic Influenza Response Plan



Goals  
Responsibilities  
Preparedness Structure

# Public Health Preparedness

## Goals of the Plan

1. Limit illness and death
2. Preserve Continuity of Government / Business
3. Minimize social disruption
4. Minimize economic loss

# Public Health Preparedness

## Public Health Objectives

- Maintain and expand functions critical to pandemic response
- Maintain critical day-to-day operations
  - All Department resources may be needed to address the consequences of a pandemic
  - Some Department functions may be suspended
  - Business continuity planning and “response team” development are underway

# Response Phase

## Direction and Control

- South Central District Health will direct the countywide health and medical response with health care system partners
- Local Health Officer will issue countywide directives when needed (i.e. school closings, health and medical response)
- South Central District Health response actions will emphasize surveillance, social distancing, and communications
- All local jurisdictions will activate emergency operations plans as needed
- Local Elected Officials will issue directives to ensure continuity of government

# Response Phase

## Antiviral Medications

- CDC is stockpiling antivirals in the SNS
- Vaccines and antivirals will be prioritized for predefined target groups
- Local Health Officer will direct (via PH Order) how these medications will be used

# Response Phase

## Social Distancing / Isolation and Quarantine

- Isolation of patients will occur throughout the event (mainly at home)
- Quarantine of close contacts may occur only in the early phases
- Decisions regarding closings and reopening will be based on current epidemiological data

# Response Phase

## Social Distancing / Isolation and Quarantine

- Schools, large child care centers and libraries may be closed early by the Local Health Organization
- Stadiums, theaters, churches may be closed by the LHO

# Health Care System Preparedness

Health Care Coalition  
Key Components  
Key Objectives



## Health Care System Preparedness

# Preparing for Pandemic Influenza

- Severe Pandemic = Mass Casualty Event
- Extreme stress on healthcare system:
  - Overwhelmed capacity
  - Limited resources
  - Ongoing critical care needs
  - All sectors impacted
  - Weeks to months in duration and global in scope
- Need a new way for the health care system to organize and maintain an effective response

## Health Care System Preparedness

# Health Care Coalition

- Comprised of representatives from a broad base of health care organizations
- Coordinating body and information clearinghouse for the medical system during major emergencies
- Health care system response will resemble Unified Command

# Health Care System Preparedness

## Health Care Coalition Participants

- Hospitals
- Large medical groups
- Safety net healthcare organizations
- Professional associations
- Home health and long term care providers
- Key stakeholders, e.g. EMS, Red Cross

# Health Care System Preparedness

## Health Care Coalition Responsibilities

- Develop all-hazard preparedness plans
- Develop an Executive Advisory Body:
  - Review plans and agreements
  - Advise the LHO on health issues during disasters
- Develop a Regional Medical Resource Center
  - Information Management
  - Resource Management
  - Communication

# Regional Responsibilities

Emergency Management  
Public Works  
First Responders  
Human Services  
General Government  
Private Sector





## Pandemic Preparedness Responsibilities of All Partners

### 1. Educate and Inform:

- Department / Business Leaders
- Supervisors
- Staff
- Families

# Pandemic Preparedness Responsibilities of All Partners

## Influenza Prevention

- Stay home when sick
- Cover your cough
- Wash hands regularly and use alcohol hand gel
- Avoid touching eyes, nose, mouth



# Pandemic Preparedness Responsibilities of All Partners

## 2. Individual Preparedness

- Store an extended supply of food and water at home
- Store nonprescription drugs and health supplies at home
- Plan with family members about the following:
  - Caring for loved ones who get sick
  - Caring for children if the schools are closed
  - Other impacts on your life if you need to stay at home for an extended period of time

# Pandemic Preparedness Responsibilities of All Partners

## 3. **Continuity of Operations Planning**

- Identify key functions
- Cross train staff
- Identify telecommuting opportunities
- Review HR policies (sick leave, flex shifts)
- Identify ways to maintain payroll functions
- Make alcohol gel, disinfectant wipes available



## Pandemic Preparedness Responsibilities of All Partners

### 4. **Information Management**

- Develop ways to track absenteeism
- Identify thresholds for critical capacities
- Develop reporting strategies for tracking region-wide impacts to critical systems
- Develop templates for region-wide situation reporting



Pandemic Preparedness  
More Information...

- *South Central Public Health District*  
*Pandemic Flu Web Site - [www.panflusouthidaho.org](http://www.panflusouthidaho.org)*
- **On our **Pandemic Flu Page:****

  - **Fact Sheets on Pandemic Flu**
  - **Checklists for Businesses, Health Care, and Government Agencies**
  - **Posters and materials for children**