



H1N1 (Swine Flu)

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Catastrophe Readiness Fair
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Swine flu

Systemic

- Fever

Psychological

- Lethargy
- Lack of appetite

Nasopharynx

- Runny nose
- Sore throat

Respiratory

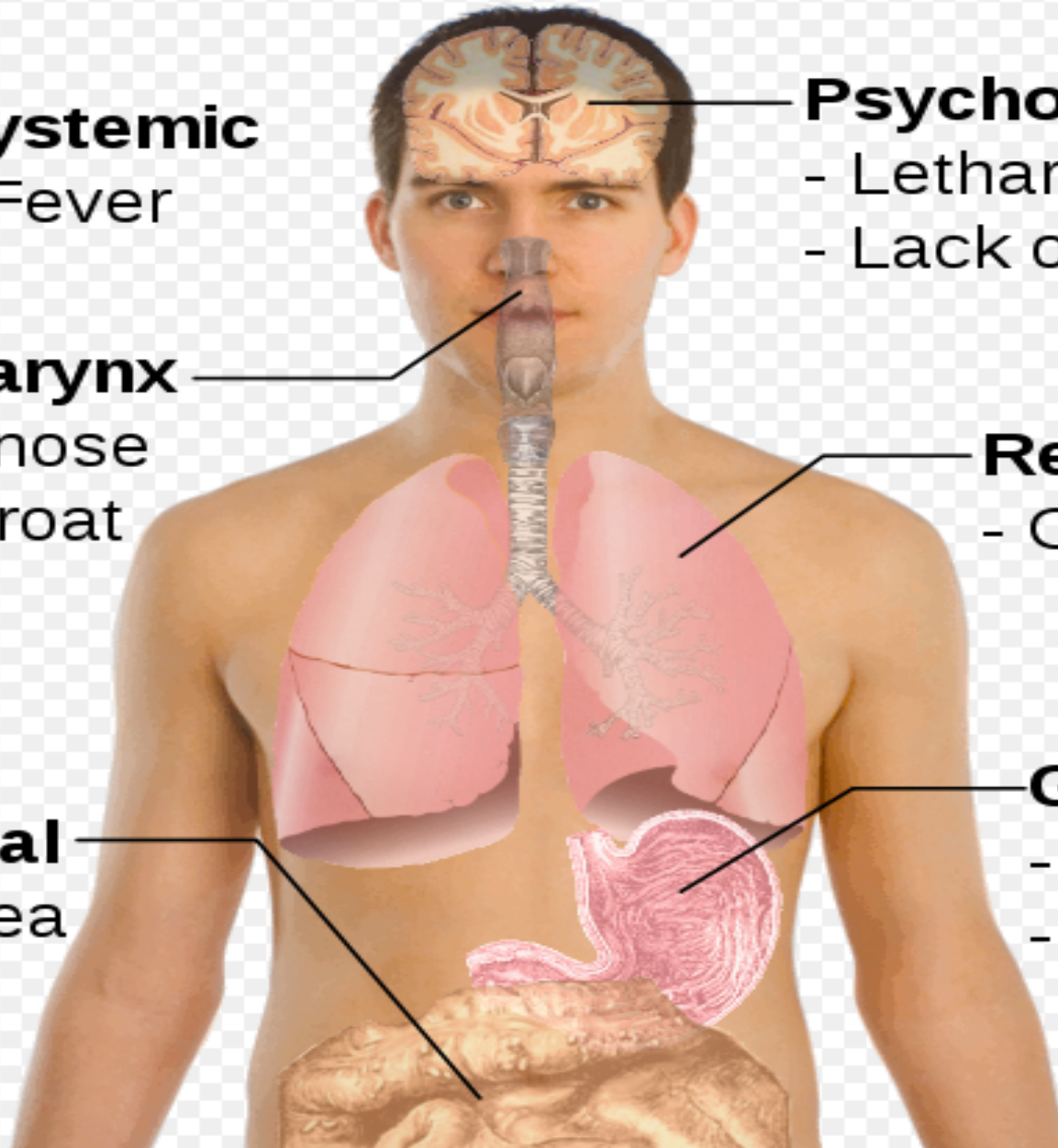
- Coughing

Intestinal

- Diarrhea

Gastric

- Nausea
- Vomiting



Selection of influenza pandemics and scares:

1918-19 Spanish flu:
An estimated 20 to 40 percent of the worldwide population became ill.

DEATHS: 40-50 million (estimated)

VIRUS STRAIN: H1N1

Historical pandemics

An influenza pandemic is possible when a virus makes a dramatic change and acquires proteins, making it a new virus to which the population has no immunity.

1957-58 Asian flu:
Virus was quickly identified due to new technology.

2 million
H2N2

1968-69 Hong Kong flu: Elderly were most likely to die.

1 million
H3N2

1977-78 Russian flu scare: Isolated in China; spread rapidly in children and young adults worldwide.

N/A
H1N1

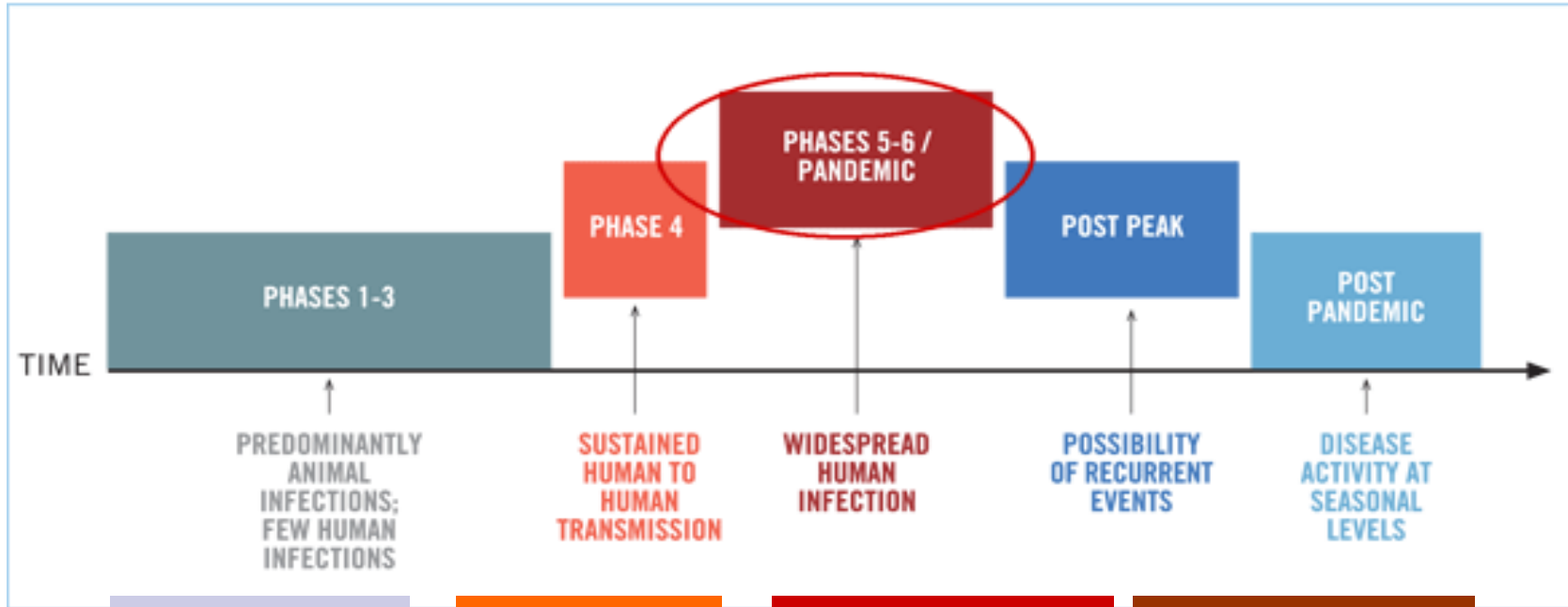
2003-09 Avian flu scare: Virus moved from chickens to people.

257*
H5N1

* Through April 23, 2009

THE WHO PHASES

PANDEMIC INFLUENZA PHASES



PHASE 3
Animal-human Infections, few Human-human Cases
ie: H5N1

PHASE 4
Sustained Outbreak in 1 geographic Region

PHASE 5
Sustained Outbreak in 2 countries/areas within same Region
(Mexico & USA)

PHASE 6
Sustained Outbreak in 2 countries/areas in different Regions
FULL PANDEMIC

The Current Situation and a Plausible Scenario

Indeed, the 2009-H1N1 influenza is already responsible for significant morbidity and mortality worldwide — from its appearance in the spring, its continued circulation in the U.S. this summer, and its spread through many countries in the Southern Hemisphere during their winter season. While the precise impact of the fall resurgence of 2009-H1N1 influenza is impossible to predict, a plausible scenario is that the epidemic could:

- **produce infection of 30–50% of the U.S. population this fall and winter**, with symptoms in approximately 20–40% of the population (60–120 million people), more than half of whom would seek medical attention.
- **lead to as many as 1.8 million U.S. hospital admissions during the epidemic**, with up to 300,000 patients requiring care in intensive care units (ICUs). Importantly, these very ill patients could occupy 50–100 percent of all ICU beds in affected regions of the country at the peak of the epidemic and could place enormous stress on ICU units, which normally operate close to capacity.
- **cause between 30,000 and 90,000 deaths in the United States**, concentrated among children and young adults. In contrast, the 30,000–40,000 annual deaths typically associated with seasonal flu in the United States occur mainly among people over 65. As a result, 2009-H1N1 would lead to many more years of life lost.
- **pose especially high risks for individuals with certain pre-existing conditions**, including pregnant women and patients with neurological disorders or respiratory impairment, diabetes, or severe obesity and possibly for certain populations, such as Native Americans.

There is an important issue with respect to **timing**:

- The fall resurgence may well occur as early as September, with the beginning of the school term, and the peak infection may occur in mid-October.
- But significant availability of the 2009-H1N1 vaccine is currently projected to begin only in mid-October, with several additional weeks required until vaccinated individuals develop protective immunity.

This potential mismatch in timing could significantly diminish the usefulness of vaccination for mitigating the epidemic and could place many at risk of serious disease.

PCAST emphasizes that this is a planning scenario, not a prediction. But the scenario illustrates that an H1N1 resurgence could cause serious disruption of social and medical capacities in our country in the coming months. The circumstances underscore the importance of:

- ensuring that the nation's complex and distributed healthcare systems are prepared to deal with the potential surge in demand, especially with respect to critical care.
- ensuring that all feasible steps are taking to protect the most vulnerable populations.

The New Potential Scenario

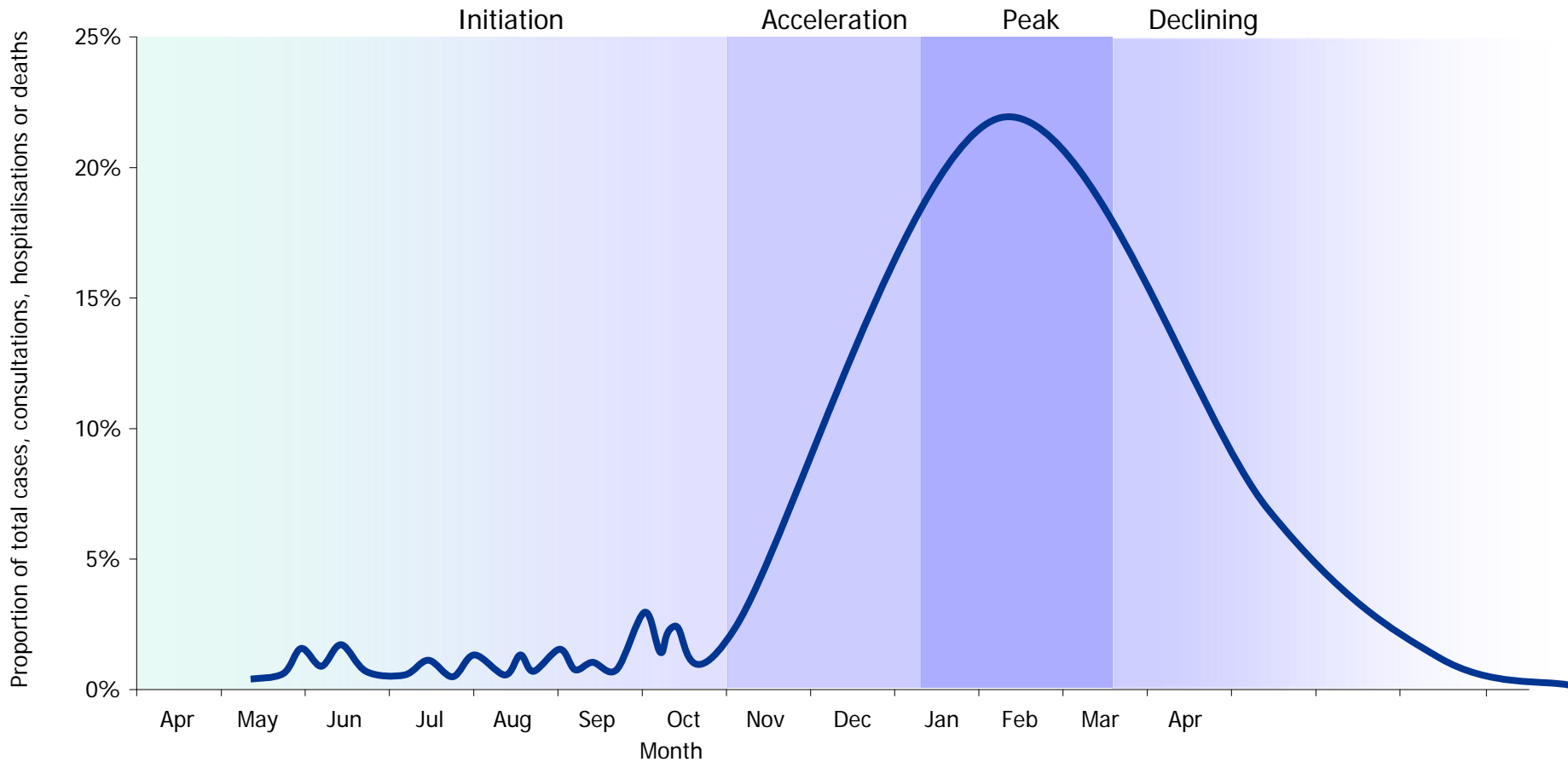


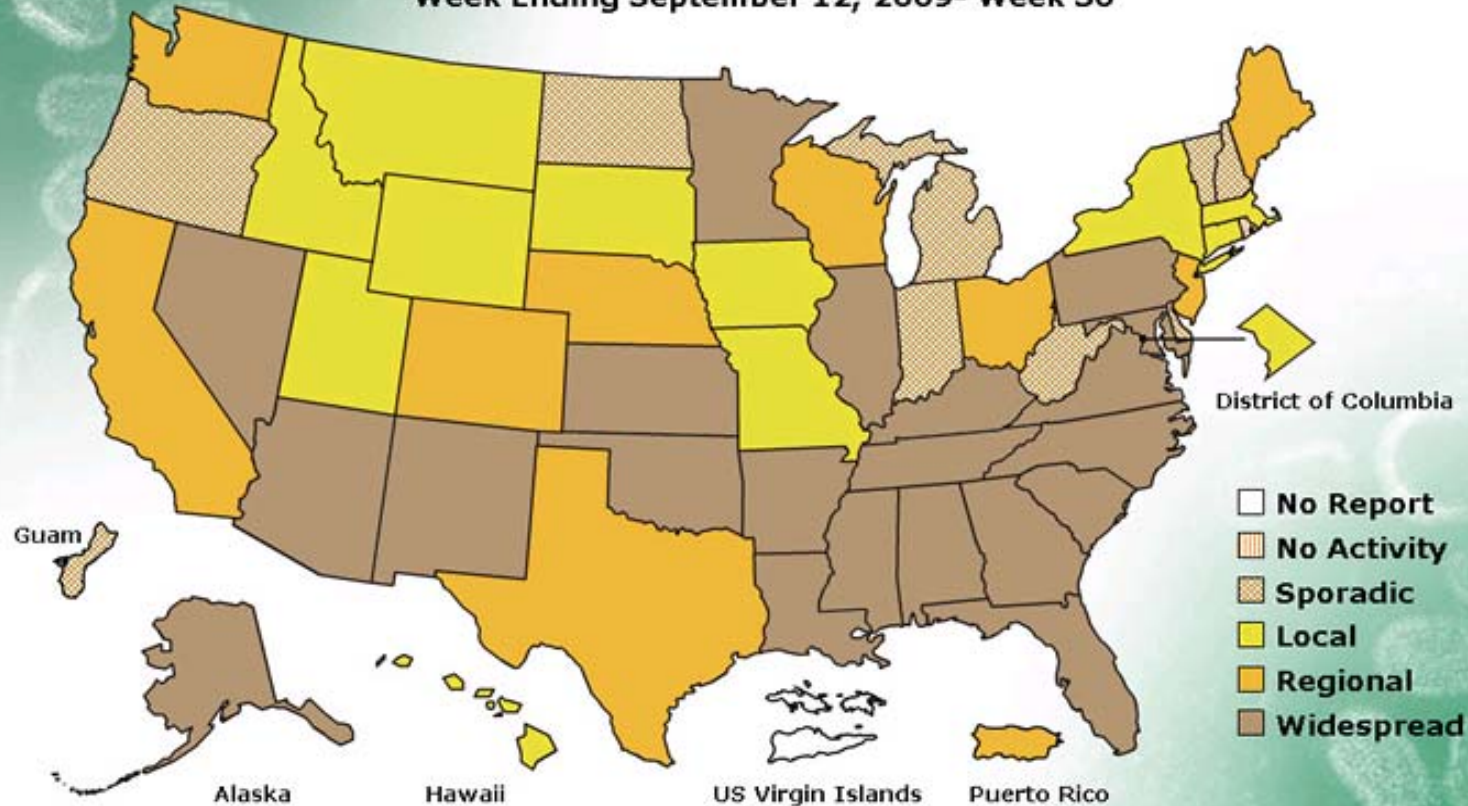
Image source: European Centre for Disease Prevention & Control

FLUVIEW

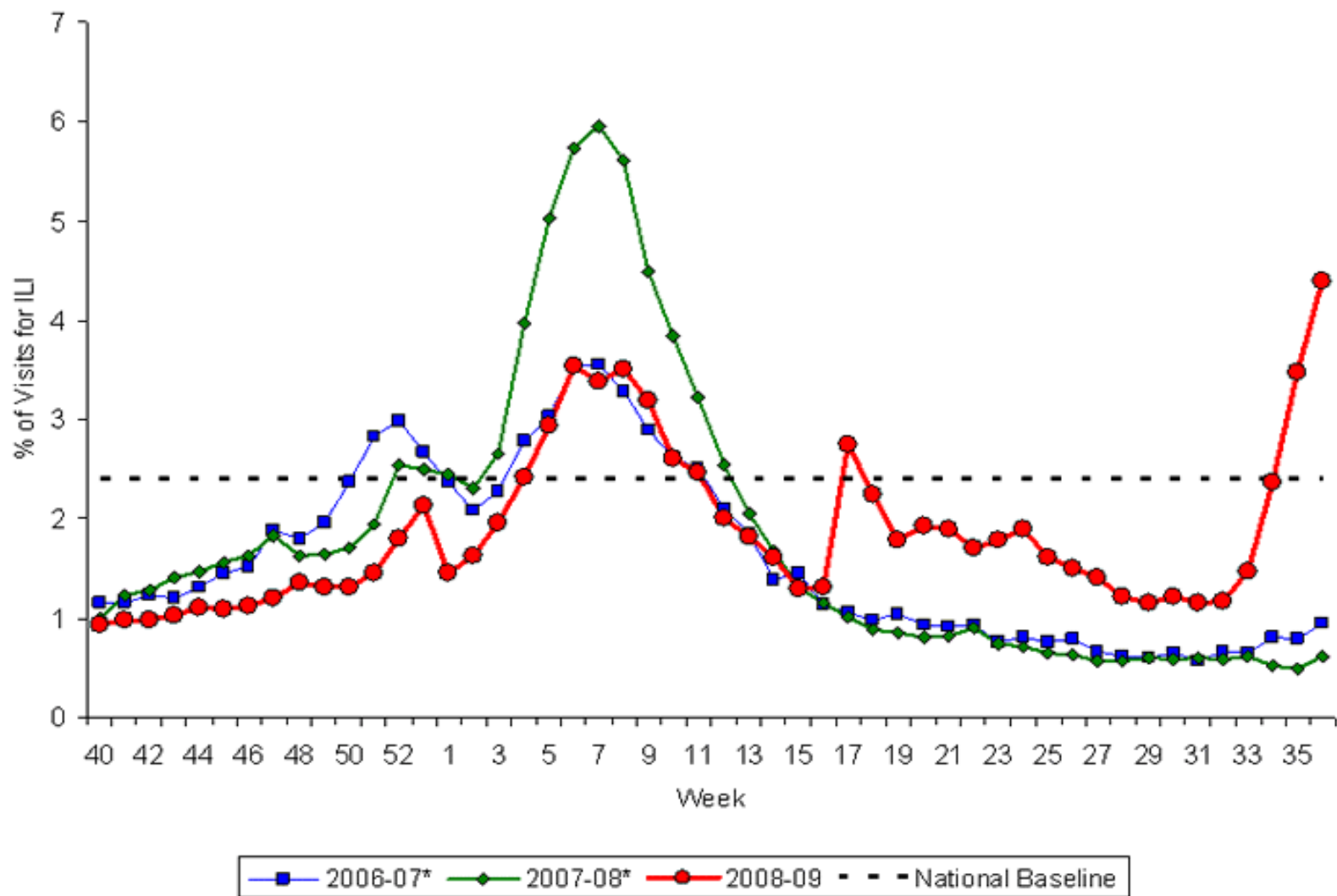


A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending September 12, 2009- Week 36



*This map indicates geographic spread and does not measure the severity of influenza activity.

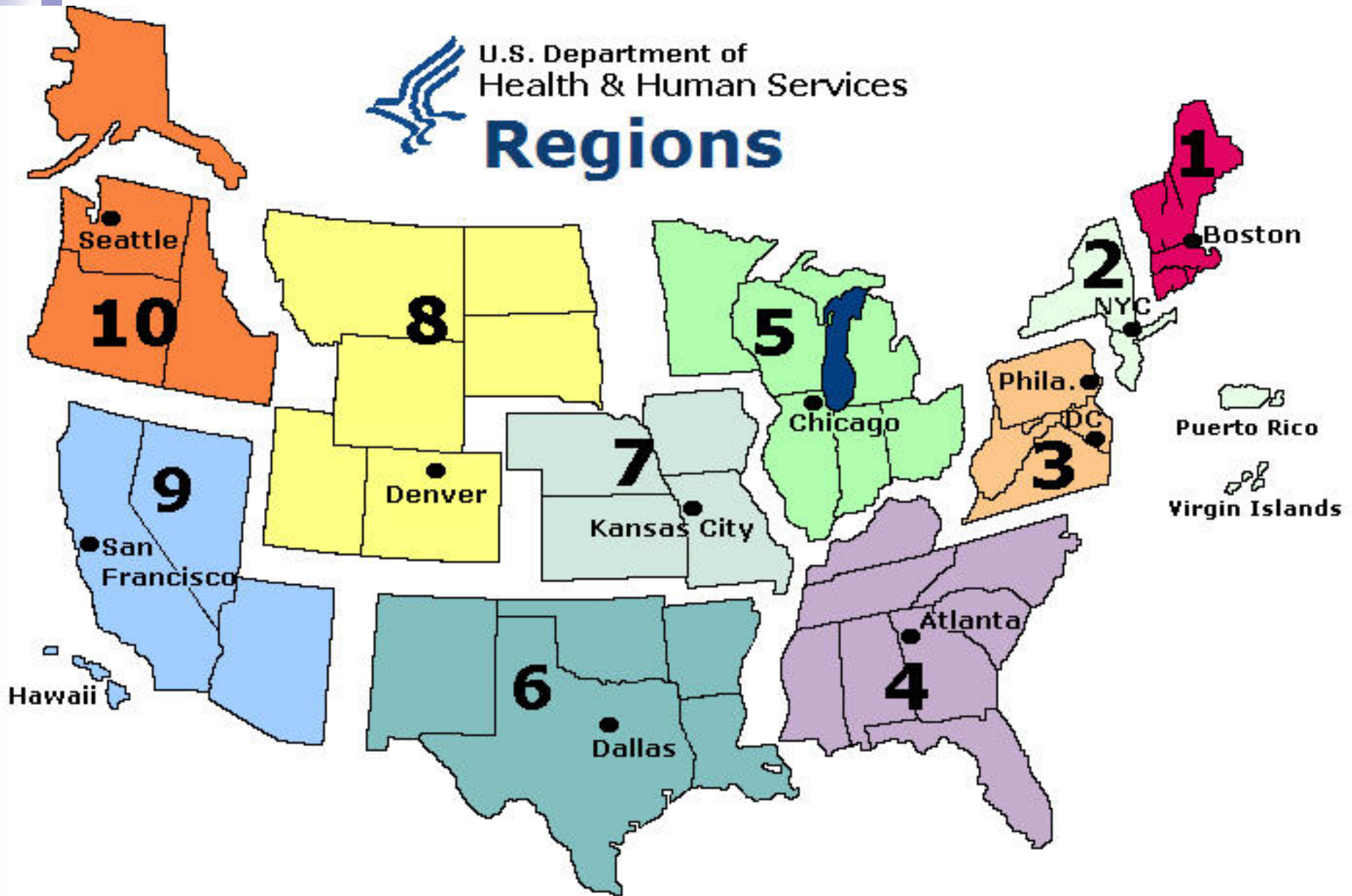


*There was no week 53 during the 2006-07 and 2007-08 seasons, therefore the week 53 data point for those seasons is an average of weeks 52 and 1.

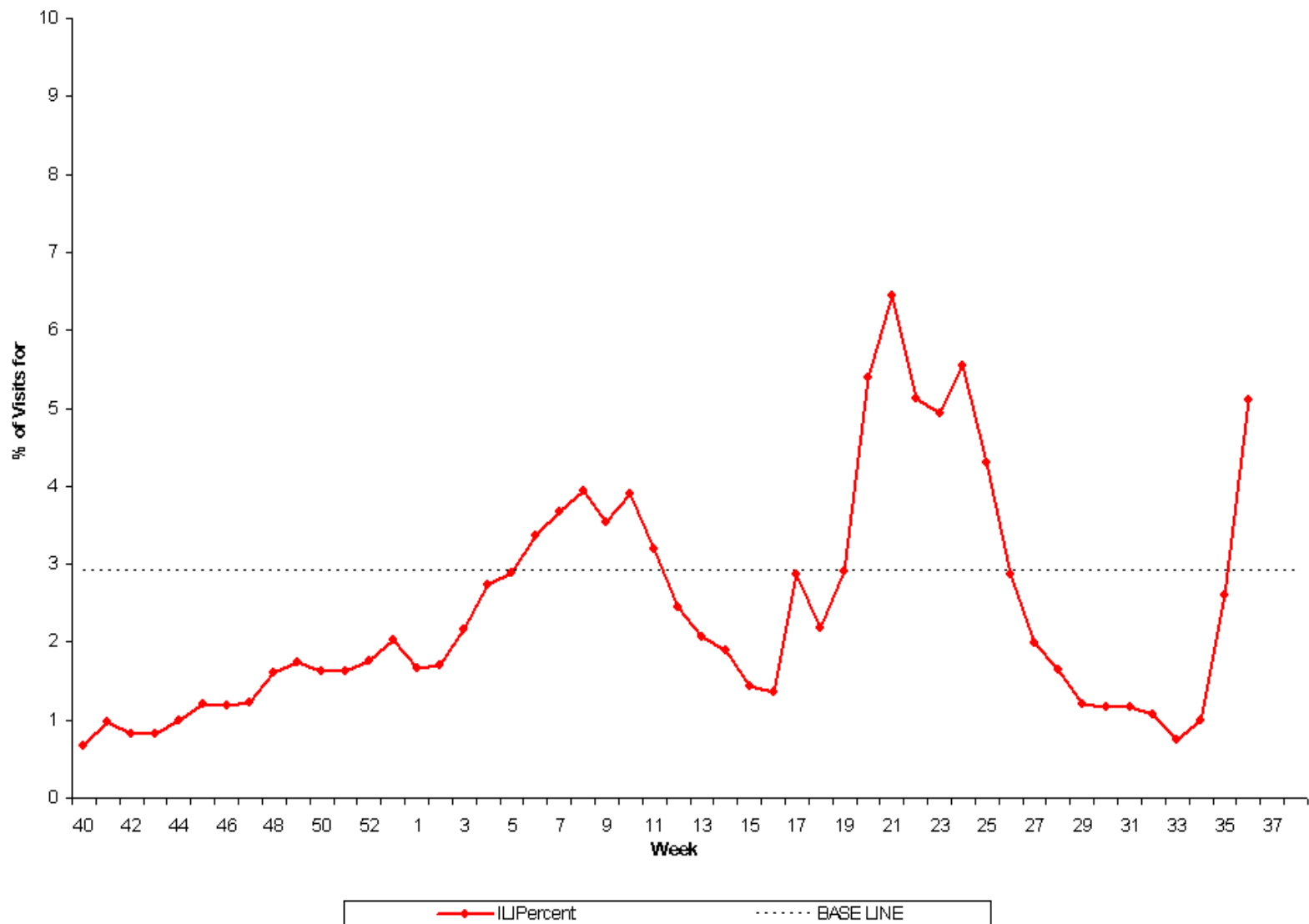


U.S. Department of
Health & Human Services

Regions



WEEKLY PERCENT OF VISITS FOR INFLUENZA-LIKE ILLNESS (ILI) REPORTED BY THE U.S. OUTPATIENT INFLUENZA-LIKE ILLNESS SURVEILLANCE NETWORK (ILINET)
SUMMARY FOR HHS REGION 2 (NJ, NY)



Do We Need a Plan?

1. It “Could” Help Significantly
 - Protect your personnel
 - Reduce the “impact” on your organization
 - Maintain business operations
 - Recover fast

2. It is “Expected”
 - Many started planning in 2004 (Avian Flu)
 - SARS “opened” eyes of many crisis management planners
 - “Failure to plan” “Duty of Care” issues
 - H1N1 revealed that a plan is critical



The Purpose of the Plan

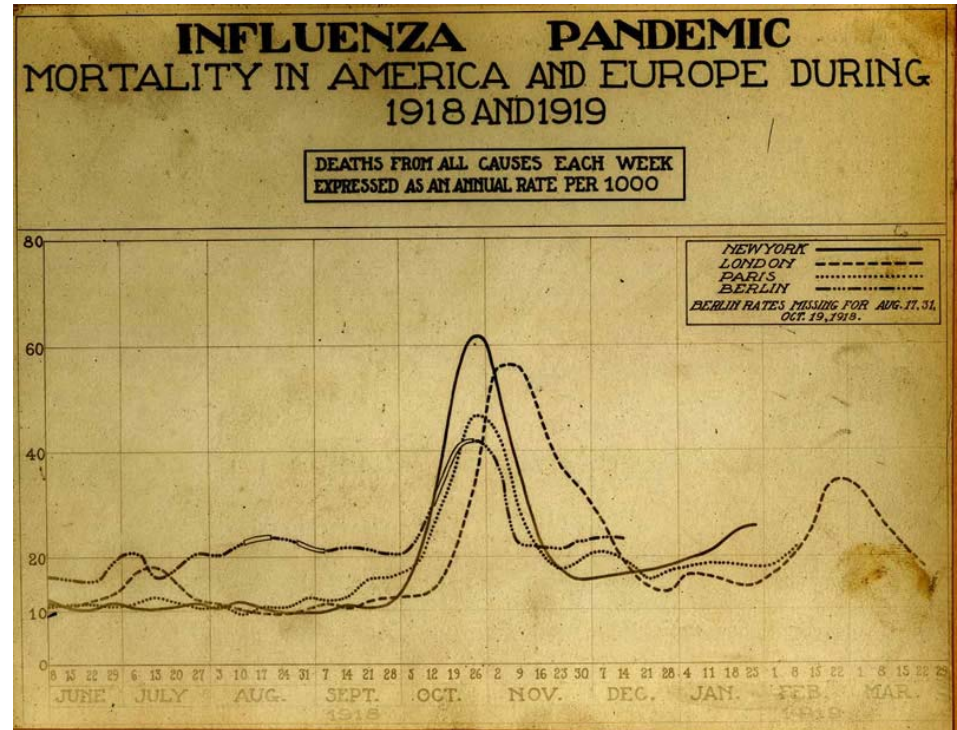
1. To Protect our People
 2. To maintain business continuity
 3. To Endure the Waves
 4. To Recover Fast
- Reduce the potential for the virus entering the workplace
 - Reduce the potential for spread amongst the workforce
 - “Delay and Reduce” the impact of the Pandemic
 - Demonstrate appropriate “Duty of Care”

What We Are Planning For:

1. Flu “waves” last 2-12 weeks
2. Waves fade, then recur multiple times
3. “Peak” of wave lasts 1-3 weeks
4. Some “Mild” waves, some “Severe”
5. Lots of people sick

Implications:

- Some locations will be affected when others are not
- Major travel hubs may be affected first, remote areas later



October 1918

200,000 deaths in USA

Impact

A. Government Interventions

- School Closures
- Public Office Closures
- Public Gathering cancellations
- Business Closures

B. Social Disruptions

- Social service disruptions – transport, food services, utilities
- No personal meetings, social distancing
- Travel disruption
- FEAR

C. Business Disruptions

- Limited business activities
- Shut down non-essential operations
- Supply chain disruptions

Examples of Corporate Interventions

1. **Communications** – posters, FAQ's
2. **Home Quarantine** – stay home if family member ill, returning travelers
3. **Home Isolation** – staff home if ill/telecommute
4. **Travel Restrictions** – To and From affected / impacted areas
5. **Social Distancing** – separation of personnel at work
6. **Personal Protective Equipment (PPE)** – masks, gloves



Examples of Corporate Interventions

7. **Door Screening** – questionnaires to Temp checks
8. **Business Critical only** – close facility except for business critical staff
9. **Antiviral Medications**
10. **Pandemic/Seasonal Vaccine** – the ideal solution, but corporate has little control
11. Corporate Emergency Access System (CEAS)
12. Reverse 911 systems, Hotlines, Calling Trees.

Useful Links

1. www.cdc.gov
2. www.grainger.com
3. www.co.suffolk.ny.us
4. www.who.int
5. www.whitehouse.gov
6. www.state.gov
7. www.nassaucountyny.gov
8. www.health.state.ny.us
9. www.ceas.com

Any Questions?