

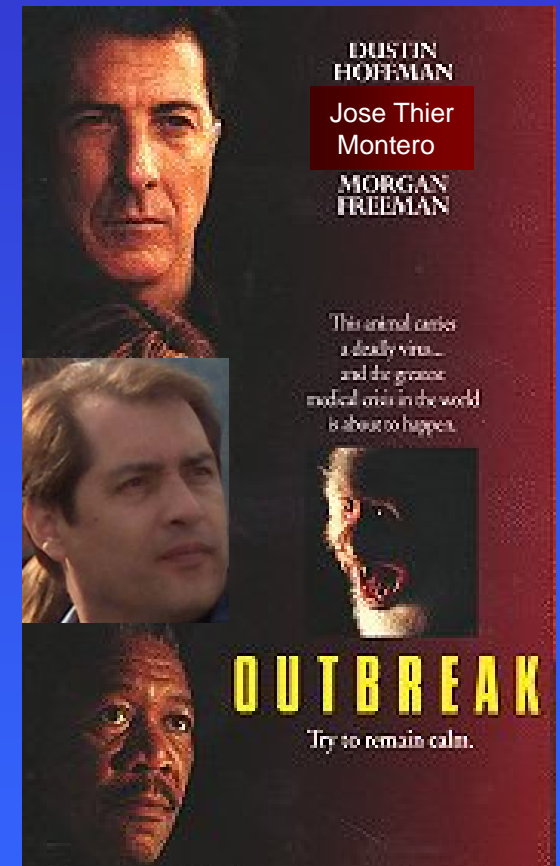
Novel Influenza H1N1: Briefing for Public Safety Officials

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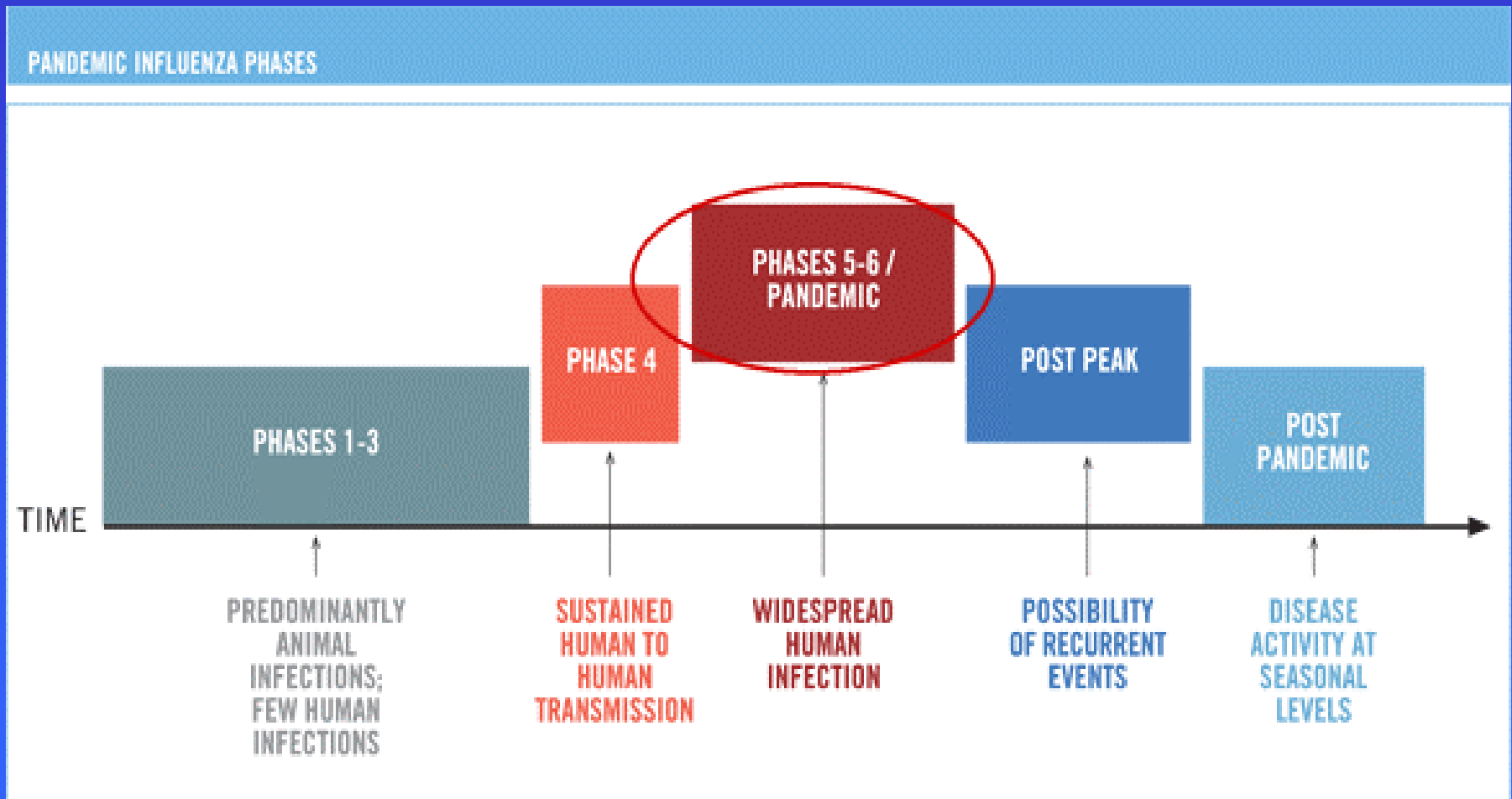


Approach to an Outbreak/Emergency Investigation

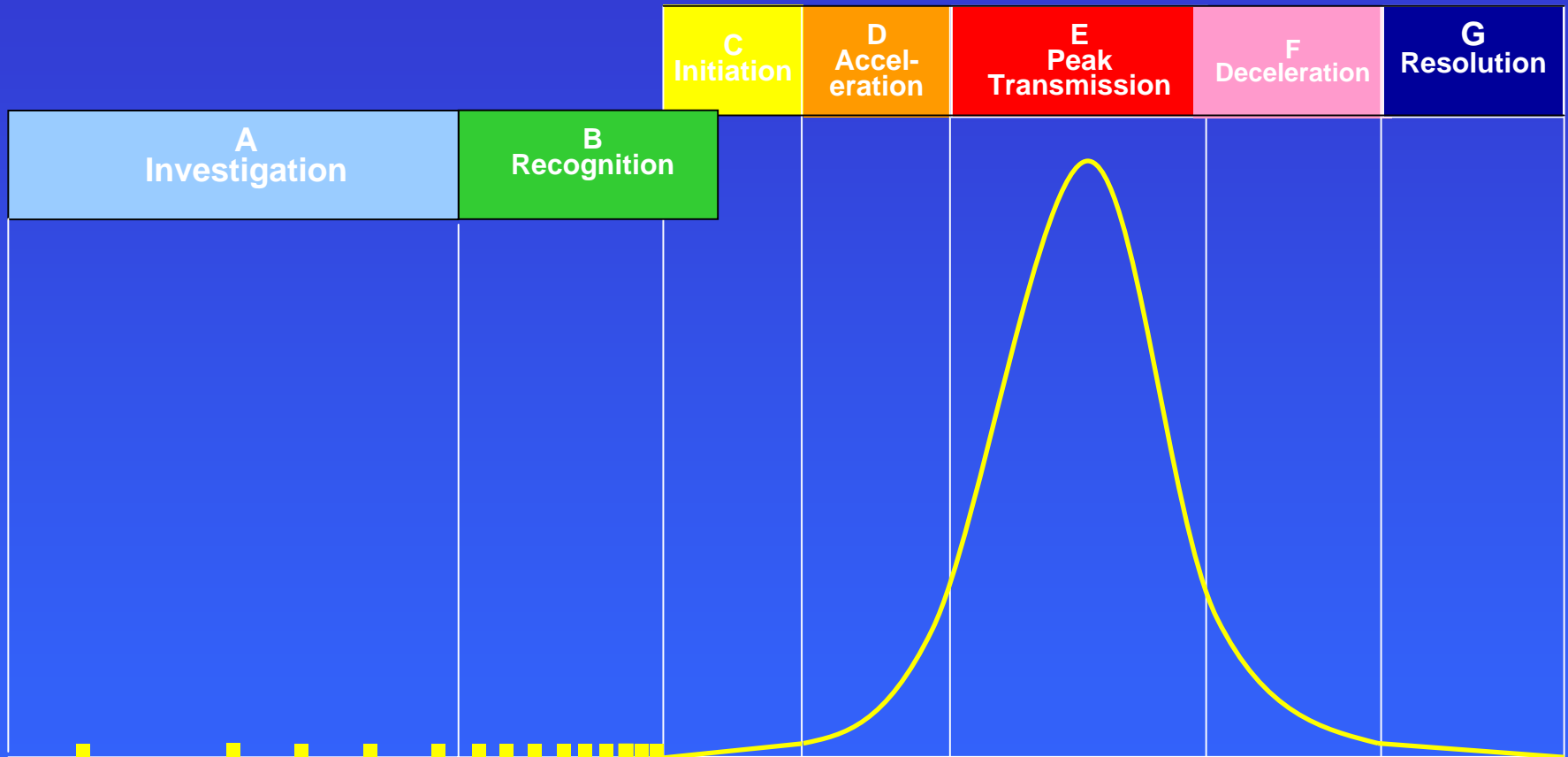
- Determine existence of outbreak
 - Establish definitions
 - Confirm cases
 - Find additional cases
 - Compare with background rate
- Epidemiologic studies
 - Line listing to generate hypotheses
 - Basic demographic and disease-relevant information
 - Epidemic curve
 - Risk factor assessment
 - Case control and cohort studies
- Implement control measures
- Inform



H1N1 Influenza Epidemic Status Worldwide



Pandemic Influenza Intervals



The Pandemic Severity Index (PSI)

Table 1. Pandemic Severity Index by Epidemiological Characteristics

Characteristics	Pandemic Severity Index (PSI)				
	Category 1	Category 2	Category 3	Category 4	Category 5
Case Fatality Ratio (percentage)	<0.1	0.1-<0.5	0.5-<1.0	1.0-<2.0	≥2.0
Excess Death Rate (per 100,000)	<30	30-<150	150-<300	300-<600	≥600
Illness Rate (percentage of the population)	20-40	20-40	20-40	20-40	20-40
Potential Number of Deaths (based on 2006 U.S. population)	<90,000	90,000-<450,000	450,000-<900,000	900,000-<1.8 million	≥1.8 million
20 th Century U.S.Experience	Seasonal Influenza (illness rate 5-20%)	1957,1968	None	None	1918 Pandemic

Please remember JT's Motto:

- What I said yesterday may not be true today,
- What I say today, may not be true tomorrow,
- What I will say tomorrow...
- Who are we kidding? Not even God knows what I'll say tomorrow!

Influenza Virus

- **Spread**
 - Aerosolized droplets from coughing or sneezing up to a 6 foot radius
 - Hand to face contact (nose, eyes, or mouth) after touching infected areas
 - Virus infectious only up to 2-3 hrs on surfaces
- **Incubation period**
 - 1 to 7 days (avg H1N1 3-4 days)
- **Symptom duration**
 - 3 to 7 days but up to 14 days (avg H1N1 3-5 days)
- **Contagious**
 - 1 day before symptoms to 10 days after symptoms
 - peak period while febrile



Influenza Like Illness

- Must-have symptoms
 - Fever plus sore throat or
 - Fever plus cough
- Other symptoms
 - Headache
 - Muscle & joint aches
 - Nausea, vomiting, or diarrhea
 - Fatigue
 - Pneumonia
 - Shortness of breath

H1N1 Influenza

- Novel (new) flu virus in humans
- High attack rate particularly among young
- Generally mild disease in healthy people
- Most hospitalizations & deaths in high risk groups
- More cases than typical at this point
- Differs from seasonal flu
- Caused pandemic (e.g. worldwide spread)

Case Counts

- Case counting is an important tool early on in a pandemic
- After reaching a critical level, individualized counting is not a Public health need.
- Influenza surveillance is done by aggregating the results of several systems
 - Asymptomatic populations
 - Mild, really mild symptoms in some.
 - Wide spectrum of symptoms
- Changing surveillance criteria

Main High Risk Groups for H1N1 Hospitalizations & Death

- Respiratory illnesses (e.g. Asthma, COPD)
- Cardiovascular Disease
- Diabetes
- Pregnancy
- Immunocompromised individuals
- Young people

What to Expect

- Presently it is expected that the current novel H1N1 flu pandemic will affect 30% population over six month period with <1% mortality rate
- Most cases will be mild:
 - People will be sick at home for a week
 - High risk groups more likely to be hospitalized or die
- Vaccines available for
 - Seasonal influenza (now)
 - H1N1 (in late fall)

- **Recommendations**

- A combination of interventions based on:

- Epidemiologic conditions
 - Expected impact
 - Feasibility
 - Acceptability

- Interventions determined through collaborative decision making involving education and public health agencies, parents, and the community



Goals & Strategies

- Prevent people from becoming ill
 - Vaccination
 - Hand washing
- Prevent spread between people
 - Hand washing
 - Cover nose/mouth with arm/tissue: not with your hand
 - Stay home when you are ill until fever-free for 24 hrs
- Treat people who are ill
 - Mild disease: stay home, rest, fluids, acetaminophen
 - Call physician if ill or have chronic medical condition
 - No aspirin for <18 yr olds

- **Recommended Interventions:**

- Respiratory Etiquette

- Cover nose and mouth to cough or sneeze
- Discard tissue after use

- Hand Hygiene

- Encourage wash hands often – especially after coughing or sneezing, before eating, after using the restroom or as otherwise needed
- Alcohol-based hand cleaners are also effective

- **Recommended Interventions (Continued)**

- Exclusion

- Individuals with ILI should remain home for at least 24 hours after they are free of fever or feverishness without the use of fever-reducing medications
 - Can shed virus for more than 24 hours after fever goes away
 - 3 to 5 day exclusion period required in most cases
 - Stay home until the end of this period
 - Avoid contact with others
 - Upon returning to work continue to follow
 - Hand hygiene
 - Respiratory etiquette
 - Exclusion is recommended regardless of antiviral use

- **Recommended Interventions (Continued)**

- Routine Cleaning

- Viruses may spread when persons touch respiratory droplets on hard surfaces and objects then touch their mouth, nose, or eyes
 - Not necessary to disinfect beyond routine cleaning
 - Regularly clean areas and items likely to have frequent hand contact
 - Clean when visibly soiled
 - Use detergent-based cleaners or EPA-registered disinfectants.

Current Testing Guidelines for H1N1 in NH

- Hospitalized patients with influenza like illness
- Healthcare workers with ILI in direct care patient services after consultation with their healthcare provider
- Selected patients suspected to be part of a cluster of undiagnosed respiratory illness and only in consultation with public health
- Testing ongoing with Sentinel providers
- Mild cases will not / should not be tested: Result of a test does not change clinical or public health recommendations, management or outcome

Current School closure/ Mass events recommendations

- At the present level of illness there is no recommendation for school closure or mass event cancellations
 - schools and their communities have a responsibility to balance the risks of illness among students and staff with the benefits of keeping students in school.

Technical Report for State and Local Public Health Officials and School Administrators on CDC Guidance for School (K-12) Responses to Influenza during the 2009-2010 School Year



Influenza Vaccine Programs

- Seasonal flu vaccination
 - Expected in September
 - Will begin prior to H1N1 vaccination program
 - Usual recommendations for who should get it
- H1N1 flu vaccination
 - Initial supply expected in fall
 - Human trials currently underway
 - Likely two shots, one month apart
 - Given to priority groups first

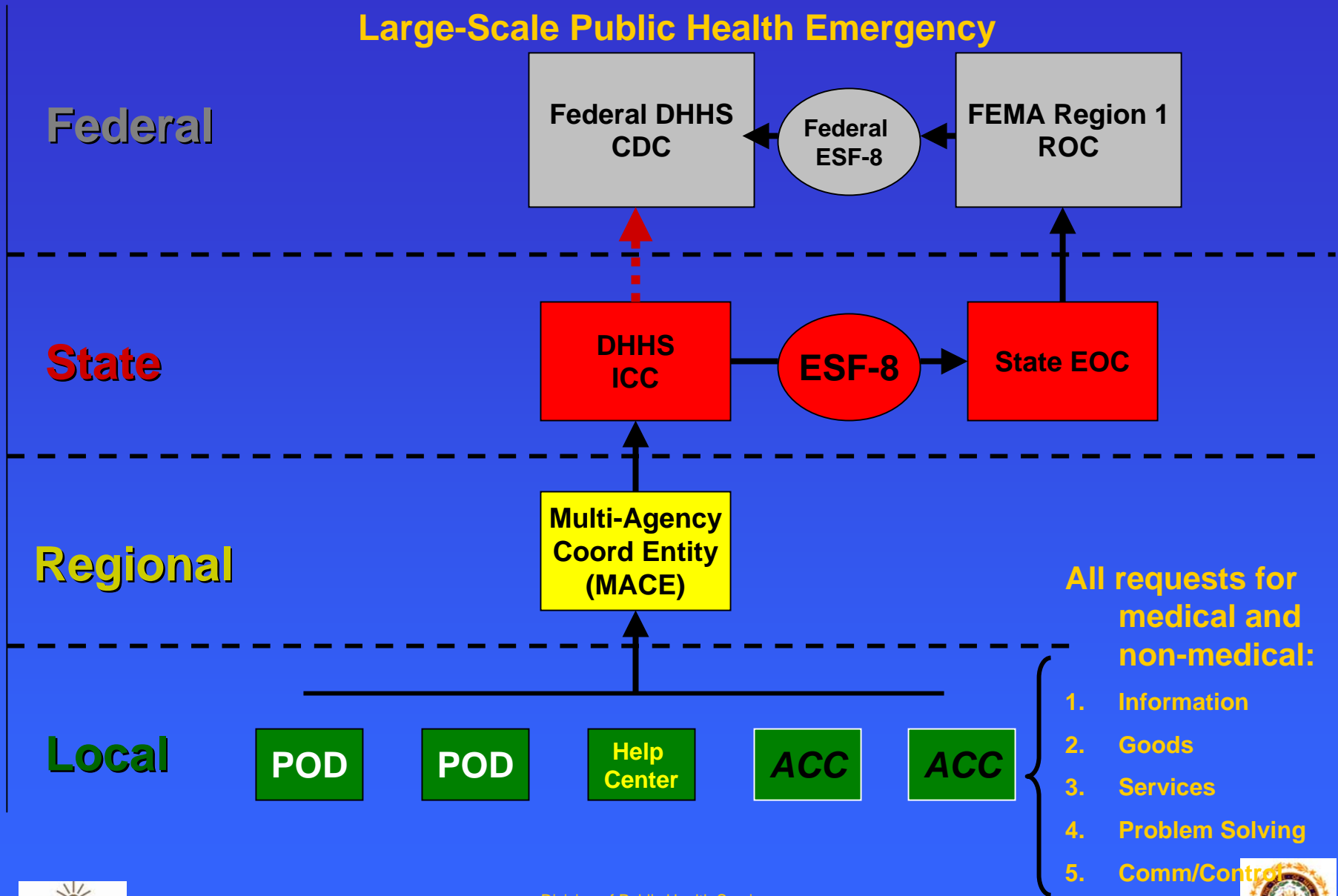


H1N1 Vaccination

- Current Tier I priority groups identified by CDC
 - Pregnant women
 - Caregivers & household contacts for children under 6 months of age
 - Children 6 months to 24 yrs of age
 - Healthcare workers & emergency medical services personnel
 - Adults 24 to 65 with chronic medical conditions at risk for influenza complications



Communications & Resource Support for a Large-Scale Public Health Emergency



Why do we use the All Health Hazard Framework?

- This is an ESF-8, Health and Medical, focused emergency.
- Some of the unique characteristics of a public health emergency necessitate a regional approach (i.e., regionally based hospitals and medical facilities).
- The 15 AHHRs have regional 'Public Health Emergency Preparedness Plans' that should be part of each local emergency operations plan in ESF8, Health & Medical.
- Exercise after-action reports in NH suggest most of the requests are medically oriented during a public health emergency.
- Maximizes utilization of available staff and resources which are typically overtaxed due to the impact of the pandemic on public safety personnel.
- The MACE-based framework fits over the existing local EOC framework.



Local Health Officers & PHEP Planning

- Participate in municipal and All Health Hazard Region (AHHR) planning teams
 - Understand the responsibilities assigned to you in a LEOP
 - Coordinate with the EMD to link your LEOP Health and Medical plan with AHHR plans
 - Collaborate in AHHR planning teams to ensure your communities' needs are addressed and its assets are included in the AHHR plan



Local Health Officers & PHEP Planning

- Target your role in AHHR planning based on your personal professional knowledge & skills
 - Health professionals: Help plan the medical components of Acute Care Centers and mass vaccination sites
 - Building professionals: Ensure these facilities plans comply with health and safety regulations
 - EMS professionals: Help plan triage and transport components of the medical surge plan

Health Officers & PHEP Communications

- Ensure the DPHS Health Officer Liaison unit has current 24/7 contact information to maintain your Health Alert Network account
- Provide briefing to to municipal officials based on guidance and information from DPHS
- Coordinate public education efforts in your community



Local Health Officers & PHEP Response

- Participate in local EOC operations as designated in the LEOP
- Act as a liaison for public health issues between the MACE and local officials when the local EOC is not activated
- Assist in staffing the AHHR MACE, especially during long-term events

Local Health Officers & PHEP Response

- Help staff Acute Care Centers, mass vaccination clinics, Neighborhood Help Centers where your community's residents will receive services
- Coordinate with EMD & EMS to meet the needs of individuals & families in voluntary, home-based quarantine
- Coordinate ongoing dissemination of health related information & resources to residents



Information Resources

- HEALTH

- www.dhhs.state.nh

- For General Public Health related Questions, including H1N1:
603-271-4496, 8:30 AM - 4:30 PM regular business days
603 –271 –5300, or 1-800-852-3345 ext 5300 after hours

- Report regular outbreaks @ 603-271-4496

- Federal Resources

- Centers for Disease Control and Prevention (CDC)

- www.cdc.gov

- Flu.gov

- www.flu.gov



THE MORE WE REASSURE THEM, THE MORE THE PUBLIC GET WORRIED. I DON'T KNOW WHY...



PANDEMIC

PAN IC



Waters - Nurse - 1995



Division of Public Health Services
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Thanks a lot



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