# Pandemic Preparation in the Commonwealth

Mass Health Policy Forum 6/8/06

#### Our Goal

- When the pandemic has passed, and the impact of the wave recedes, we will be able to look back and know:
  - That the Commonwealth of Massachusetts did everything it could; and
  - That by having the right plans in place, and the capability to respond effectively and efficiently, we were able to come together to meet the challenges.

### Our Goal

- We will be able to say that:
  - We maintained essential services,
  - We preserved life and minimized discomfort,
  - We created a supportive caring network for our most vulnerable,
  - We minimized the suffering of ALL our residents, and
  - We protected our families and first responders.

### World Health Organization

WHO global influenza preparedness plan

The role of WHO and recommendations for national measures before and during pandemics

**HHS Pandemic** 

Influenza Plan

Commonwealth of Massachusetts

Influenza Pandemic Preparedness Plan

Revised January 2006



U.S. Department of Health and Human Services

November 2005





Department of Communicable Disease Surveillance and Response Global Influenza Programme

### What must we prepare for?

- Surge capacity within the health care system (personnel and hospital capacity).
- Assure the health and safety of the most vulnerable citizens.
- Assure the continuity of society.
- Surveillance / real time identification capability regarding flu outbreaks.
- Timely, effective communications.

### Overall Planning Process

- Global / International, and National (WHO, HHS / HRSA, CDC / BT, DHS / HSPD-8)
  - Surveillance, Doctrine / Guidance, National Stockpile,
     Preparedness Grants
- State / Regional (EOPS / MEMA, EOHHS / MADPH)
  - Comprehensive Emergency Management Planning for all ESF's
- Local / Institutional
  - COOPs for Businesses, Schools, Colleges, Churches, Community Based Agencies / Providers, Municipal Government
- Family / Individual
  - Emergency plans, supplies, and contingencies

### MA Preparedness Planning

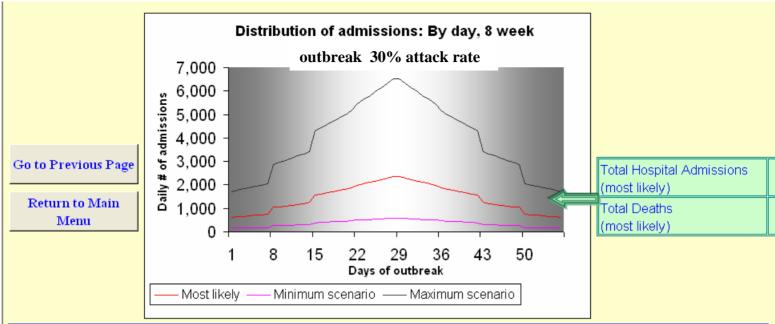
- Through EOPS / MEMA Continuity of Operations (COOP) and Continuity of Government (COG) plans have been prepared for all executive branch agencies
  - Agencies responsible for the 18 Emergency
     Support Functions (health care, food, water, energy, public safety, transportation, etc.) have prepared comprehensive, "All Hazard" COOPs to ensure the continuity of society.

### MA Preparedness Planning

#### • Through EOHHS / MADPH:

- An education and outreach campaign has been launched through regional forums across the state.
- All HHS agencies and providers have been required to develop comprehensive COOPs that specifically address the impact of an influenza pandemic to patients as well as the work force.
- The potential impact of a pandemic on the population at large and the health care system in specific has been analyzed at all levels to identify and address vulnerabilities.

## Impact Estimates



Pandemic Influenza Impact / Weeks		1	2	3	4	5	6	7	8	9	10
Hospital Admission	Weekly admissions		8,000	12,000	15,200	15,200	12,000	8,000	4,800		
	Peak admissions/day				2,369	2,369					
Hospital Capacity	Capacity # of influenza patients in hospital		5,881	8,821	11,173	11,569	10,169	7,799	5,116		
	% of hospital capacity needed	27%	44%	67%	84%	87%	77%	59%	39%		
ICU Capacity	# of influenza patients in ICU	2,400	5,090	7,816	10,324	11,173	10,869	8,637	5,964		
	% of ICU capacity needed	169%	358%	550%	726%	786%	764%	607%	419%		
Ventilator Capacity	# of influenza patients on ventilators	720	1,527	2,345	3,097	3,352	3,261	2,591	1,789		
	% usage of ventilator	87%	185%	284%	375%	406%	395%	314%	217%		
Deaths	# of deaths from influenza			1,200	2,000	3,000	3,800	3,800	3,000	2,000	1,200
	# of influenza deaths in hospital			840	1,400	2,100	2,660	2,660	2,100	1,400	840

Notes: 1. All results showed in this table are based on most likely scenario.

80.000

20.000

<sup>2.</sup> Number of influenza patients in hospital, in ICU, and number of influenza patients on ventilators are based on maximum daily number in a relevant week.

<sup>3.</sup> Hospital capacity used, ICU capacity used, and % usage of ventilator are calculated as a percentage of total capacity available (see manual for details).

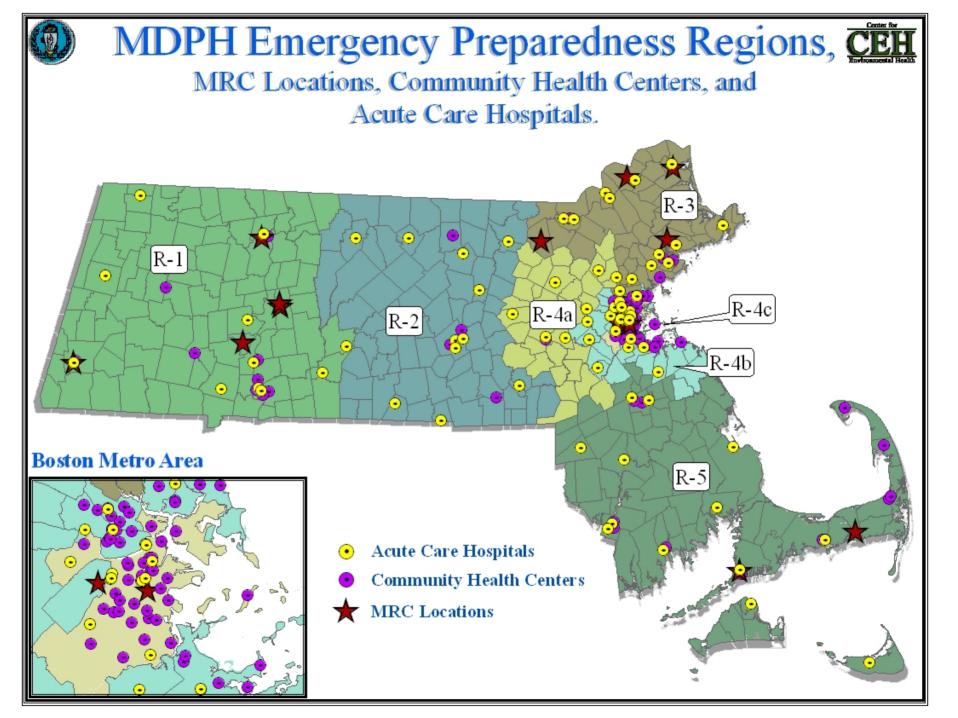
<sup>4.</sup> The maximum number of influenza patients in the hospital each week is lower than the number of weekly admissions because we assume

# Comparison of Pandemic Planning Numbers

	1958/68-like	MDPH Surge Planning*	1918-like		
# Ill	2 M (30%)	2M (30%)	2 M (30%)		
Hospitalizations	20,000 (1%)	80,000 (4%)	220,000 (11%)		
ICU Care	2,746	Peak – 11,173	31,680		
Mechanical Ventilation	1,368	Peak – 3,352	15,840		
Deaths	4,600 (0.23%)	20,000 (1%)	42,000 (2.1%)		

<sup>\*</sup>Based on 3X 1968 projections (Trust For America's health report: A Killer Flu, www.healthyamericans.org, June 2005)

# Hospital Surge Capacity



## Surge Bed Capacity vs. Need

	Levels 1 and 2	Level 3	Level 4 *	Total Bed Capacity	Total Beds Needed	Variance
1 (West.)	2,122	277	1,026	3,425	3,284	141
2 (Central)	1,948	460	579	2,987	2,867	120
3 (N.E.)	2,663	788	1,286	4,737	4,022	715
4AB (128)	2,879	740	915	4,534	5,096	(562)
4C (Bos.)	3,013	978	748	4,739	4,014	725
5 (S.E.)	2,761	324	517	3,283	4,277	(994)
STATE	15,061	3,567	5,071	23,705	23,560	145

<sup>\*</sup> Requires Purchase of Beds & Supplies

### Health Care Personnel

# Health Care Personnel Recommendations

- Hospital staff could be reduced by as much as 40% during Pandemic, therefore:
  - In order to assure essential workforce capabilities we must optimize the MA System for Advanced Registration of Volunteer Health Professionals.
  - Critical to the viability of such a system, and thereby our capability of assuring adequate personnel is the passage of legislation that indemnifies said volunteers and makes them eligible for worker's compensation insurance; and
  - Leverage Regional Medical Reserve Corps' capacity to recruit, train and coordinate local medical volunteers.

### MA Preparedness Planning

#### • Governor Romney:

- Hosted a State-wide Pandemic Planning Summit 2/7/06 with HHS Secretary Leavitt.
- Submitted a \$36.5 Million Supplemental Budget Request for Pandemic Preparedness.
- Hosting 5 Regional Pandemic Planning Conferences
  - Targeting key sectors (municipal leaders, business, schools, colleges / universities, community based organizations and public safety / health and hospitals) across the Commonwealth as partners to promote local preparedness.

### **Summary Recommendations**

- The Governor's supplemental budget request to "Provide Funding to Support Pandemic Preparation and Response in the Commonwealth" would support efforts to:
  - Assure Availability of Adequate Health Care Personnel:
    - Establish MSAR of health care volunteers
    - Approve legislation indemnifying volunteers
    - Enhance Medical Reserve Corps
  - Enhance Hospital Surge Capacity
  - Develop State Stockpile of Antiviral Medications
  - Enhance State Laboratory Surveillance Capabilities
  - Develop 30 day Stockpile of Food, Supplies and Medications for State Operated 24 / 7 Hospitals / Programs

## Upcoming Milestones

- Follow-up activities identified through the conferences will be in process by July.
- Guidance / directives from the administration on key issues should be disseminated in July:
  - Mandatory closures, Quarantine and travel restrictions,
     Communication / notice protocols, Indemnification of volunteers, Locations of local Influenza Specialty Care Units (ISCUs)
- Simulations / exercises will be rolled-out during July, August and September
- Public education campaigns in Fall 2006

### What the public can do

- Educate yourself and family members:
  - Review the "Pandemic Influenza Guide for Individuals and Families" included in your package and at <a href="www.pandemicflu.gov">www.pandemicflu.gov</a>
- Develop a home emergency plan and put together a kit as detailed by the Red Cross:
  - http://www.redcross.org/services/prepare/0,1082,0\_91\_,00.html
- As best you can, keep a supply of canned and dried food in the home
- Talk with your healthcare provider about having more than a 30-day supply of needed medications
- Maintain good health and good habits