

# Iowa's Antiviral Stockpile Program

## Preparing for an Influenza Pandemic

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## Pandemic Influenza Stockpiles

- Two stockpiles of antiviral medications and support material for utilization in the event of an influenza pandemic
  - State stockpile:
    - Antiviral medications
  - Federal Stockpile:
    - Antiviral medications
    - Personnel Protective Equipment (PPE)
    - Supportive medical equipment & supplies

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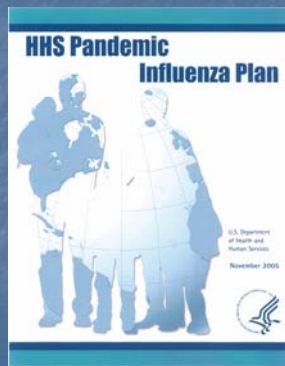
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## Antiviral Medications

- National Pandemic Influenza Response Plan:
  - Department of Health and Human Services
- Recommendation:
  - Stockpile antiviral medication to treat 25% of the U.S. population



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## Iowa's Stockpile Program

- Legislative Executive Council approved one-time funding for purchase, storage, and maintenance of Iowa's antiviral medication stockpile (August 2006)
- Iowa Department of Public Health (IDPH) identified as lead agency

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## Antiviral Medications in Stockpiles

- Tamiflu<sup>®</sup>
  - Oseltamivir (Roche)
  - FDA approved for treatment & prophylaxis of influenza virus strains A & B
- Relenza<sup>®</sup>
  - Zanamivir (GlaxoSmithKline)
  - FDA approved for treatment & prophylaxis of influenza virus strains A & B



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## Stockpiled Courses of Antiviral Medications

<b>State Controlled</b> <small>(completed June 2007)</small>	Tamiflu	247,110
	Relenza	61,777
		<b>308,887</b>
<b>Federally Controlled</b> <small>(estimated completion date December 2008)</small>	Tamiflu	350,736
	Relenza	87,684
		<b>438,420</b>
<b>Combined Stockpiles</b>	Tamiflu	597,846
	Relenza	149,461
		<b>747,307</b>

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## Antiviral Medication Course

- Amount of medication necessary to treat a single patient
- Tamiflu: 10 capsules
  - 75mg each capsule
- Relenza: 5 oral inhalation disks (Rotadisk®)
  - 4 blisters per disk
  - 5mg per blister
  - 100mg per course

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## Use of Stockpiled Antiviral Medications

- Utilization by established guidelines
  - Will not know details until pandemic is declared
- IDPH State Medical Director/Epidemiologist or Deputy State Epidemiologist will be prescribing physician
  - Issue standing orders/protocol at time of release

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## Determining Priority Groups

- Priority groups can not be determined until the virus emerges:
  - National guidelines
  - State Medical Director/Epidemiologist
  - Infectious Disease Advisory Committee (IDAC)
  - Others sources
- Based on:
  - Characteristics of the virus
  - How sick people are getting from the virus
  - Population the virus is attacking
  - How easily the virus is transmitted
  - Availability of vaccine and antivirals

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## Release of State Controlled Antiviral Medications

- State will be notified:
  - WHO Phase 4-5
    - Deployment of federally controlled pandemic influenza assets to states will begin
- State Response:
  - Deployment of state controlled stockpile to counties



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## Deployment of State Antiviral Stockpile

- Notification:
  - Health Alert Network (HAN)
- How much:
  - *Pro rata* to each county
  - Initial (base) supply
- Utilization Guidance:
  - Assets may or may not be immediately utilized
  - Standing Order/Protocols
- Ancillary Stockpile:
  - 30,000 courses maintained by state
  - "Ring" Treatment/prophylaxis



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WHO Global Pandemic Phases & Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
<b>INTER-PANDEMIC PERIOD</b>			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk county
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.		
<b>PANDEMIC ALERT PERIOD</b>			
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.	0	New domestic animal outbreak in at-risk county
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.	1	Suspected human outbreak overseas
5	Larger 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)		
<b>PANDEMIC PERIOD</b>			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves

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## Deployment of Federal Assets to States

- Part 1
  - Antiviral medications
- Part 2
  - Masks and respirators
- Part 3
  - Additional PPE, IV antibiotics, ventilators and other medical items needed



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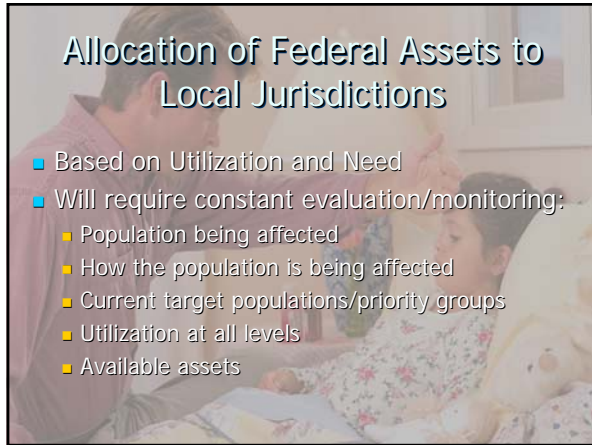
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## Allocation of Federal Assets to Local Jurisdictions

- Based on Utilization and Need
- Will require constant evaluation/monitoring:
  - Population being affected
  - How the population is being affected
  - Current target populations/priority groups
  - Utilization at all levels
  - Available assets



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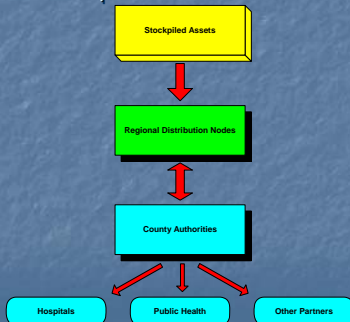
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## Distribution and Transportation of Assets

Will follow process established for SNS



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## Vaccine

- Pre-pandemic vaccine
  - Limited federal stockpile
  - Current strain of H5N1
  - Unknown protection during pandemic
- Pandemic vaccine
  - 4-9 months to develop once strain is identified
  - Probable IND and/or EUA utilization
- Priority Groups
  - Will be determined at national level

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## Local Considerations

- Command Structure
- Transportation
- Storage
- Dispensing/Administration of Pharmaceuticals or Medical Supplies

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## Other Considerations

- Expect waves
  - Not everyone will be sick at the same time
  - May last from 6 months to 2 years or longer
- Utilization of non-pharmaceutical interventions
  - Education and understanding
- Who will dispense medication and/or administer vaccinations?
- How will you communicate with all local partners
  - May change based on the priority groups or targeted populations

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Additional Questions  
or Discussion?

Thank You



Iowa Department of Public Health



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