



**United States Department of  
Health & Human Services  
Office of the Assistant Secretary for Preparedness and Response (ASPR)**

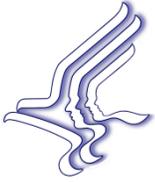
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# **Stockpiling Influenza Antiviral Drugs and Other Countermeasures**

**Biomedical Advanced Research and Development Authority (BARDA)**

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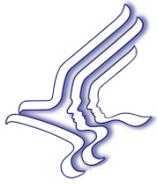


# Stockpiling Questions to Consider

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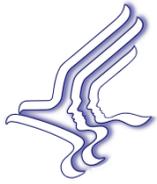
- **Why stockpile countermeasures?**
- **What countermeasures has HHS stockpiled for pandemic preparedness?**
- **What are considerations for stockpiling pandemic influenza countermeasures?**



# Why stockpile countermeasures for pandemic influenza?

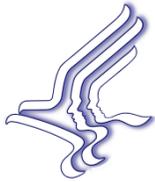


- **When we need a large quantity in a short period of time**
- **When it is or may become a scarce but necessary resource**
- **When a product has no commercial market/is not otherwise available**



# HHS Pandemic Influenza Preparedness Policy





## **Key Stockpiling Actions from the *National Strategy for Pandemic Influenza***



- 6.1.5. - Encourage and subsidize the development of State-based antiviral stockpiles to support response activities**
  
- 6.1.6. - Ensure our national stockpile and stockpiles based in states and communities are properly configured to respond to the diversity of medical requirements presented by a pandemic, including personal protective equipment, antibiotics and general supply**
  
- 6.1.7. - Establish domestic production capacity and stockpiles of countermeasures to ensure sufficient antiviral medications and vaccine for front-line personnel and at-risk populations, including military personnel**
  
- 6.1.9. - Establish domestic production capacity and stockpiles of countermeasures to ensure antiviral treatment for those who contract a pandemic strain of influenza**



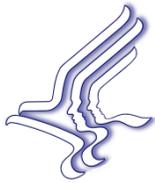
# National Pandemic Influenza Antiviral Drug Program



- Target of 81 M stockpile of treatment courses between HHS and States
- Defined mix of oseltamivir and zanamivir

Treatment Courses	Stockpile Type	Purpose
6 M	HHS	“Quenching”
44 M	HHS	Treatment
31 M	State	Treatment
81 M	HHS & State Combined	

*National Pandemic Preparedness Plan (Nov. 2005) and HHS Pandemic Preparedness Plan (Nov. 2005): [www.pandemicflu.gov](http://www.pandemicflu.gov)*

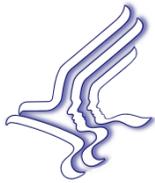


# Development of Federal and State Influenza Antiviral Drug Stockpiles



- BARDA led and managed the State Stockpile Program to 100% participation
  - Achieved 84% of program goal for antiviral purchases
  - Collaborated with CDC to surpass goals outlined in the *NSPI* calling for sufficient antiviral drugs to treat 25% of the US population
  - Contracts signed with Roche, GSK and BioCryst for IV NAIs
  - IV peramivir (purchased for use under EUA)
  - HHS Critical Workforce stockpiles

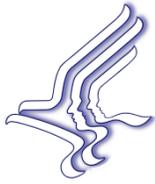




# Current Antiviral Drug Stockpiles



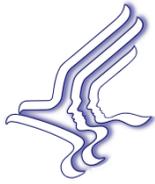
<b>Antiviral Drugs (regimens)</b>	<b>Current SNS Inventory (regimens)</b>	<b>Deployed from SNS in H1N1 Domestic Response (regimens)</b>	<b>State Purchased (regimens)</b>
zanamivir	16.3 M	2.5 M	3.6 M
oseltamivir 75 mg	35.7 M	7.6 M	20.9 M
oseltamivir pediatric formulations (30 mg, 45 mg, suspension)	15.5 M	1.9M	1.2 M
<b>Total</b>	<b>67.5 M</b>	<b>12.0 M</b>	<b>25.7 M</b>
IV peramivir (Investigational)	9,071	2,129	NA



# Other Countermeasures for Pandemic Preparedness



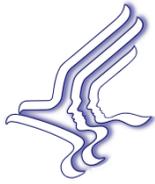
- **Ventilators and associated equipment**
- **Antibiotics for secondary infections and intravenous fluids**
- **Personal Protective Equipment and infection control supplies**
- **Needles and syringes**



# Respirators and Masks to Support All Hazards Response



<b>RPD</b>	<b>SNS Inventory (March 2011)</b>	<b>Quantity Deployed in H1N1 Response</b>
N95 Respirators (NIOSH)	12.4 M	27.8 M
N95 Respirators (NIOSH/FDA)	5.4 M	57.4 M
Surgical Masks	37.7 M	14 M
<b>Total</b>	<b>55.5 M</b>	<b>99.2 M</b>



# Other Countermeasures for Pandemic Preparedness

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## Ancillary Supplies:

- **56 M kitted syringes**
  - Needles, syringes, and alcohol swabs
- **10 M PFS needles (adults and peds)**
- **3M mixing syringes for adjuvanted vaccines**





# Conclusions

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- **BARDA, in collaboration with HHS partners, has developed a stockpile of countermeasures to support pandemic preparedness and response**
- **There are risks and benefits to stockpiling countermeasures**
- **Careful consideration must be given to align national needs with countermeasures attributes**



# Interfacing with BARDA



- [www.phe.gov](http://www.phe.gov)
  - Program description, information, news, announcements
- [www.medicalcountermeasures.gov](http://www.medicalcountermeasures.gov)
  - Portal to BARDA
  - Register, request a meeting
  - Tech Watch
- [www.fedbizopps.gov](http://www.fedbizopps.gov)
  - Official announcements and detailed information about all government contract solicitations

