Influenza and Emerging Infectious Diseases (IEID) Vaccine Development

Armen Donabedian, PhD
Branch Chief, Vaccine Development
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Public Health Impact of Influenza

- 20%-40% infected worldwide
- 50M deaths worldwide
- 675,000 deaths in US
- 74 countries affected
- 123,000-203,000 deaths worldwide
- 60.8M infected in US
- 274,304 hospitalizations in US
- 12,469 deaths in US
- Seasonal Influenza Epidemic in US: 5%-20% infected every year, >200,000 hospitalizations every year, $87.1B economic burden every year, $10.4B medical costs every year, 3,000-49,000 deaths every year

2009-2010 H1N1 Pandemic: 1918 ‘Spanish’ Pandemic
Influenza Pandemic Preparedness Accomplishments

Goal

More Effective Vaccines Initiative – FY15

Antigen-Sparing Technology

Recombinant Vaccine

Cell-based Vaccine

Egg-based Vaccine

H7N9 stockpile 2013-2018

H5N1 Q-PAN® Licensed 11/22/13

Flublok® Licensed 01/16/13

FLUCELVAX® Licensed 11/20/12

H5N1 Vaccine Licensed 04/17/07

Vaccinate US Population ≤6 mo.

Manufacturing Improvements

Goal

Ongoing Influenza Countermeasure Initiatives

Domestic Capacity Gaps

Antigen supply
Adjuvant supply

Better, Faster, Flu Vaccines

Speed/Flexibility

Efficacy

One develops disease
Domestic Capacity Gaps
Speed

Modernized release testing

Break Though Vaccine!

Multi-target

e.g. CMI

Administration technologies
Effectiveness

Vaccine Targets
HA stem

Multiple immune pathways

Improved vaccine formulations

Mucosal Immunity

Adjuvants

Single Dose
Speed >> Efficacy

Later Vaccine with Higher Efficacy

Earl...
Partnership Requirements

The vaccine candidate must offer a substantial improvement in pandemic response.
Dear Development Innovator,

Your biologics license application for Awesome is approved effective this date…
Collaboration

Solicitation Number: BAA-18-100-SOL-00003

Area of Interest #8: Influenza and Emerging Infectious Diseases (IEID) Vaccines

• 8.1 Advanced development of more effective influenza vaccine candidates
• 8.2 Innovative vaccine production enhancements.

Technical Point of Contact: Armen Donabedian; Armen.Donabedian@hhs.gov
How to contact BARDA

medicalcountermeasures.gov/home.aspx
Portal to BARDA: Register to request a TechWatch meeting!

www.fbo.gov/ ("FedBizOpps")
Official announcements and info for all government contract solicitations

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