

## BARDA's Mission

BARDA's mission is to protect the American People by developing and making available medical countermeasures to address Chemical, Biological, radiological, and Nuclear (CBRN) threats, Pandemic Influenza, and Emerging, Infectious Diseases.

# BARDA Priorities

BARDA will work with PHEMCE partners to address medical countermeasure needs for the Zika response both domestically and globally.



**Prevent** Zika virus infection through new vaccines



**Detect** acute and previous Zika virus infections through new rapid diagnostics



**Ensure** a blood supply safe from Zika virus through use of screening tests for donated blood and virus inactivation in blood products



**Activate** our National Medical Countermeasure Response Infrastructure to help medical countermeasure developers



# US Zika Vaccine Goals

2016-2018

**Aim #1:** Evaluate available vaccine candidates to assess safety, efficacy, and immunogenicity and identify protective immune correlates during the time of highest disease incidence

By 2018








**Aim #2:** Deploy an available vaccine under an appropriate regulatory mechanism to US populations at high risk of exposure

By 2020









































**Aim #3:** Work with industry partners to commercialize vaccine(s) for broad distribution



## Zika Virus Vaccine Landscape February 2016

Platform	Research & Discovery	Preclinical	Phase 1
Recombinant or Subunit	 		
Live Attenuated	 		
Whole Virus Inactivated			
Nucleic Acid			
Viral Vector			
Other			

## Zika Virus Vaccine Landscape April 2017

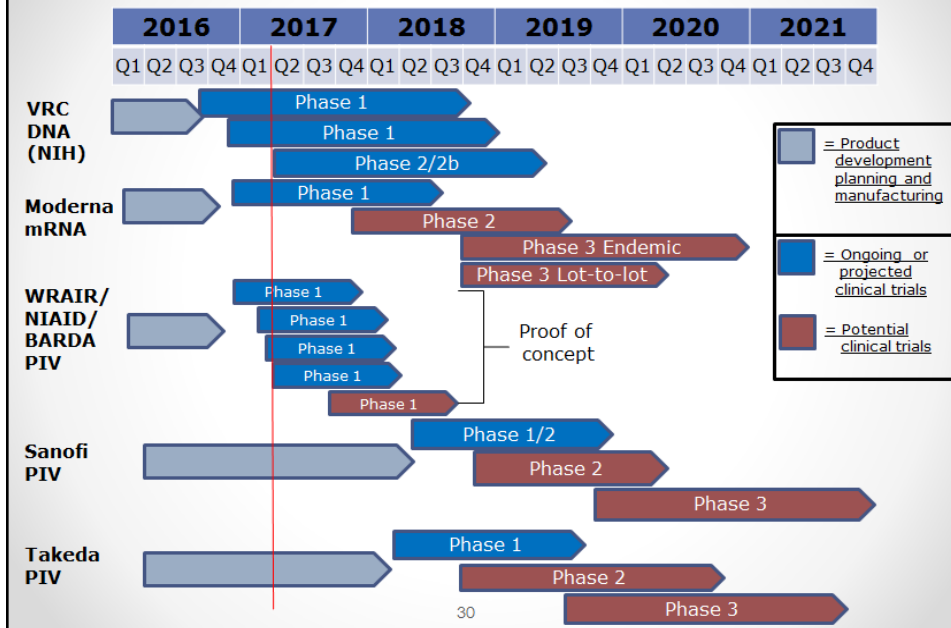
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Live Attenuated	  		
Whole Virus Inactivated	  	  	 
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Viral Vector	    	   	
Other	  		<p>See also the WHO vaccine pipeline tracker for continuing updates  <a href="http://who.int/immunization/research/vaccine_pipeline_tracker_spreadsheet/en/">http://who.int/immunization/research/vaccine_pipeline_tracker_spreadsheet/en/</a></p>

# HHS Zika Vaccines in Development

- **Nucleic Acid Vaccines**
  - DNA – NIAID/VRC, pending partnership
  - mRNA - NIAID/GSK, BARDA – novel vaccine delivery methodologies
  - mRNA – VRC/BARDA/Moderna Therapeutics
- **Whole-particle inactivated vaccines**
  - Based on DoD platform for flavivirus inactivation
  - WRAIR/NIAID/BARDA/SP
  - BARDA/Takeda
- **Live-attenuated dengue/ZIKV chimeric –**
  - Based on NIAID dengue vaccine candidate, for non-obstetric population,
  - NIAID/Butantan
- **Vesicular stomatitis virus (VSV)**
  - NIAID/Harvard



## USG ZIKV Trials – Timelines



# Regulatory Framework to Make Zika Vaccine Available

