First Responder Vaccine Initiative (FRVI)



PRESENTED BY:

Thomas Zink, MD

Biosecurity Subject Matter Expert to PREPARE DHS CWMD's First Responder Vaccine Initiative

MODERATED BY:

Steve Redifer 2021-03-31







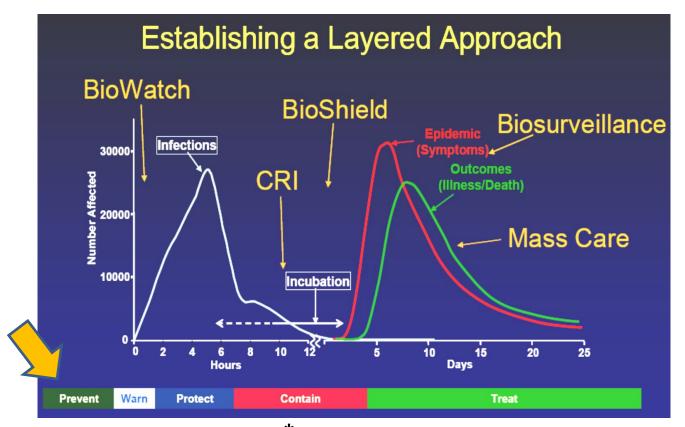
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Program to Ready Emergency Personnel for an Anthrax Response Event

Emergency Care Research Core Washington University - St. Louis

Idea



Rajeev Venkayya, MD, White House Security Council, September 2006

3

Rationale

Threat is a function of three Variables:

- Probability (Intent x Capability)
- Vulnerability
- Impact



As <u>any</u> of these variables approach ZERO...
so does the Threat.

Impact

Past Experience: Anthrax Letters



Number that received antibiotic treatment	30,000	
Number of illnesses	22	
Number of deaths	5	
Decontamination	3 Buildings	
Direct Economic Cost	>\$1B	

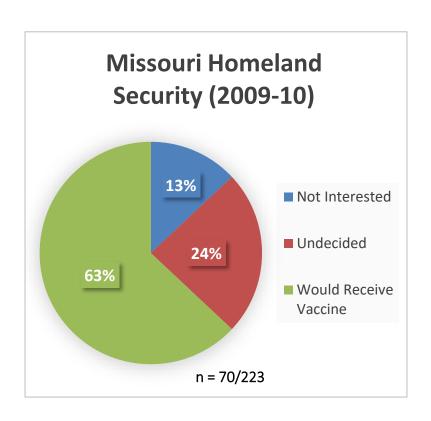
Current threat: Aerosol Release

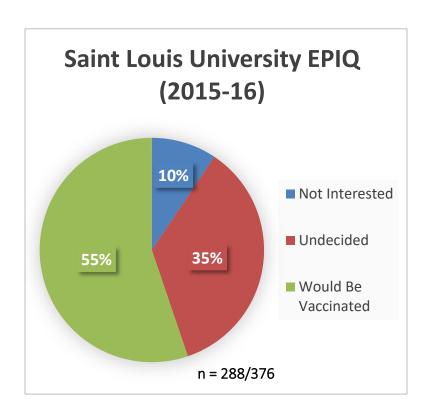


Number that will need antibiotic treatment	1.9-3.4M	
Number of illnesses	~450,000	
Number of deaths	~380,000	
Decontamination	City wide	
Projected Economic Cost	> \$1.6 Trillion	

Target

Responder Opinions on Vaccination Against Anthrax





Target

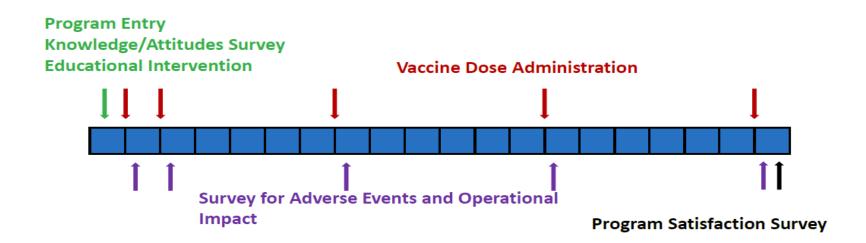
"Pre-event anthrax vaccine may be offered by a participating pilot State to eligible emergency responders who are engaged in response activities that might lead to exposure to aerosolized anthrax spores."*



* First Responder Anthrax Preparedness Act (Public Law 114-268)

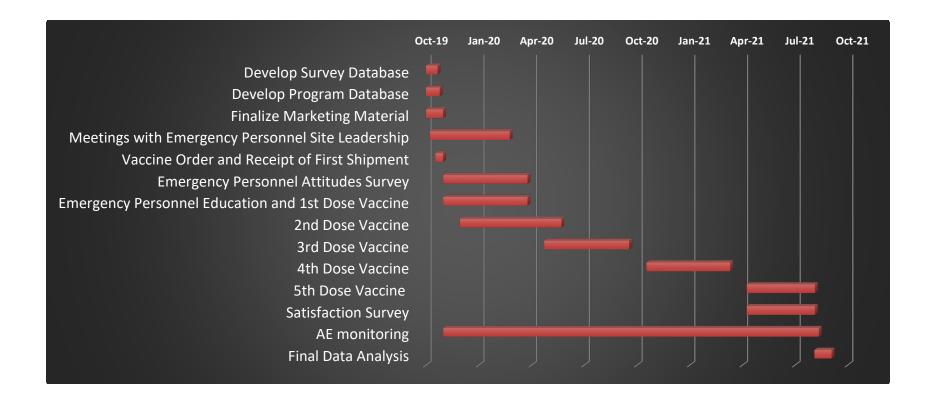
Overview

Project PREPARE



Identify | Reach | Communicate | Tailor | Execute | Document

Program Schedule



Resources

Facilities

- Administrative space in Washington University ECRC
- BSL2 Lab with temp-monitored vaccine refrigerator for secure vaccine storage
- Dedicated Vaccine Suite
- Data Command
 - PREPARE constituent database
 - Vaccine inventory and accountability
 - Survey Response
- Software
 - RedHat Data Management

Analytics & Deliverables

Analytics

- Survey on Anthrax Threat and Vaccine Knowledge and Attitudes
- **Education Intervention Metrics**
- Program Efficiency/Cost Analysis
- Immunization Metrics

Deliverables

- Monthly Progress Reports
- Quarterly Financial Reports
- Yearly and Final Data Analysis



Results to Date

PROJECT PREPARE	Education	Vaccination	% Uptake	
In-Person	1659	1095	679/	
Virtual	30	22	67%	
Asynchronous	520	5	Pending	
Total	2209	1122 +	?	

Acknowledgments

PREPARE Advisory Board

- Stacey House, MD, PhD Co-Chair
- Fred Echols, MD Co-Chair
- Tom Zink, MD (Biosecurity; Vaccinology)
- Brian Froelke, MD (EMS; Disaster Response)
- Gary Christman (Emergency Management)
- Justen Hauser (Disaster Preparedness)
- Ntasiah Shaw, MS, CDP, CEM (Disaster Preparedness)
- Michele Ryan, (Emergency Management)

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- Nurses/Paramedic Coordinators
 - * Sam Broadhacker RN, EMT-P; Aaron Day EMT-P
 - * Bronson Flint EMT-P; Jesse Hocking RN
 - * Stephanie Johnson RN; Jamie Rolando RN
 - ⁺ Misty Tribout RN, EMT-P; Brian Umali, RN
- Program Data Team
 - + Phil Asaro MD
 - ⁺ Julie Ziegler, Danaye Gebru, Aaron Papp

PREPARE

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