BARDA Chemical Medical Countermeasures Program

Efrain E Garcia, Ph.D.
Health Scientist
Chemical Medical Countermeasures Branch
CBRN Division

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ASPR: Saving Lives...Protecting America
Chemical weapons have been used in war and terrorism since World War I and are still being used today!

BARDA Top Priorities for Medical Countermeasure (MCM) Development

- Pulmonary Threat Agents
- Vesicants
- Nerve Agents
- Cyanide
Intentional use of chemical weapons resulting in death in 100 years

- Pulmonary
- Cyanide
- Nerve Agent
- Vesicant
- Other

- 1914
- 1935
- 1937-1945
- 1942-1945
- 1963-1967
- 1978
- 1982
- 1988
- 1994-1995
- 2002
- 2012
- 2013
- 2014-2017

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General Considerations for Civilian MCMs

- **First, the bad news:**
  - *Chemical Injury Happens Fast!*
  - Civilians don’t get pretreatments
  - It might take a while for help to arrive

- **Next, the better news:**
  - Optimized Ladder Pipe Decontamination can remove >99% of chemical contamination.
    - *Just removing contaminated clothing removes 90%!*
  - Chemical-induced pathologies can share many characteristics with more common clinical conditions

- **Now, the insight:**
  *Treat the injury, not the agent*
Chemical MCM Program Growth

ARD Spending ($M)

FY13 | FY14 | FY15 | FY16 | FY17 | FY18

$0.0 | $10.0 | $20.0 | $30.0 | $40.0 | $50.0 | $60.0

Projected
Current Portfolio

- Projects Address Program Priorities
  - Nerve Agents
  - Cyanide
  - Sulfur Mustard
  - Chlorine
  - Decontamination
  - Animal Model Development Projects

- FY2018 Portfolio Expansion Plans
  - Vesicants
  - Repurposed Drugs and Novel Delivery Methods
  - Task orders in Non-clinical and Clinical Studies Networks

Breakout Session Today!
Enabling Community Resiliency

Ensuring availability of lifesaving medicines

New Uses for Common Medicines

Improving Emergency Response

PRISM Guidance for Chemical Decontamination

Our goal is to improve health outcomes for all victims of chemical exposure
Operation Downpour in Action
Pursuing Chemical Threat
Indications for Available Drugs

- Midazolam for Nerve Agent Exposure
- Silverlon® Wound Dressing for Sulfur Mustard
- Activase® for Sulfur Mustard Inhalation
- TRPV4 Blockers for Chlorine exposure
- Amyl Nitrite (SIAN) for cyanide intoxication

Your Drug Here
www.medicalcountermeasures.gov

- Portal to BARDA
- View BAA priorities
- Register and Request a Meeting

The Chemical MCM Team
Efrain Garcia
202-205-3717
Efrain.Garcia@hhs.gov

Judith Laney, Chief, Chemical MCM – Judith.Laney@hhs.gov
Kristen Herring – Kristen.Herring@hhs.gov
Tom Hu – Tom.Hu@hhs.gov
Robert Raulli – Robert.Raulli@hhs.gov

Thank You!