# Disaster Science Responder Research (DSRR) Program NIOSH Emergency Preparedness & Response Office







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National Institute for Occupational Safety and Health

Office of the Director, Emergency Preparedness and Response Office

**Emergency Preparedness and Response Office (EPRO)** *Mission: To protect the health and safety of emergency response providers and recovery workers* 

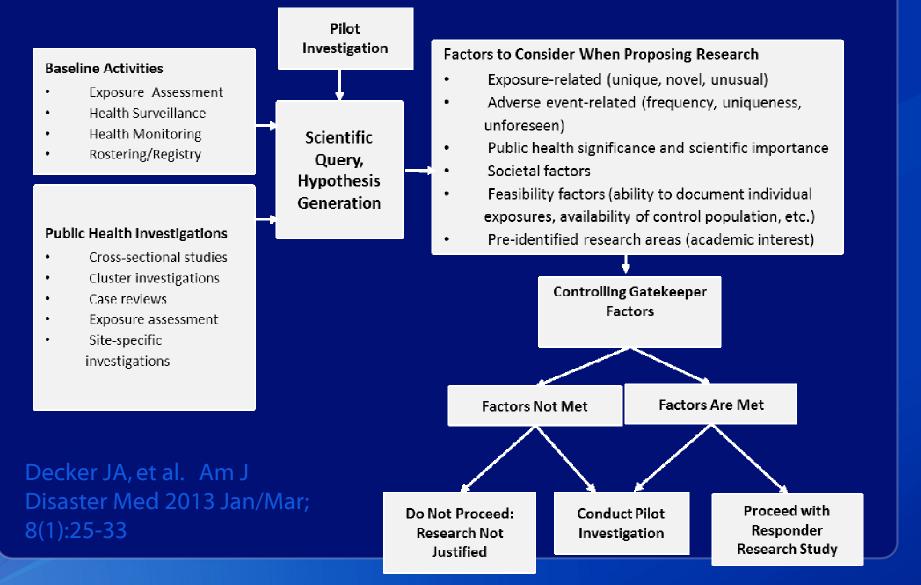
- Created in response to 9/11
- Emergency planning and response coordination for NIOSH
- Provide technical assistance during incidents (onsite/remote)
- Staff the Worker Safety and Health Team in the CDC Emergency Operations Center
- Coordinate with the OSHA through the NRF Worker Safety and Health Annex
- Promote research to protect responders \*

#### **Disaster Science Responder Research (DSRR) Program**

Scientific study can provide better understanding and reduction of responder health effects from disasters and can lead to improvements in the effectiveness of emergency responses.

- Began in 2014 as the Disaster Science Research Initiative
- "What" Identify critical topic areas for research
- "How" Create mechanisms for overcoming the associated logistical, technical and administrative challenges that researchers will encounter during outbreaks and other emergencies

# **Process for Determining Whether to Conduct Responder Research Utilizing Expert Opinion**



# Emergency Response and Recovery Worker Research *Examples*

- Ebola
- Deep Water Horizon
- Anthrax
- Hurricane Sandy
- Hurricane Katrina
- World Trade Center





#### **Definitions:**

*Responder:* Traditional first responders, contractors, volunteer organizations, healthcare workers, public health personnel, construction and utility workers

Disaster Types: All hazards, intentional & naturally occurring, small & largescale incidents



An Inventory of EPA's Tools for Enhancing Community Resilience to Disasters (2016)

# **DSRR Internal Steering Committee**

- Began March 2015
- Broad representation across NIOSH
- Developing and implementing a five-year strategic roadmap
- Participating on federal interagency working groups (e.g., HHS/ASPR Science Preparedness Research Interagency Team)
- Updating DSRR website
- Recent and current responses
  - Lead-contaminated drinking water in Flint: Abatement workers
  - Zika: Worker surveillance needs & airline disinsection concerns
  - LA Flooding: Lessons learned from Hurricane Katrina research on construction workers

#### **DSRR Strategic Goals**

- Goal # 1: Identify critical topic areas for responder research
  - Identify research gaps from previous responses & exercises
  - Identify gaps based on intramural and extramural research projects
- Goal # 2: Address major challenges associated with conducting research during disasters
  - Rapid approval mechanisms (e.g., IRB, OMB, funding, data release)
  - Internal TTX in FY17
  - Disaster-specific SOPs for activating research activities
  - Incorporate research into ICS

# DSRR Strategic Goals (Continued)

- Goal #3: Identify data collection capabilities and information resources to be utilized for research purposes
  - Internal & external resources (e.g., SME, labs, response tools/data collection, existing surveillance systems)
  - Identify novel approaches enabling responders to collect own research data
- Goal #4: Ensure research findings and lessons learned are translated into practice
  - Rapid dissemination of results
  - Assess utilization/implementation of recommendations in future responses

### **FY17 Critical Topic Areas**

- Occupational Health Surveillance
- Risk Assessment Tool for PPE Selection and Prioritization During Infectious Disease Outbreaks
- Development of Exposure Assessment Plans for the First 72 Hours Following a Disaster
- Development of Rapid Methods to Detect Mental Health Risks Among Law Enforcement Personnel Exposed to Traumatic Incidents
- Modeling Radiation Exposure of First Receivers in Shelters, Community Reception Centers, and Hospitals from Contaminated Evacuees after a Nuclear Detonation

# **DSRR Topic Page:**

#### http://www.cdc.gov/niosh/topics/disasterscience/default.html

http://www.cdc.gov/niosh/topics/disasters		
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The National Institu	ute for Occupational Safety and Health (NIOSH)	
Workplace Safety and		
Health Topics	Providing National and World Leadership to Prevent Workplace Illnesses and Injuries	SH
Disaster Science Responder		
Research Program	Workplace Safety and Health Topics	
Emergency	Disaster Science Responder Research Program	
Preparedness and	f 😏 🕂	
Response Directory		
	NIOSH announces the Disaster Science Responder Research Program (DSRR)	
NIOSH Homepage	to develop an approach that will allow for timely and scalable responder-based	$\times$
Позгнопераде	research that can be implemented before, during, and after a disaster.	4
NIOSH A-Z		1-1-1
Workplace Safety & Health	What started out as the Disaster Science Research Initiative (DSRI), is now the Disaster Science Responder	1
Topics	Research (DSRR) Program located in NIOSH's Emergency Preparedness and Response Office. The goal of the DSRR is to implement a framework that allows for occupational safety and health research to be started quickly	
Publications and Products	when a disaster or emergency occurs, without interfering with the response itself. The types of research	ALC: NO
	conducted may include: the impact of a novel exposure, unexpected or severe health effects, the effectiveness of	
Programs	a proposed intervention, mental health/resilience issues, and disease outcomes with latency periods. By defining	1

# **Questions and Discussion**

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