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

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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 & large-scale 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
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

The National Institute for Occupational Safety and Health (NIOSH)

Disaster Science Responder Research Program

NIOSH announces the Disaster Science Responder Research Program (DSRR) to develop an approach that will allow for timely and scalable responder-based research that can be implemented before, during, and after a disaster.

What started out as the Disaster Science Research Initiative (DSRI), is now the Disaster Science Responder 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 when a disaster or emergency occurs, without interfering with the response itself. The types of research conducted may include: the impact of a novel exposure, unexpected or severe health effects, the effectiveness of a proposed intervention, mental health/resilience issues, and disease outcomes with latency periods. By defining “research” in its broadest sense the DSRR Program includes etiologic, intervention, applied, comparative and clinical research.
Questions and Discussion

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