Infectious Disease Response (IDR) Worker Training Program (WTP) Overview

Joseph T. Hughes Jr.
Director

Worker Training Program
Division of Extramural Research & Training
WTP Role in Infectious Disease Response

- **HAZMAT & Biological Safety Training:**
  - Provided occupational biological safety training to workers during
    - H5N1 outbreak
    - Anthrax attacks (2001)
    - H1N1 Avian Influenza outbreak (2009)
    - Mold remediation from Hurricane Katrina (2005) and Sandy (2012)
    - Ebola Virus Disease Preparedness (2013)

- **Training by NIEHS WTP Awardees integrate:**
  - Bloodborne Pathogens standard (29 CFR 1910.1030)
  - OSHA’s Personal Protective Equipment (PPE) standard (29 CFR 1910.132)
  - Section 5(a)(1) of the Occupational Safety and Health (OSH) Act of 1970 (General Duty Clause)
  - WTP training >160,000 workers annually, through combined programs

- **Encourage Innovation in Training with:**
  - Appropriate adult education techniques & literacy
  - Training quality improvement
Overview of Program Components

Worker Training Program (WTP)
Ebola Biosafety and Infectious Disease Response Training UH4

- Minimum Criteria Document & Core Values
- Data Management System (DMS) reporting
- Grants Management Contact
- NIEHS WTP National Clearinghouse
- Awardee Training Strategies & Coordination
- Training Tools & Resources
- Pathogen Safety Data Tools
- Evaluation Framework
- Coordination with WTP Program Administrator
Ebola Biosafety & Infectious Disease Response Training Project Genesis

- **September 2014:** NIEHS reprogrammed existing funds for domestic Ebola preparedness to 7K workers across 18 states.
- **November 2014:** ASPR, CDC, NIH, IOM, NRC Ebola Response Workshop.
- **Early 2015:** NIEHS received $10M for biosafety training among US based workers; WTP charged to lead efforts.
- **May 2014:** Supplement Awards ($650K) & Grantee Workshop.
- **Summer 2015:** WTP consulted public and private sector worker reps, thought leaders.
- **Spring/Summer 2015:** Training & Performance Objectives Compilation of Ebola Resources.
- **Summer 2015:** Gap Analysis and literature review.
- **August 2015:** Needs Assessment Released.
- **August 2015:** Funding Announcement Released ($9M).
- **October 2015:** FOA Receipt date.
- **February 2016:** Special Emphasis Panel Peer Review Meeting.

**Ebola Biosafety Training Initiative**
Gap Analysis & Needs Assessment

- CDC Guidance (3 documents)
- OSHA Standards (6 standards)
- Literature Review (71 courses)
- Stakeholder Surveys (NY, DC, CA)
Gap Analysis & Needs Assessment

OSHA standards:

- General Duty Clause (Section 5(a)(1))
- Bloodborne Pathogens (1910.1030) standard
- PPE (29 CFR 1910.132) standard
- Respiratory Protection (1910.132) standard
- HAZWOPER (1910.120) standard for infectious material

- Most notable gap pertaining to OSHA standards is that many of the affected employers and workers are not aware of these OSHA requirements and therefore need training to advise them of their rights and responsibilities.
Gap Analysis & Needs Assessment

- **Stakeholder Input Key Themes:**

  - Despite several infectious disease outbreaks, there is not a training atmosphere that endures past the incident.
  
  - Federal guidance continues to be disease-specific rather than on generalized hazard assessment, generalized infection control preparedness measures and worker safety and health
  
  - Guidance issued is confusing or not practical for many end users outside of the healthcare profession
  
  - More emphasis needs to be placed on general worksite preparedness
  
  - Hospitals focus on infection control and not worker health and safety
  
  - Participants agreed that training should be competency-based but could not agree on which competencies to include in training
  
  - Waste management and training for waste handlers is very important
Gap Analysis & Needs Assessment

• Overall Gap Analysis Themes:

1. There is no current mechanism to integrate public health, medical, occupational and worker safety activities in a comprehensive and all-encompassing approach that incorporates:
   • Perspective of key stakeholders
   • Delivers concise, easy to understand, risk-based protective guidance
   • Informs the full spectrum of workers

2. Sustaining a high level of readiness is difficult due to a number of factors including:
   • Complacency
   • Inadequate funding
   • Loss of interest as the outbreak resolves
   • Pathogen-specific training
   • Emphasis on technical aspects of PPE, which not employed in daily use or ongoing training, make it difficult to maintain high level of competency
Figure 2: Target Training Populations

The most trainings (12) reported were created for “OTHER” workers, including:
- Airport/aircraft cleaners
- Airport workers
- Compliance officers
- Environmental remediation workers
- Epidemiologists
- Maintenance staff
- Other staff potentially involved in response
- Public health responders
- Urban mass transit workers
- Volunteers
Gap Analysis & Needs Assessment

- Literature search of PubMed and Web of Science for health and safety, training & disease:
  - Of 71 courses
    - 52 awareness
    - 9 operations
    - 6 comprehensive
    - 1 clinical care
    - 3 TTT
  - Most common form of delivery:
    - Awareness: Web
    - Operations: Classroom

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Gap Analysis & Needs Assessment

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Figure 3: Training Challenges Identified
Target Population Proposed by Applicants

Target Populations, Proposed Across Programs

- 100% target first responders
- 75% target custodial/environmental service workers
- 53% target healthcare facility workers (clinical & non-clinical) and health laboratory workers
- 50% target airline/airport, transport and waste handlers
- 38% target maintenance professionals, occupational health & safety workers and vulnerable populations (such as immigrant workers, disadvantaged or immunocompromised)
High Risk Categories, Grouped

23 high risk categories are grouped

Each high risk category can be expanded to include training sub-populations as uniquely identified by each application

Airline/Airport workers can be further expanded to include: cabin crew cleaners, administrative leadership, janitorial workers, cargo handlers, baggage handlers, screeners, TSA staff and so forth

Illustrated as proposed by each awardee, individually marked with an, x

<table>
<thead>
<tr>
<th>Population Category</th>
<th>ICWU</th>
<th>SCEO</th>
<th>DUKE</th>
<th>IUB</th>
<th>EMORY</th>
<th>LIUNA</th>
<th>UAB</th>
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<td>Total High Risk Categories</td>
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</table>
Approximately 45 locations of partnerships at baseline
### Estimated Timeline of NIEHS WTP Engagement Activities, Summer 2016

**NIEHS WTP Ebola Biosafety and Infectious Disease Response Training Program**

<table>
<thead>
<tr>
<th>Timeline</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
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</thead>
<tbody>
<tr>
<td><strong>Site Visits</strong></td>
<td>June 29 – Rutgers, NJ</td>
<td>July 1 – Steelworkers, NY</td>
<td>TBD</td>
<td>TBD</td>
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<tr>
<td><strong>New Awardee Engagement Webinars (3)</strong></td>
<td>June 22nd @ 2pm EST: Welcome to NIEHS WTP &amp; introductory Webinar</td>
<td>July 14th @ 1pm EST: Building collaborative strength &amp; capacity Webinar</td>
<td>August 15th @ 2pm EST: Dig deeper on outcome and evaluation Webinar</td>
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<tr>
<td><strong>Infectious Disease Themed Grantee Workshop</strong></td>
<td>June 15th at 11am: Develop Planning Committee &amp; Identify key presenters; Send Save-the-Date emails</td>
<td>July 12th at 11am: Finalize key themes, shape agenda and workshop format</td>
<td>August 16th at 11am: Continue planning committee discussions and workshop logistics</td>
<td><strong>Workshop Event:</strong> September 19-21</td>
</tr>
<tr>
<td><strong>Pathogen Safety Data Guidebook &amp; Training Tool</strong></td>
<td>PSD Guidebook and Training Module; Solicit feedback</td>
<td>July 1st: Pilot PSD training module USW (NY)</td>
<td>Roll out PSD guidebook and training module among awardees</td>
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# Logic Model for the NIEHS Worker Training Program (WTP) Ebola Biosafety Training and Infectious Disease Response Initiative

**Last Updated: April 13, 2016**

## Program Purpose
Support the development, implementation, and dissemination of occupational safety and health and infection control worker training programs to prevent and reduce exposure of hospital employees, emergency responders, and other healthcare and non-healthcare workers who are at risk of exposure to Ebola virus and other infectious diseases through their work duties.

## Inputs
- **Human**
  - WTP Staff
  - Biosafety program awardees
  - MDB, Inc.
  - Subject matter experts
  - Other WTP grantees

- **Organizational**
  - NIEHS WTP biosafety resources
  - Guidance materials and support documents from partners
  - Infection control and occupational health and safety recommendations and regulations

- **Partnerships**
  - Federal
  - Academic
  - Professional Orgs
  - Treatment Centers and Containment Units
  - Labor unions
  - Local government
  - Community orgs

- **Funding**
  - Biosafety/Infectious disease
  - Programmatic

## Activities
- Use needs assessment/gap analysis, knowledge areas, and performance objectives to inform program
- Select advisory committees
- Develop, adopt, and customize trainings and resources for intended worker populations
- Recruit trainees
- Implement trainings nationally across worker populations
  - Awareness
  - Operations
  - Train-the-Trainer
- Collaborate with key national, regional, and state partners across occupational health and safety, hazmat, and infectious disease

## Outputs
- Workers trained
- Trainers trained
- Training curricula and resources developed
- Partnerships formed across occupational health and safety, hazmat, and infectious disease
- Partnerships formed with worker populations with exposure potential
- Training ratings on satisfaction, relevance, and intention to use training content [These measures not final]

## Short-term Outcomes
- Increased national capacity to provide high quality biosafety trainings across worker populations with exposure potential
- Increased worker knowledge and skill to protect against infectious diseases
- Increased worker risk awareness and empowerment to advocate for appropriate protections
- Increased worker preparedness that reduces fear and anxiety
- Integration of occupational health and safety, hazmat, and infectious disease concepts in workplace safety training
- Changes in organizational practice and policies to support worker safety and infection control

## Intermediate Outcomes
- Improved organizational and community capacity to safely respond to sustained infectious disease response
- Safety environment in workplaces with exposure potential to Ebola and other infectious diseases
- Safe and healthy workers and communities through work-related infection prevention of infectious diseases

## Long-term Outcomes
- Program evaluation and dissemination of resources and findings

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Title: Logic Model for the NIEHS Worker Training Program (WTP) Ebola Biosafety Training and Infectious Disease Response Initiative

Last Updated: April 13, 2016

**Program Purpose**: Support the development, implementation, and dissemination of occupational safety and health and infection control worker training programs to prevent and reduce exposure of hospital employees, emergency responders, and other healthcare and non-healthcare workers who are at risk of exposure to Ebola virus and other infectious diseases through their work duties.

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<tr>
<th>Inputs</th>
<th>Activities</th>
<th>Outputs</th>
<th>Short-term Outcomes</th>
<th>Intermediate Outcomes</th>
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<tr>
<td>Human</td>
<td>Use needs assessment/gap analysis, knowledge areas, and performance objectives to inform program</td>
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<td></td>
<td>Recruit trainees</td>
<td>Partnerships formed across occupational health and safety, hazmat, and infectious disease</td>
<td>Increased worker preparedness that reduces fear and anxiety</td>
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<td></td>
<td>Implement trainings nationally across worker populations</td>
<td>Partnerships formed with worker populations with exposure potential</td>
<td>Integration of occupational health and safety, hazmat, and infectious disease concepts in workplace safety training</td>
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<tr>
<td></td>
<td>- Awareness</td>
<td>Training ratings on satisfaction, relevance, and intention to use training content [These measures not final]</td>
<td>Changes in organizational practice and policies to support worker safety and infection control</td>
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<td>- Train-the-Trainer</td>
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**National Institutes of Health**

**U.S. Department of Health and Human Services**