



*A health study for oil spill clean-up workers and volunteers*

# **Use of Internet Technology for Training, Certification, and Monitoring in the Gulf Long-Term Follow-up Study (GuLF STUDY)**

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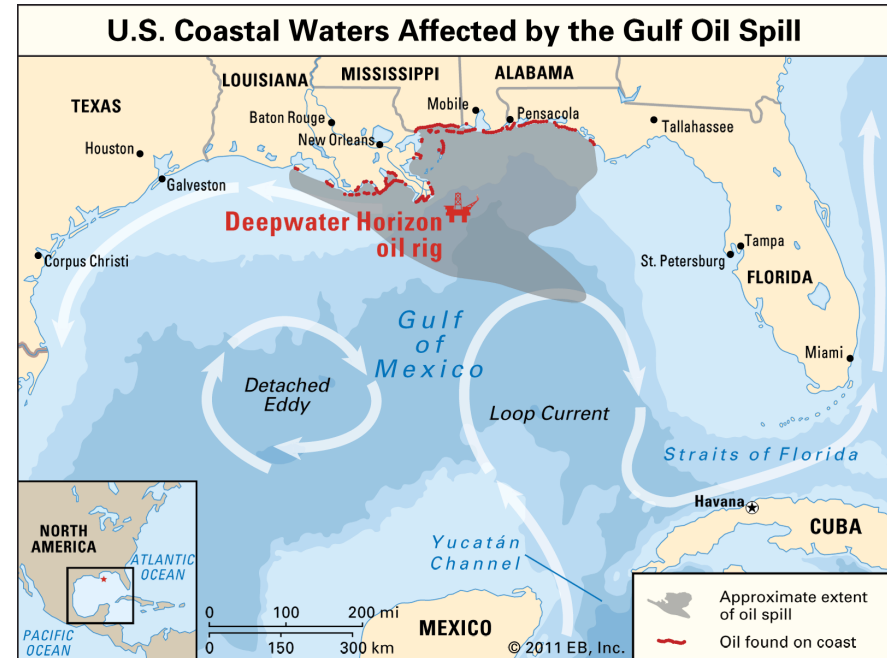
National Institutes of Health  
U.S. Department of Health and Human Services

# Background



## 2010 Deepwater Horizon Oil Spill

- Caused by drilling rig explosion
- Largest maritime oil spill to date
- >100,000 persons involved in clean-up
- Clean-up workers and residents exposed to crude oil and dispersants



# Objectives



## Gulf Long-term Follow-up Study

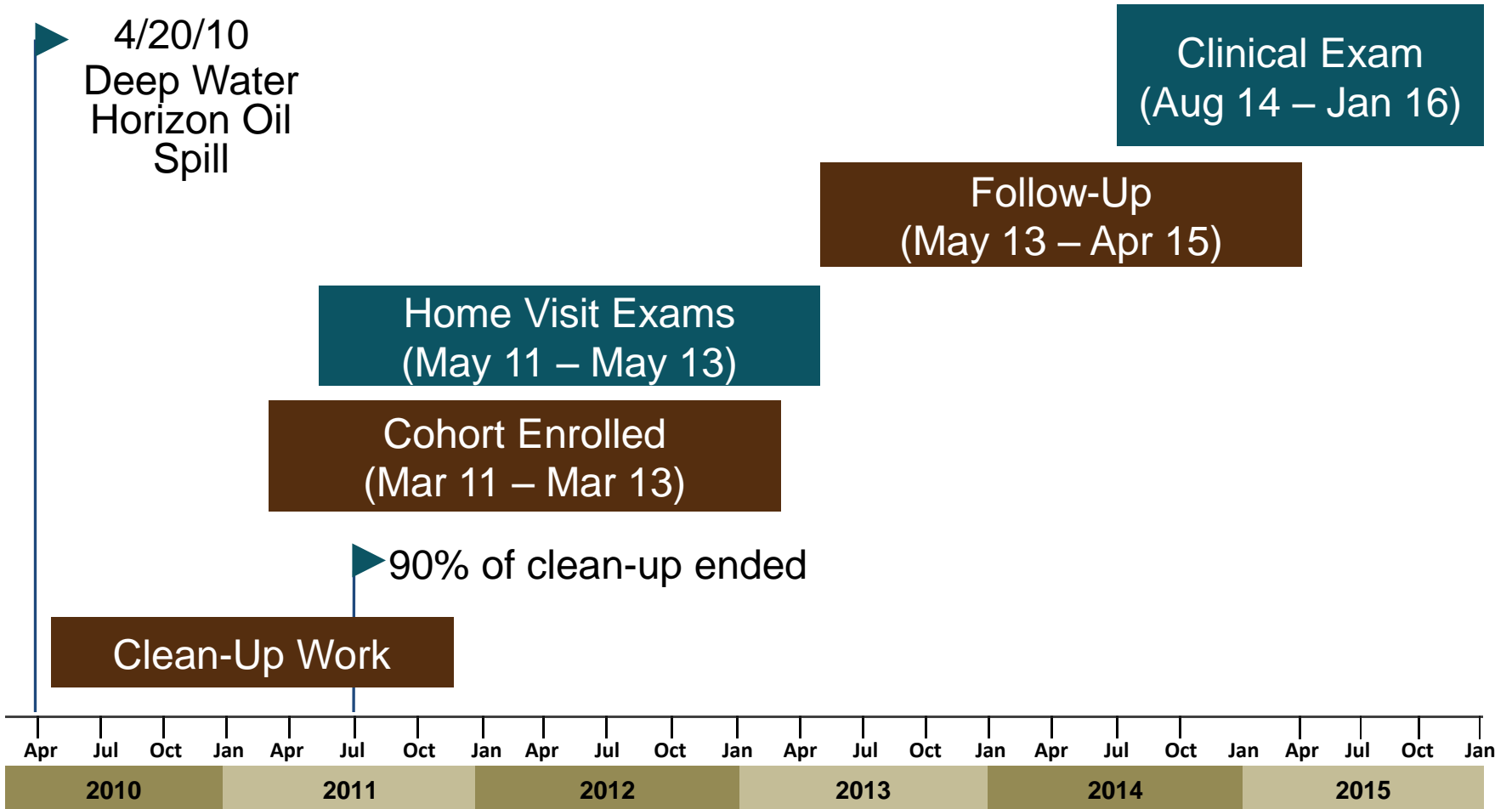
Assessing health effects associated with the oil spill

Focused on oil spill clean-up workers, most exposed group

Largest, most comprehensive study of oil spill disaster

- 40 major spills worldwide
- Few studies of health effects
- No long-term studies
- Community concerns about a range of health effects

# Study Timeline



# Study Cohort

## **32,608 adults enrolled between 2011 and 2013**

- Worked at least one day in active oil spill clean-up, did support work, or took safety training but not hired
- Enrollment telephone interview collected information about clean-up jobs, symptoms, medical history, lifestyle, socioeconomic factors, demographics
- Home visit included collection of anthropometric measurements, biological samples, environmental samples, and lung function testing with subgroup of 11,193 in the Gulf

## **Follow-up is currently underway**

- 1<sup>st</sup> telephone follow-up nearly complete
- Multi-center follow-up clinical exam is ongoing

# Clinical Exam Overview

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## **Focused on neurological, pulmonary, and mental health outcomes**

- 4 hour visit, not including drive time
- Carried out by clinical sites at New Orleans and Mobile
- \$100 for effort, plus \$25 - \$50 based on travel
- Sharing some clinical results – e.g. BP, PFT, A1C, Lipids

## **Initiated in August 2014**

**Inviting ~ 6,200 participants within 60 miles of clinics**

**Hoping for > 65% response, 4,000 completed exams**

# Training Considerations

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- Two-site clinical study, 8 staff members per site
- Each staff member carries out 2 - 3 exam components
- Coordinating center staff and experts train sites
- Central training was effective for initial training
- More cost effective approach needed for ongoing training



# Remote Training Approach

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## **Webinar**

- Introduction to the study and clinical exam
- Presentation on clinical procedures

## **Live Training Demo**

- Trainers demonstrate procedures via streaming video

## **Practice**

- Trainees practice procedures with coordinator shadowing

## **Certification**

- Trainees demonstrate proficiency to trainers over the web

## **Monitoring**

- Coordinating center monitors data to assess performance
- Study coordinators monitor performance using QC check list
- Coordinating center and experts perform periodic site visits



# Low-Tech Requirements

## Requirements:

- Telephone
- Conference Call Account
- Computer
- Web-cam
- Google Hangout Account
- Internet Access



# Video of Live Training

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Remote Training Accusway.MOV

# Our Experience

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**Easy to implement and very inexpensive**

**Positive feedback from sites**

**Useful for a wide range of procedures**

- 5 staff trained on neurobehavioral assessments
- 2 staff trained on biological sample collection
- 2 staff trained on pulmonary function testing

**Appears to be comparable to central training**

- No major difference in staff performance



# Investigators and Study Team

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