

**NIEHS Spring Workshop Notes**  
**Friday, April 4, 2008**

Bill Suk, Acting Director, NIEHS  
Introduced

**8:30am Keynote Speaker**

Dr. John Howard, Director, NIOSH

- Dr. Howard is not pretending to be an expert in emergency response
- Described the 9/11 response in exposure environment
- We know little about the mixed exposures
- 91,000 emergency responders estimated
- 39,000 responders had an initial screening – most prevalent were aero-digestive diseases and mental health issues (post traumatic stress disorder)
- Outside NY/NJ area responders are estimated at 5,000 to 10,000
- Piecemeal and staggered funding mechanism is not helpful to long-term program building
- Emergency responder “community” included those exposed outside the WTC site (e.g. Chinatown cleanup, office building workers that came back to clean up their offices)
- NIOSH has recertified all respirators to CBN standards
- Responder training and health needs as much focus as victim rescue
- Dr. Howard is spending all of his time on the after-disaster
- PTSD for outsiders coming to help is 22% compared to 12% for the emergency responder community
- Recommendations
  - We need to put up fences outside the “hot zone” in order to be able to perform epidemiological studies
  - Worker Safety and Health Annex needs to be elevated to an Emergency Support Function in the National Response Plan

Questions

Thoughts on PTSD?

- Dr. Howard is not a psychologist.
- What to do about church groups coming to help a disaster site? We have to figure it out.

Is NIOSH going to think about redefining particulate matter?

- Yes, very important matter. We are looking at it.

Firefighters could be a population to track.

Do we have any idea what the entomology is for exposures at the WTC site?

- The difficulty is figuring out what is the proportional amount to exposure.
- Don't know if we will ever know that – don't know if we can design that control case study
- Argument for continuous monitoring

CPWR has a construction safety and health training – how can CPWR enhance the program in PTSD?

- Publish the program
- Look at a paper called “The Researcher”
- Tell the church groups, Red Cross that they are putting their people at risk

Any programs involved with the Emergency Broadcast System?

- Don't know of any right now – but would like to learn more about it

Advice for us who will continue on?

Make ideas known to anyone that has a soap box – GAO, reporters

**9:30am**

#### **Breakout Session 4- Medical Surveillance and Bio-monitoring**

- Group introduced themselves to one another and what they do in relation to medical surveillance and bio-monitoring
- Expressed the fact that if they are providing surveillance with a disaster site, that they should also take part in treatment of those that have been contaminated.
- We need a program of inexpensive antibodies and assays
- Pull resources together to decipher the difference between actual vs. perceived threat
- Definitely see the role of medical surveillance during a disaster, but unsure of it's use after the disaster
- Developing google maps to help with real time surveillance

#### **Comments/Questions**

Is there a model for disasters similar to the CDC when preparing for disasters?

No, we are totally organized in that sense and should form one.

What are some of the gaps and barriers in medical surveillance?

Having prepackaged medical gear/equipment that could be widely distributed in case of a disaster i.e. generators

How would you marry surveillance and bio-monitoring?

To help with monitoring sensors

Making inexpensive antibodies and storing as well as making real time google maps to detect contaminants

California just passed a bio-monitoring system law to display risk

WETP and SBRP would like to team up a training session on the google map interphase in surveillance maps

Is there surveillance done on workers?

It depends on the personnel, fire fighters vs, carpenters and construction workers. It depends on the skill of the workers.

Why medical surveillance ?

Are we providing information as to what health outcomes there are to prevent future mistakes or will help in the short term with helping people cope with the disaster on a right now level?

They think it is a little bit of both, it is important to have long term monitoring as well as assist with the current catastrophe/disaster

Is there potential in teaming with SBRP and WETP in doing research and trainging with biomarkers and surveillance?

Definitely SBRP doing research and WETP doing training on susceptibility

We think that prescreening people for certain situations to see if they will be susceptible to the risk at hand, will they still be able to work?

That is a very difficult.

**12:00 pm**

### **Report Back from Breakout Sessions**

Exposure Assessment and Data Capture

Alison Geyh

- Discussed how to coordinate data collection efforts
- For exposure assessment – guidelines need to be created immediately by NIOSH people
- There is a need for a group that would reach out to media to provide a consistent message
- Use of preparedness centers at universities should be integrating work with emergency response community
- Training should include things that they would encounter in the operation
- Need for more consistent way to document what is going on at the after action discussion – written and formalized way

Deployment Readiness

Dori Reissman

- Need to create a deployment passport that includes mental and physical training attributes
- Can not gain access to the site unless they have a passport
- There is need to create mental health support systems (e.g. buddy system)

- Looking to create processes that support physical and psychological health
- Everything is local – federal policies need to translate to the state and local levels

## Knowledge Transfer and Information Management

Cliff Mitchell

- How to use technology effectively to control everything that happens on the site
- For example, cell phones as a means to communicate information
- Unless we design systems up front that examine geographic and temporal information, we are not going to be able to effectively make an assessment
- Need to get IT, HR and researchers together
- Site control is important

## Medical Surveillance and Biomonitoring

Margaret Karagas

- Discussed questions on how to groom the researching
- Talked about refining technologies with biomonitoring and bioassay
- Worker susceptibility – are they more susceptible to certain exposures?
  - Ethic issues?
- Data management and IT issues – using cyber sources and cyber resources (e.g. Google mapping with the CA fires)
- Medical monitoring on everyone or a subset?
- Should be thought of by type of worker
- Need to discover innovative treatments
- Stressed the importance of mental health

**12:30 pm**

## Wrap-Up/Closing Remarks

Gerald Poje, Independent Consultant, formerly with the U.S. Chemical Safety Board and NIEHS

- Population in 1950 was 2.3B, now 6B
- Gross World Product in 1950, >\$10T, now \$65T
- Petrochemical consumption is much larger now
- Past and future atmospheric composition – current 360 CO<sub>2</sub> concentration (ppmv) and rising
- Most water is salt water, most fresh water is locked up in the glaciers
- We have to become the senior elders to elevate our value system
- We need to settle the earth's garbage strike
  - We need to embrace reality
  - Work together in the right relationship
  - Be prepared
  - Have a dream