

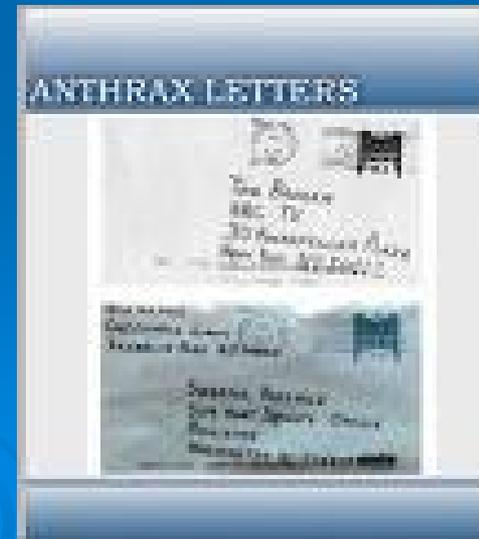
Interstate Chemical Terrorism Workgroup (ICTW)

*A collaborative network integrating
public health and emergency
preparedness*



ICTW - Purpose

- In an effort to define the role of public health in the event of chemical terrorism, and to share knowledge, materials and resources, representatives from state, local and federal agencies formed this workgroup (2002).



ICTW Structure

- Ad hoc
- Guidance - co-facilitators + advisory group
- Monthly conference calls
 - Speakers on wide range of topics
 - Written call summaries
- Electronic websites:
 - CDC ftp site (current postings)
 - CDC epi-x forum site (archives)
- Subgroups on special issues as needed, ex:
 - Chemical fact sheets
 - Field detection equipment SOP (proposed)

Current ICTW Members

- ~ 350 members
- 48 states + Washington, DC
 - primarily state, federal, and local public health and health professionals
- Federal agencies
 - CDC, DHS, EPA
 - NOAA, OSHA, USDA
- Other institutions
 - APHL, ICWU, NACCHO
- No businesses or parties outside of the US

Collaborations

- CDC
 - Current NIEHS/WETP workshop
 -
 - Workshop on Risk Communication in a Chemical Event
 - Atlanta, GA, February 3-4, 2004
 - Primary goals:
 - develop templates for chemical fact sheets
 - model core competencies and benchmarks
 - Results published, “Risk Communication Needs in a Chemical Event” (2006). J Em Mgmt 4(2):1-11
- FBI
 - Scientific Working Group, Forensic Analysis of Chemical Terrorism (now SWG-CBRN)
 - Participation in chemical threat ranking subgroup, 2004-2008

ICTW Products

- Monthly Newsletter
- “Infomatrix”
 - Web, phone resources for response
- Core competencies & benchmarks
 - Risk communication in a chemical event
- Fact sheet templates & checklists for:
 - Public/press
 - 1st responders
 - Medical providers
 - Local public health



ICTW – Sharing Lessons Learned



- Train Derailment, Chlorine Release
 - January, 2005
 - Graniteville, SC



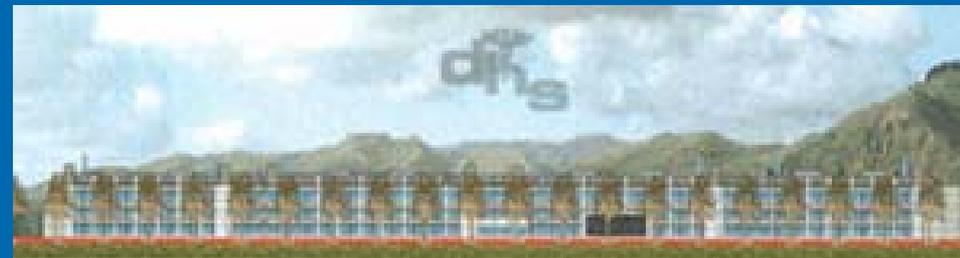
- Ammonia Pipeline Breach
 - November, 2007
 - Riverview, FL

ICTW – Sharing Training



Hospitals and Hazmat The Missing Link

Greg Santa Maria, NREMT-P, IC
Emergency Preparedness Manager
Sanford Health System, Sioux Falls, SD



Developing Cross-Training for Emergency Responders and LRN Laboratories

State of California
Department of Health Services
Microbial Diseases Laboratory Branch

Kathryn M. Hansen

Public Health Microbiologist II, Clinical Laboratory Scientist,
EMT, Captain (Ret.), Palo Cedro Fire Department

ICTW – Sharing Products (MI Fact Sheet Matrix)

Chemical	CAS #	medicin	CDC		ATSDR			New Jersey		MDCH		
		MMG	PE	PS	PE	PS	MMG	PE	PS	PE	PS	MMG
3 - Quinuclidinyl Benzilate (BZ)	6581-06-2	click										click
Abrin	1393-62-0	click	click	click								
Acetic Acid	64-19-7	click						click				
Acetonitrile	75-05-8	click						click				
Acrolein	107-02-8				click							
Acrylonitrile	107-13-1				click							
Adamsite (DM)	578-94-9	click	click									
Allyl Alcohol	107-18-6							click		click		
Ammonia	7664-41-7	click			click							
Arsenic Trioxide	1327-53-3						click	click				
Arsine (SA)	7784-42-1	click	click				click	click	click			click
Benzene	71-43-2	click	click		click							
Benzyl Chloride	100-44-7							click	click			
bis(Chloromethyl)Ether	542-88-1				click	click		click				
Boron Trifluoride	7637-07-2											
Botulinum	-	click	click	click								click
Brevetoxin	-	click										

Page 1

http://www.atsdr.cdc.gov/es/toxfaqs/es_tfacts128.html - Click once to follow. Click and hold to select this cell.

ICTW InfoMatrix

INFORMATION SOURCE MATRIX --- Useful information sources on chemicals, 2009 (4-10-09 DRAFT)

Site	Contact	Summary	Toxicology	Epidemiology	Laboratory	Worker Protection	First Responders	Acute Health Hazards	Medical	Public FAQs	Other languages	Planning	
I.A Critical Phone Numbers													
American Association of Poison Control Centers	http://www.aapcc.org/	(800) 222-1222	(Staffed 24/7) phone number connects anyone in the US to their local poison center.							X			
ASPCA National Animal Poison Control Center	http://www.aspc.org/site/PageServer?agenames=pro_apcc	(888) 426-4435	(Staffed 24/7) A fee of \$55 may be charged per case. Allied with the University of Illinois College of Veterinary Medicine.							X			
Centers for Disease Control / Agency for Toxic Substances Disease Registry	http://www.atzdr.cdc.gov/2p-emergency-response.html	(770) 488-7100	(Staffed 24/7) CDC's main emergency operations center					X	X				
Chemical Transportation Emergency Center (CHEMTREC and MEDTREC)	http://www.chemtrec.org/CHEMTREC/Resource/	(800) 424-9300	(Staffed 24/7) public service hotline for emergency responders. Medical advice available (Medtrec). CHEMTREC® is part of the American Chemistry Council.					X		X		X	
National Response Center	http://www.nrc.uscg.mil/	(800) 424-8802	(Staffed 24/7) The National Response Center is the sole federal point of contact for reporting oil and chemical spills. This is also the hotline for chemical & biological WMD incidents.					X					X
I.B First Responders - Agent Info (**alerts to the full range of response hazards: fire/explosion, reactivity, health)													
2004 Emergency Response Guidebook **	http://hazmat.dot.gov/pubs/erg/guidebook.htm	(202) 366-4433 (DOT Pipeline & Hazardous Materials Administration)	Contains emergency response protocols for specific chemicals and chemical classes including fire & explosion hazards, evacuation perimeters, and first aid.					X					X

Public Fact Sheet Template

PUBLIC/PRESS FACT SHEET TEMPLATE

AGENCY NAME _____ DATE _____

CHEMICAL _____

Short summary of chemical release information:

Here's what we know:

Date, time, location of release

Name(s) of chemical(s) and materials released

ChemFinder: <http://chemfinder.cambridgesoft.com/>

MSDS locator: www.ilpi.com/msds/index.html

What is known about cause of release (e.g. intentional act, spill, collision, etc)

Initial impact (area affected; who, what are affected)

Containment steps taken and next steps

Steps taken to prevent public exposure (evacuation distances, isolation, clean-up/disposal), incident command status

Here's what we're doing to find out what we don't know:

Immediate actions public is to take:

Identify who needs to take action by proximal distance to event site

Identify if at secondary risk via a contaminated individual

Evacuation or shelter in place instructions

Decontamination of people, pets, livestock, homes (if shelter in place)

Location of medical aid, emergency decontamination stations, emergency shelters

Safety of drinking water supply (public water systems, private wells affected?)

Safety of food supply (home food gardens, orchards, stream fish)

What is Chemical X?

Common name, form (liquid/gas/powder), appearance (color range, oily, etc), odor, flammability, vapor (moves low or high to ground in warm or cold weather), visible changes in exposed environment or animals, persistence in environment, Other names.

CDC Chemical Fact Sheets: <http://www.bt.cdc.gov/Agent/agentlistchem.asp>.

ChemFinder: <http://chemfinder.cambridgesoft.com/>

TOXNET: <http://toxnet.nlm.nih.gov/>



Chemical X

Information for the Public

What has happened? (Brief summary of chemical release)

- What is known about the release, including the date, time, and location of release.
- Name(s) of chemical(s) and materials released
- What is known about cause of release (e.g. intentional act, spill, collision, etc)
- Agencies that are working on remediation of this event

Resources that may be used by the author to gather this information:

- *Situation reports*
- *Local agencies: Local health department/EOC/fire department/HazMat*
- *State agencies: MSP/MDEQ/MDA/Poison Center*
- *Federal agencies: EPA/ATSDR/FBI*

Was I exposed to Chemical X?

- Who needs this information; geographic proximity to the release
- Routes of exposure
- Health effects

Resources that may be used by the author to gather this information:

- *CDC Chemical Fact Sheets: <http://www.bt.cdc.gov/Agent/agentlistchem.asp>.*
- *TOXNET: <http://toxnet.nlm.nih.gov/>*
- *CDC/ATSDR Tox Profiles: <http://www.atsdr.cdc.gov/toxpro2.html>*

What should I do? (Immediate actions for the public to take)

1st Responder Fact Sheet Template

1st Responder / Emergency Response Card Template

Prepared by _____ (Agency) Date _____

AGENT :: Health Effect Category

CAS #:
RTECS #:
Common Names:



Agent Characteristics

- **APPEARANCE:**
- **DESCRIPTION:** (overview)
- **METHODS OF DISSEMINATION:**
 - Indoor Air:
 - Water:
 - Food:
 - Outdoor Air:
 - Agricultural:
- **ROUTES OF EXPOSURE:**

Personal Protective Equipment

- **CLOTHING:**
- **EYE PROTECTION:**
- **GLOVES:**
- **RESPIRATOR:**

Emergency Response

- **CHEMICAL DANGERS:**
- **EXPLOSION HAZARDS:**
- **FIRE FIGHTING INFORMATION:**
- **INITIAL ISOLATION AND PROTECTIVE ACTION DISTANCES:**

Emergency Department Medical Provider Chemical Fact Sheet Template / Checklist

Recognition and triage:

- *Include name of chemical(s) involved and brief description of incident*

Personal protective equipment (at the health care site):

Decontamination (at the health care site):

- *Personnel and equipment*

Key medical management:

- *Diagnosis and treatment*

Patient monitoring:

- *Personnel and equipment*

Disposition criteria:

- *When to send patient home*

Reporting / coordination link:

- *Name(s) and contact information*

Guidelines for emergency department fact sheet development:

1. The fact sheet is an initial 1-2 page section devoted to immediate care.
2. Use a bullet format.
3. Document reference sources.
4. If needed, attach comprehensive care information to the fact sheet for care beyond the emergency department.

**Template for Chemical Emergency Response Fact Sheet
Produced for Local Public Health Agencies by their State Health
Department**

Chemical X or Incident Name
prepared _____ (mm/dd/yyyy) _____ : _____ (time)

Approved by: _____ Position: _____ Date: _____ Time: _____

TOPICS	RATIONALE AND DATA SOURCES
<p>Short summary of incident:</p> <ul style="list-style-type: none"> ▪ <i>Date, time, location, description of incident</i> ▪ <i>Name of chemical(s) involved</i> ▪ <i>Number of persons injured/killed</i> ▪ <i>Containment status</i> ▪ <i>Actions taken to prevent public exposure (evacuation distance, isolation, etc.)</i> ▪ <i>Incident Command System / National Incident Management System deployment status</i> 	<p>What is known and unknown about the event at the time the fact sheet was developed, especially in multi-jurisdictional events</p> <p>Contact local, regional or state emergency operations centers</p>
<p>Immediate Protective Actions - First Aid and Emergency Treatment:</p> <ul style="list-style-type: none"> ▪ <i>Do not enter/reenter contaminated scene.</i> ▪ <i>Identify radio/TV stations for emergency broadcast messages.</i> ▪ <i>Shelter-in-place? Evacuate? (humans? animals - pets/livestock?)</i> ▪ <i>Can the public self-treat?</i> ▪ <i>Is an antidote available?</i> ▪ <i>Medical treatment guidelines for health professionals</i> 	<p>Provide advice on early, non-instrument dependent safety issues</p> <p>[Link to First aid/Emergency Treatment in Info Source Matrix]</p> <p>CDC chemical fact sheets: http://www.bt.cdc.gov/chem/factsheets.asp NIOSH Int'l Chem. safety cards: http://www.niosh.gov/inter/inter.html</p> <p>[Link to Medical Treatment Guidelines for Health Pros in Info Source Matrix]</p> <p>AIDSX MMGC: http://www.aidsx.cdc.gov/mmng.html IPCS INT OXC http://www.incx.org/databank/index.htm VA Clinical Guide, "Biological Chemical and Radiation Induced Illnesses: http://www.oq.p.med.va.gov/cgi/BC/BCR_Base.html</p>

*Question -
“How could a collaborative
network like the ICTW
serve you?”*

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Supplemental slides



Model Core Competencies & Benchmarks

**RISK COMMUNICATION NEEDS
IN A CHEMICAL EVENT,
MODEL CORE COMPETENCIES AND BENCHMARK ACTIVITIES**

Preparatory Phase Communication Plan explaining what is communicated to whom and by what means:

Core Competency	Bench Mark
<p>1. For various modes of delivery, the agency will establish relationships with likely partners in the crisis and recovery phase. Agency partners will clarify their roles with regard to risk communication. Agency partners will work with each other and with relevant opinion leaders/gate keepers in the community.</p>	<p>1. Agencies will maintain partnerships with all relevant response agencies and individuals through electronic information sharing, conference calls, meetings and other "stakeholder" activities such as preparedness exercises. For each mode of delivery (explosion, environmental release, consumer product tampering, food tampering etc), list the responsible local, state and federal agencies that would be involved as well as their 24/7 contact numbers.</p>
<p>2. Scientific staff of agencies will be able to disseminate information and prepare fact sheets on chemical agents according to an agreed upon template in a timely fashion.</p>	<p>2. A detailed team structure and procedure for quickly acquiring and disseminating technical information, and preparing fact sheets for different audiences according to agreed upon templates will be developed and rehearsed (See Attachments F-I). <u>MOUs</u> will be completed with regard to likely cooperating agencies (considering various modes of delivery).</p>
<p>3. Agencies will give priority to scenarios that also are subject to accidental disasters.</p>	<p>3. Consider and practice likely local accidental release scenarios.</p>
<p>4. Agency scientists will have established access to "surge capacity" assistance from others with regard to acquiring and summarizing information.</p>	<p>4. Have <u>MOUs</u> with adjacent states, other state, local and federal agencies, and academia and private sector entities for voluntary mutual aid and will have conducted tabletop drills.</p>
<p>5. Public information officers (PIOs) will have access to "surge capacity" assistance from other agency's PIOs with regard to their functions.</p>	<p>5. Have <u>MOUs</u> with other agencies for mutual aid and will have conducted and/or participated in table top drills</p>

Model Core Competencies & Benchmarks

Crisis Phase

Core Competencies	Bench Marks
19. Agencies will be able to convey accurate and clear information to communities in a practice-based, timely fashion.	19. In actual events, an assessment shows that risk communication is/has been accurate, timely and understandable.
20. Agencies will be able to provide occupational health guidance to first responders, first receivers, contractors and volunteers in a practice-based timely fashion.	20. Agencies will have an MOU on who is responsible for disseminating and maintaining key occupational health information, (e.g., chemical fact sheets, personal protective equipment, decontamination, etc), that this information is readily available (command centers, work sites, on the web, and for e-mailing and faxing when needed). Hospitals and emergency management planners should communicate and coordinate essential information to facilitate risk communication and risk management needs.

Recovery Phase (Particularly in situations in which there is residual contamination)

Core Competency	Benchmark
21. Agencies involved with prolonged clean up or follow up epidemiological studies will communicate in a timely, intelligible, practice-based, and accurate way.	21. A survey or other methods for contacting stakeholders (including vulnerable subgroups) suggests that the developed protocol is being followed and that stakeholders are satisfied.
22. Agencies will be able to provide practice-based guidance on worker health and safety on an ongoing basis.	22. First responders, volunteers, contractors, and other workers involved in the recovery phase will be shown to have avoided unnecessary risk.

Note: "Agency" refers to any agency or department with a responsibility for risk communication in a chemical terrorism event.

Public Fact Sheet Checklist

PUBLIC/PRESS FACT SHEET/Q & A CHECKLIST

Short summary of chemical release information:

- *Here's what we know:*
- *Date, time, location of release*
- *Name(s) of chemical(s) and materials released*
ChemFinder: <http://chemfinder.cambridgesoft.com/>
MSDS locator: www.ilpi.com/msds/#internet
- *What is known about cause of release (e.g. intentional act, spill, collision, etc)*
- *Initial impact (area affected; who, what are affected)*
- *Containment steps taken and next steps*
- *Steps taken to prevent public exposure (evacuation distances, isolation, clean-up/disposal), incident command status*
- *Here's what we doing to find out what we don't know:*

Immediate actions public is to take:

- *Identify who needs to take action by proximal distance to event site*
- *Identify if at secondary risk via a contaminated individual*
- *Evacuation or shelter in place instructions*
- *Decontamination of people, pets, livestock, homes (if shelter in place)*
- *Location of medical aid, emergency decontamination stations, emergency shelters*
- *Safety of drinking water supply (public water systems, private wells affected?)*
- *Safety of food supply (home food gardens, orchards, stream fish)*

What is Chemical X?

- *Common name*
- *Form (liquid/gas/powder)*
- *Appearance (color range, oily, etc)*
- *Odor*
- *Flammability*
- *Vapor (moves low or high to ground in warm or cold weather)*
- *Visible changes in exposed environment or animals*
- *Persistence in environment*
- *Other names*

Local Health Dept Fact Sheet Checklist

Checklist for Chemical Emergency Response Fact Sheet Produced for Local Public Health Agencies by their State Health Department

Note: When entering data, always include the citation reference or URL.

Short summary of incident:

- Date, time, location, description of incident
- Name of chemical(s) involved
- Number of persons injured/killed
- Containment status
- Actions taken to prevent public exposure (evacuation distance, isolation, etc.)

Immediate Protective Actions - First Aid and Emergency Treatment:

- Do not enter/reenter contaminated scene.
- Identify radio/TV stations for emergency broadcast messages.
- Shelter-in-place? Evacuate? (humans? animals - pets/livestock?)
- Can the public self-treat?
- Is an antidote available?
- Medical treatment guidelines for health professionals

Actions to prevent exposure:

Public –

- Protect breathing/airways (masks? respirators?)
- Shelter-in-place? (how to effectively shelter while traveling or inside a building that is not an official emergency shelter)
- avoid travel to certain locations?
- cover outdoor water or food resources for pets/livestock/other animals?
- is a vaccine available?
- is there risk of secondary exposure from a contaminated person or object?
- is the drinking water supply safe?
- is the local food supply safe (home garden produce, orchards, stream fish)?

Health care workers – PPE for secondary exposure

Environmental workers (first responders, investigators, remediators) – PPE for primary exposure