

Hospital Emergency Preparedness Conference of Ottawa (HEPCO)

Alberta Health Services Southern Alberta Floods 2013

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Alberta Floods 2013

- About the 2013 Floods
- Flood Timeline - Day One
- Condensed Timeline – ongoing

The Beginning....

- Heavy rainfall triggered the worst flood in Alberta's history
- Alberta declared its first ever State of Provincial Emergency
- Third worst natural disaster in North America with flow rates greater than that of Niagara Falls.
- Most costly natural disaster in Canadian history; estimate of insured property damage \$1.7 billion
- Alberta has experience previous floods 1995, 2005, 2011; this one would be different

The Beginning....

- For two days Alberta Environment had been expecting a low pressure system from the Pacific Ocean to bring precipitation
- On Monday June 17, 2013, forecasters were expecting a typical June rain storm
- Rain in the mountains typically flows into the creeks and rivers
- By Wednesday evening, June 19, 2013, it was becoming evident the storm may not be typical
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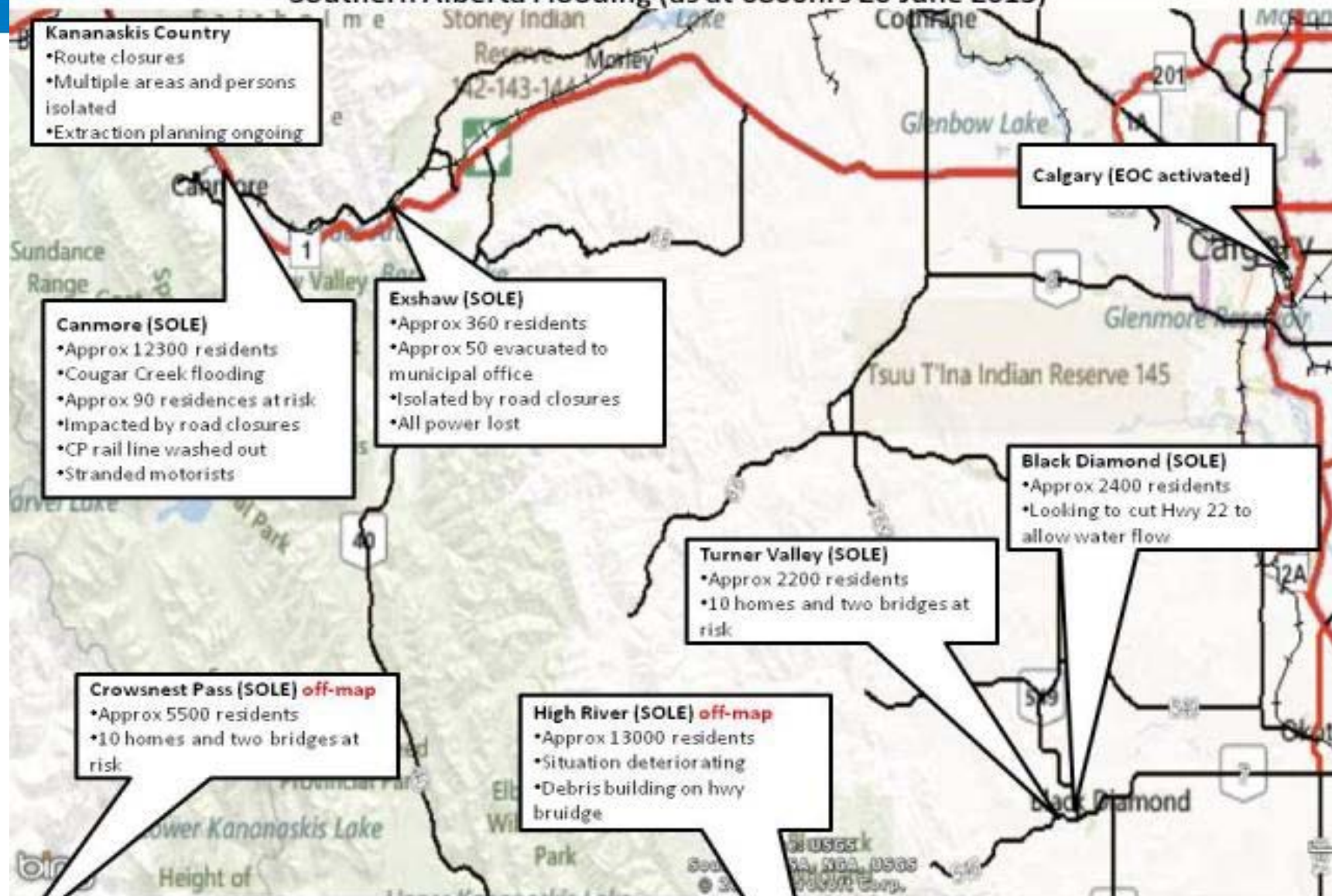
Things Happened Fast



AHS Timeline – June 20, 2013

- 04:00** – Heavy mountain rainfall and severe flooding notification
- 07:16** - AHS Emergency Management On call issued first Situational Report
- 07:54** - Calgary Zone EOC virtually activated
- 07:56** – Advised Banff was cut off from Canmore
- 08:00** - EMS Emergency Management Plan Activated
- 08:28** - Calgary Emergency Management Agency issued their Municipal Emergency Plan Activation Alert

Southern Alberta Flooding (as at 0800hrs 20 June 2013)



Trans Canada Highway.



Canadian Press Photo

Canmore Was On It's Own



Canmore....



John Gibson/Getty Images

Timeline June 20, 2013 (cont.)

- **10:00** - Initial Situational call with Alberta Health
- **10:05** - Canmore Hospital requires Med re-supply by 17:00 hrs
- **11:00** - Medicine Tree Manor starting to evacuate
- **11:05** - Turner Valley sour gas pipeline rupture

Timeline – June 20, 2013 (cont.)

11:55 – Calgary Zone Emergency Operations Centre
staffed and fully activated

Through the day, the devastation continues downstream...

- First Nations Communalities and other rural communities, Bragg Creek, Exshaw, Kananaskis, etc.
- High River – flooding occurs in downtown / low lying communities
- Calgary– buildings / communities evacuated as the Elbow and Bow River breach their banks

Timeline – June 20, 2013 (cont.)

- 13:59 - Report that High River has 4 – 5 feet water in downtown; major evacuation underway
- 14:00 - City of Calgary evacuating low lying communities on the Elbow River
- 14:15 - Okotoks Long Term Care evacuating
- 14:29 - BC Ambulance agrees to cover Lake Louise / Banff
- High River Hospital (123 patient of which 74 were LTC), Community Health Centre, Hospital Annex, and Addictions & Mental Health Clinic evacuated
- In Calgary, Sheldon M. Chumir Health Centre, Holy Cross Centre and Centre 15 commenced evacuation
- 17:30 – Provincial Emergency Coordination Center moved from virtual to full operations in Edmonton

Timeline – June 20, 2013 (cont.)

- By midnight downtown Calgary Urgent Care Center closed with all discharged or evacuated to other sites
- Approx. 17 states of local emergency had been declared
- Multiple Evacuation Centers had been established in Calgary and Calgary rural communities
- Evacuated patients were accommodated in numerous receiving hospitals
- Contracted LTC sites assumed had accommodated evacuated LTC clients

Flooding 2013 - Calgary



Flooding 2013...Town of High River



The River flows through downtown
High River



The Community of Sunrise, - was
never supposed to flood.

Residential Evacuations





High River, Alberta

-
- Insert provincial map

Alberta Flooding 2013- South Zone

June 20, 2013

- Simultaneous activity occurring in two other Zones – namely the South and Central Zones
- Early PM, South Zone moved from virtual activation to full activation of their Zone Emergency Operations Center in Lethbridge
- The Oldman, the Crowsnest and the Castle River flow East from the mountains and converge into the Oldman flows through the Peigan First Nation and then into Lethbridge.
- City of Lightbridge and surrounding communities prepared for flooding

Alberta Flooding 2013-Central Zone

June 20, 2013

- Early PM, Central Zone activated their Zone Emergency Operations Center in Red Deer in preparation of Red Deer River and contributories overflowing their banks
- Cities of Red Deer and Drumheller / surrounding communities prepared for flooding

Alberta Flooding 2013- Con't

June 21st

- Was much the same in Calgary Zone
- In the South Zone, the Oldman and the Bow River converge west of Medicine Hat to form the South Saskatchewan
- Medicine Hat began to prepare for flooding and potential of losing the bridge which would split the City
- Medicine Hat Hospital established a Site Command Post
- A ten bed Urgent Care Center was established at the Medicine Hat College to ensure health services would be available on both side of the river

Alberta Flooding 2013 (con't)

June 21 - 22, 2013

- Sundre Hospital evacuated as a precautionary measure (Three rural hospitals accepted evacuees)
- Drumheller Hospital positioned to evacuate on the 21st.; dialysis moved to Hanna; precautionary evacuation followed

Condensed Timeline (Con't)

- June 22nd ECC/EOCs went virtual overnight; still evacuating sites and moving higher needs pts to other sites
- Beds / mattresses were required; Equipment requests
- June 23rd Enmax power issues and SHC
- Radiation leaks at Holy Cross
- Health Inspections of reception centres
- June 24 – Communications (Evacuees, staff, etc.)
- Site recovery planning; business continuity /resumption planning and execution

Condensed Timeline (con't)

June 25th – 26th

- Cleaning of Sheldon Chumir
- High River physician processes – lab work, etc.
- Downtown Chumir opens for walk ins
- Repatriation of Central Zone Hospitals / disassembling of urgent care in South

June 27th

- Chumir back up for EMS

July 2nd.

- AHS Provincial ECC transition to AHS Recovery Operation Centre; relocated to Calgary

Continuing Care Evacuation

Several continuing care sites (Hospices, Drop In, etc.) and Long Term Care Facilities evacuated / received damage:

- Medicine Hat: St. Joseph's
- High River: Medicine Tree Manor (damage sustained)
- Okotoks: The Heartland
- Calgary:

Agape Hospice

Bow View Manor

Bow-Crest Care Centre

Rouleau Manor (damage sustained)

Edwards Place (damage sustained)

King Tower (damage sustained)

Murdoch Manor (damage sustained)

Salvation Army Centre of Hope (damage sustained)

Alpha House (damage sustained)

Drop In Centre (damage sustained)

Essential Services Uninterrupted

Despite overland flooding damage and isolation

- Canmore Hospital remained open
- Oilfields Hospital in Black Diamond lost service utilities and was isolated due to road washouts, but did not sustain damage.
- Covenant Health Banff Mineral Springs Hospital lost service utilities and was isolated due to road washouts, but did not sustain damage.
- Drumheller and Sundre Hospitals evacuated; no damage

The Berm



Alberta Health Services

Alberta Health Services was not only a responding agency in the emergency but were also heavily impacted by the floods.

AHS Operational Impact - Summary

- A number of Hospitals / Urgent Care Centers evacuated, isolated and / or damaged; secondary impact for receiving sites
- Several continuing care sites (Hospices, Drop In, etc.) and Long Term Care Facilities evacuated / received damage
- Multiple AHS Corporate/Community/EMS facilities/private Community Physician Offices/evacuated and/or sustained damage
- Hundreds of Home Care clients displaced
- Staff were displaced from places of work; many Staff had homes that were damaged or destroyed
- Physician Offices/evacuated and/or sustained damage
- Damage to main frame servers; patient records

Impact....



Patient records were damaged by the flood waters.



Boats, motor homes, personal belongings, etc were moved by the raging flood waters.

Lessons Learned

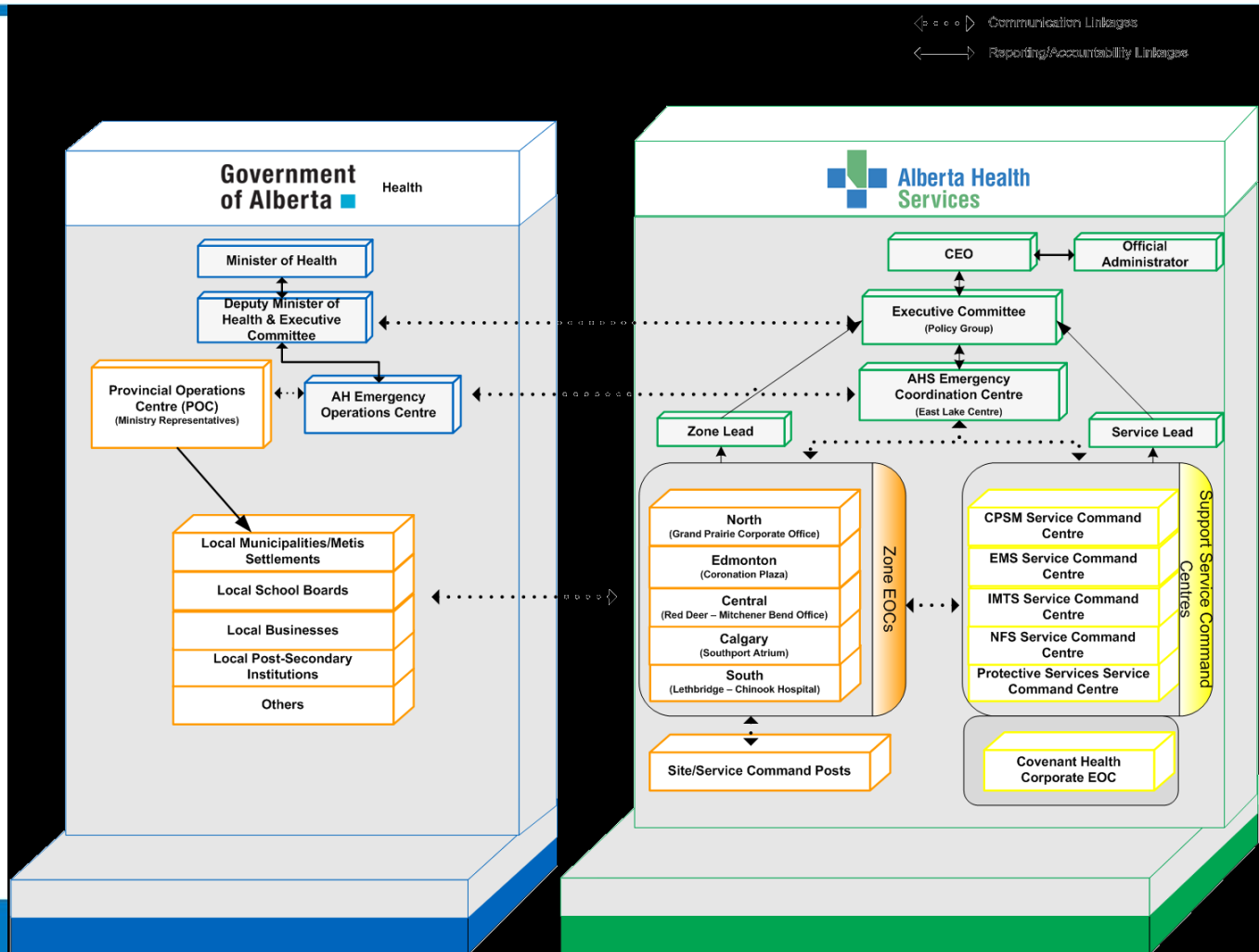
- Heightened the awareness of need for a corporate BCM / DR framework and methodology
 - displaced staff were relocation/alternate working arrangements
 - back up sites / destinations `
- More Staff training and exercises are required
- Business recovery / resumption planning must start at the commencement of the event
- Financial tracking and reporting system communicated and implemented early

AHS Response Efforts

- EMS activated their Emergency Management Plan
- Three Zone Emergency Operations Centers (ZEOCs) activated
- Provincial AHS Emergency Coordination Centre activated
- AHS Staff assigned 24/7 coverage within Municipal Emergency Operations Centers and later, Recovery Centers
- AHS Mental Health and Public Health staffed High River “Welcome Center” – provision of information, support
- Site evacuation plans were implemented for evacuating and receiving sites



AHS Incident Management Structure



AHS Response Efforts (cont)

- > 250 Community Health Nurses/Home Care Nurses and Mental Health Workers supported Community Evacuation Centers
- AHS Nursing and Aboriginal Health Staff supported First Nation Communities (e.g. Siksika Nation , Stoney Nations - Eden Valley and Morley)
- Messaging for Health Link Alberta; linkage to other call centers
- Posting / distribution of health related information and use of social media
- Establishment of alternate care location



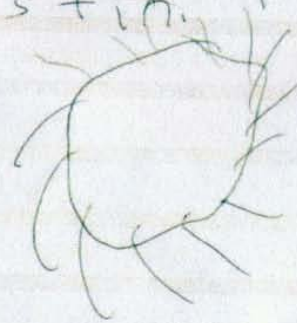
Lessons Learned

- Greater redundancy required in AHS IMS
- Expand training for AHS Staff assigned to Municipal EOC
- Re-invest in Evacuation Center planning / resource support for Evacuation / Reception Centers
- Clarification of linkages with NGOs

Resource Management

- Out of zone Public Health Inspectors (PHI), Supervisors and Managers were cycled through Calgary and area
- On July 5: 12 out of province inspectors arrived
- Emergency Social Services staff from BC augmented AHS Community Mental Health resources
- Equipment (beds, geriatric chairs, stretchers, etc.) shipped from central stockpiles to sites receiving evacuees
- Personal protective supplies provided to Non Governmental Organizations for handout to residents / volunteers involved in cleanup
- Many staff displaced from their places of work; work from home or alternate sites

Dear people in Calgary who got Fladded
Out. I hope your ok If your lissining and
~~your~~ your in the Hospital this is for you too fully
you get out soon and Calgary gets all the water out
of the aria and Here is a little pitcher to
cher you up I love you from Justin



Justin

AHS Response Efforts (cont)

Public Health response involved:

- Increased health surveillance / reporting
- Focus on key infrastructure (i.e. potable water & sewage systems)
- Working with AESRD for water, soil and air monitoring
- Provision of support to, and inspection of, facilities
- Support to the municipality to assess safety for re-entry into affected homes (posting of not for habitation (NFH) notices)
- Provision of information for homeowners and businesses
- Responding to health complaints/concerns about clean up activities



Structurally unsafe



Unfit for habitation



Unfit for habitation





The Stampede will go on!

**173 food facilities
required inspection
prior to opening in a
shorter period of
time than previous
years.**



Food facility



Lessons Learned

- Need for role clarity with municipalities and safety codes officers and variable capacity between municipalities
- Real time data entry and recording required for needs assessment and surveillance
- Staff safety is paramount – ensure appropriate and available PPE
- Important to work with GOA partners
- Regular work demands still come in over and above flood related work.
- Support public policy development

Fear of the Unknown – e.g. High River

Health Trends Alberta

August 27, 2013

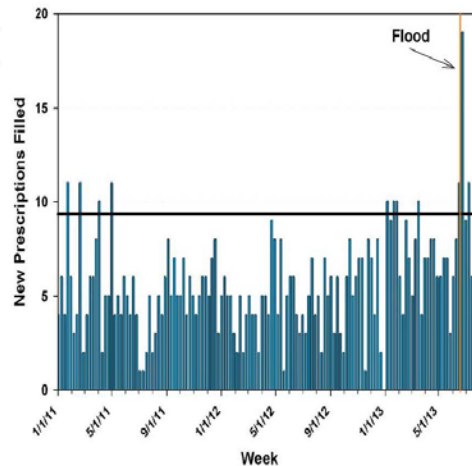
Number of New Prescriptions for Anti-Anxiety Medication Filled by Residents of High River

Prior to and following the 2013 flood

High River was one of the communities most severely impacted by the southern Alberta flooding that began on June 19, 2013. The evacuation of High River residents due to the floods was stressful, many residents suffered property damage, and some lost their homes. Prescription medications could be used as a means of coping with this difficult situation. Today's edition of *Health Trends Alberta* describes and compares the number of new prescriptions filled for anti-anxiety medications among High River residents prior to and after the flood. A new prescription event was defined as there being no history of dispensed events in the previous 365 days. This indicator excludes both routine prescriptions and short term refills (e.g., to cover the period of evacuation) associated with the flood.

New Prescriptions for anti-anxiety among females increase after the flood

Among females in 2011 and 2012 on average, there were five new prescriptions for anti-anxiety medications dispensed per week in High River. The threshold line of approximately nine new prescriptions per week represents two standard deviations above the average for 2011 and 2012. There was a statistically significant increase of new prescriptions among females in High River, per week, observed one and three weeks after the flood with the peak of 19 new prescriptions dispensed the week of June 23, 2013.



- People scrambled to account for and connect with their loved ones
- People were evacuated from their homes for weeks; some remain evacuated
- Financial strain
- Post traumatic stress
- July 23rd High River was hit with a massive hail storm, causing significant property damage
- September 4th a flood warning was issued, further increasing anxiety in the community
- The long term effects of the High River Flood are not known yet

Intermediate Recovery Phase

- Removal of almost 500 not fit for habitation orders in High River
- Liaison with new temporary neighbourhoods to ensure adherence to housing and other regulations
- Business recovery
- Mental health / psychological support to community / staff
- Work with partners on infrastructure recovery and mitigation
- Attendance at community meetings to provide information and expertise

AHS Ongoing Efforts

- 6 temporary inspectors hired to assist with anticipated workload extending for at least one year (Mold issues)
- Ongoing Mental Health support in the communities (New FTE)
- Attendance at community meetings to provide information / expertise
- Relocation of displaced staff / services
- Reconstruction / renovation of impacted sites
- Post incident debrief sessions / surveys / reports
- Stockpile recovery / replenishment (Grant)
- Financial recovery / insurance (Complex)
- Employee Family Assistance Program resources enhanced

Reminders

- Things happen fast; get big fast
- Facilities can be isolated
- Heavy equipment may not be available because it is saving lives
- People on the sites work miracles, there are so many heroes you can't count them all
- Prepare to be self-sufficient with local contingencies for three days. (PDP Guide)

Reminders

- Communication can be difficult; establish communication mechanisms early in the response; have contingency plans.
- Establish single point of command early in the response – delegate wisely.
- Municipal EOC is an important link in the success of the response.
- Don't hesitate to ask for help.
- Be calm and be flexible – keep good notes
- AHS staff, physicians and the community are key to response and recovery.

Our People



Thank you!

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