



Health Protection Agency

Chemical Hazards and Poisons Division
 Centre for Radiation Chemical and Environmental Hazards
 24 hour tel: 0844 892 0555

Acute Chemical Incidents– Basic checklist

1. Questions to ask the notifying organisation
2. Recommendations for acute phase response
3. Recommendations for incident investigation (post-acute phase response)
4. Post incident questions for public health

1. Questions to ask the notifying organisation

For all chemical incidents request a brief summary of what is known **NOW** about the chemical incident.

- **What** has happened? Is it a fire, explosion, spill, leak, etc?
- **Where & when** did it happen?
- **What media** has it affected? e.g. air, water, land, food
- **What** is the **source** of contamination? Could it be a **deliberate release**?
 - Consider establishing a STAC for deliberate releases
 - Has the contaminant been safely contained or removed?
- **What** is known about the **contaminating substance**?
 - specific name(s)
 - composition
 - concentrations

Information
Collected*

You may need the following additional information:

- Have any adverse health effects been reported following exposure or have there been any complaints?
 - What symptoms have been reported? (May have been reported to local authority, GPs, emergency departments, water utility etc.)
- How many people have actually and/or potentially been exposed and to what contaminant concentrations?
 - Has the Ambulance Service been alerted? Have they received any casualties?
 - Have local hospitals been alerted? Have they received any casualties?
 - Do emergency departments have adequate personal protective equipment (PPE) and decontamination facilities?
 - Do emergency departments have appropriate antidotes and an adequate supply?

***Key:** ✓ = Yes X = No ? = Information awaited NA = Not applicable



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2. Recommendations for acute phase response

Information to obtain/confirm from other agencies

- Ensure appropriate agencies are taking steps to prevent further contamination
- Ensure access to affected area is restricted to minimise exposure
- Ensure relevant Local Authority, Environment Agency and water company (if appropriate) personnel are informed; take contact details
- Establish clear lines of responsibility and communication
- Establish whether any environmental samples have been taken
 - What sampling strategy has been used, e.g. sampling frequency, priority analyses? (if possible identify peaks & troughs in the analytical results)
- Consider convening a multi-agency incident control meeting
- Consider issuing a press release to local press and media – remember to have alternative versions in appropriate language

Action to protect the health of the public:

- Alert Chemical Hazards and Poisons Division as soon as you are aware of the incident; pass on as many details as possible
- Define affected population, and monitor symptoms and disease levels – mark on a map or geographical information system
 - Are any additional populations at risk?
 - Have appropriate actions to protect public health been taken?
 - consider sheltering ('go in, stay in, tune in') versus evacuation (consider & advise on risks of evacuation)
- Review potential adverse health effects of the chemical and methods of control
- Provide information to the public as needed
- Consider setting up a help line to provide assistance
- Consider referring to health emergency plan and ensure key staff members are notified
- Consider alerting GPs, NHS Direct, NHS & private hospitals, neighbouring Health Protection Units and other medical professionals
- Consider informing Food Standards Agency/DEFRA if there is a threat to food or agriculture
- Consider informing the Regional Director of Public Health (RDPH), or the Regional Epidemiologist (RE).



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3. Recommendations for incident investigation (post-acute phase response) - Information to obtain/confirm from other agencies

- Confirm that the chemical hazard initially identified is the **actual** chemical hazard
- Identify source-pathway-receptor linkages
 - Is there an aquifer used for drinking water abstraction?
 - Are there plastic water supply pipes?
 - Is there a river or stream used for recreational purposes?
 - Is the land used to grow food?
 - Are there other contaminant transport pathways?
- Obtain notification for each organisation involved on when incident is declared over and when they are standing down
- Obtain updates on incident evolution and any secondary contamination
- Undertake detailed site assessment
 - collect maps and plans of the area
 - establish topography and direction of groundwater flow
 - collect further environmental samples
 - compare any measured concentrations with regulatory standards and any past sample results, e.g. from routine sampling
- Obtain any plume modelling (real time or after event) data

Action to protect the health of the public:

- Re-evaluate incident category
- Ensure appropriate remedial action has been undertaken to remove source of contamination or exposure pathway
 - once confirmed, no further action required
 - go to 'post incident questions'
- Consider conducting a site visit
- Undertake further assessment of health impact
 - consider whether biological sampling of sentinel cases and other exposed individuals is necessary
 - consider carrying out a questionnaire survey of all those exposed to identify any adverse health effects
 - if necessary, initiate an epidemiological study to assess health impacts
 - consider long-term follow up and monitoring of the exposed population

