National Operational Guidance

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Hazard - Contaminated members of the public

Hazard Knowledge

Understanding the current threat to life and the need for immediate action will take priority and influence any pre-determined planned responses. The first objective of the three primary emergency blue light services is to save life, and all agencies are required to assist in achieving this key objective as a matter of urgency.

Evacuation, disrobe and decontamination are key principles to follow when conducting life-saving activity in a contaminated environment. Maximum benefit will be realised if conducted within fifteen minutes of exposure.

Evidence has shown that the actions taken by first responders to incidents involving the contamination of members of the public saves lives. The condition of contaminated individuals is likely to worsen the longer it takes for responders to react. Actions during initial operational response (IOR) should concentrate on:

- **Remove** casualties from the immediate area to avoid further exposure to the substance. Evacuate casualties upwind, and if possible uphill, away from the scene of contamination and into fresh air. Use available resources to form an improvised 'inner cordon' upwind of the incident. See control measure: Evacuation
- **Remove** the outer clothing of casualties by asking them to disrobe, avoiding pulling clothing over the head if possible. Do not pull off clothing stuck to skin. See control measure: Disrobe
- **Remove** the substance from the skin using a dry absorbent material to either soak it up or brush it off. Rinse continually with water if skin is itching or in pain. See control measure: Improvised decontamination

Failure to remove casualties to an area of relative safety and instigate disrobing in the shortest possible time will result in unnecessarily prolonged exposure to the contaminant, adversely affecting patient outcomes and affecting survivability.

The impact on members of the public will depend on the type of contaminant and the clothing they are wearing. Factors such as the total surface area of skin covered by clothing, the type of the clothing (waterproof, absorbent, fabric type, etc.), the number of layers, the speed and method with which it is removed will all vary the degree of contamination and harm to the person.

Responsibility for dealing with any member of the public who is reluctant or refuses to be decontaminated, and recording people passing through decontamination rests with the police or security services.

To understand this hazard fully, it is important responders know the following definitions relating

to public decontamination:

- **Decontamination:** The physical or chemical process of reducing contamination to minimise the risk of further harm occurring and to minimise the risk of cross-contamination to a level as low as reasonably practicable (it is not always possible to totally remove the contaminant or clean the equipment on site)
- **Improvised decontamination:** Using an immediately available method of decontamination before the use of specialist resources
- **Interim decontamination:** Using standard equipment to provide a planned and structured 'wet decontamination' process
- **Mass decontamination:** A planned and structured procedure using purpose designed decontamination equipment where there are large numbers of contaminated casualties that require 'wet decontamination'
- **Clinical decontamination:** The process where contaminated casualties are treated individually, by trained healthcare professionals, using purpose-designed decontamination equipment. Triage should determine the priority for any casualties

See National Operational Guidance: Performing rescues – Casualty care for further information.

Contaminated members of the public

If a companion animal, such as a dog, is involved in a hazardous materials incident, it should be restrained and contained in the warm zone to prevent it spreading contamination to other areas.

For further information about dealing with animals see Incidents involving animals.

Control measure - Life-saving actions

Control measure knowledge

Understanding the threat to life and the need for immediate action will take priority and influence any pre-determined planned responses. Members of the public in areas of either gross contamination or high concentrations of hazardous materials, and who therefore have no safe escape route, may require immediate life-saving actions.

At a hazardous materials incident, it is recognised that members of the public may be directly involved. The priority for emergency responders at all incident types is to save life; therefore the primary focus for emergency responders involved in a hazardous material incident will be to conduct initial life-saving activity for casualties that need assistance, direction or rescue.

These early operational activities should be considered an absolute priority. Casualties should be directed away from the scene, ideally upwind and uphill of contamination and point of release. Any casualties who can walk should be directed to this area with the minimum direct physical contact from emergency responders.

Initial operational response (IOR) identifies realistic expectations of frontline emergency responders during a response to a CBRN(e) event. This principle can be applied to a hazardous material incident where a risk to life exists and the properties of the substance involved are not known in the early part of the response phase.

To conduct life-saving actions in a hazardous material environment it is important to understand:

- The Step 1-2-3 Plus - Safety Triggers for Emergency Personnel) process
- The advantages and limitations of responder personal protective equipment (PPE) and respiratory protective equipment (RPE)
- The need for multi-agency joint understanding of risk (JUR) and a dynamic risk assessment (DRA)

If the incident commander is considering deploying crews to conduct life-saving activity it is important to ensure an effective emergency decontamination strategy is available for both firefighters and casualties.

Incident commanders should be able to undertake the joint understanding of risk (JUR) and service-specific risk assessment and apply the identified control measures effectively before committing personnel to undertake deliberate reconnaissance and rescue activities in the hot and warm zones.

The presence of saveable lives can be confirmed through the casualties being in line of sight. If casualties are not in line of sight but there is a reasonable suspicion, based on intelligence, that live casualties are in the area, the incident commander may commit a deliberate reconnaissance team for a maximum of 15 minutes to provide confirmation.

Strategic actions

Fire and rescue services should:

- Ensure incident commanders have the skills, knowledge and understanding required to undertake rapid risk assessment to limit or prevent exposure during immediate life-saving rescues at hazardous materials incidents

- Consider providing appropriate equipment to assist in removing casualties from the risk area, such as loud hailers, vehicle personal address systems and stretchers

- Ensure staff are aware of the principles of IOR and that they are incorporated into all policies and procedures which address CBRN(e) incidents;

Tactical actions

Incident commanders should:

- Assess the need to conduct immediate life-saving actions at incidents involving hazardous materials

Control measure - Warn, inform and advise people

Control measure knowledge

Under the Civil Contingencies Act, Category 1 responders are required to put arrangements in place to make information available to the public about civil protection matters and to maintain arrangements to warn, inform and advise the public in the event of an emergency.

In some situations, information provided to the public may have to be restricted, especially if its release could cause panic and potentially result in further harm to people.

Information communicated to, or withheld from, people can influence their behaviour. Communicating with people, particularly those in groups or crowds, is essential to maintain order and manage behaviour.

In emergencies, the key communications objective will be to deliver accurate, clear and timely warnings, information and advice to people, so they feel confident, safe and well-informed.

Warnings, information and advice should:

- Be specific and clear
- Be timely and accurate
- Come from a credible source and be verifiable
- Convey the nature and extent of the danger

Warnings, information and advice can be delivered in many ways including:

- Face-to-face
- Visiting premises – residential and commercial
- Media and social media announcements
- Public announcements in areas such as public buildings, shopping centres, sports venues and transport networks

Strategic actions

Fire and rescue services should:

- Develop guidance and support arrangements to effectively communicate with people during emergency incidents
- Develop arrangements with partner agencies for the delivery of warnings, information and advice during emergency
- Develop guidance and support arrangements for the effective use of media services

Tactical actions

Incident commanders should:

- Use the most effective methods for communicating with people who are either directly or indirectly involved in the incident
- Consider the use of media, social media and other methods to communicate with people
- Establish a media liaison point and brief a nominated media liaison officer

Control measure - Controlled evacuation of

contaminated casualties

Control measure knowledge

The first phase for mass decontamination (MD) is the controlled evacuation of contaminated casualties, by directing or removing them from the scene of contamination.

The removal of casualties from the scene of contamination and point of release (normally in or around the hot zone), will significantly reduce the likelihood of any further contamination occurring. Likewise exposure through the casualties' unprotected respiratory systems will be reduced.

An area away from the scene of contamination (normally in the warm zone) should be identified. Where possible, this should be upwind, and ideally uphill, of the scene of contamination. Any ambulant casualties should be directed to this area as quickly as possible, with the minimum of direct physical contact from emergency responders. It is essential that responders communicate effectively with casualties to gain their confidence and co-operation.

Controlled evacuation of contaminated animals

The owner or keeper of a companion animal, such as a dog, should be instructed to restrain the animal and remain in the warm zone. If the owner or keeper of the animal cannot be identified or is incapacitated, it should be handed over to a police officer.
The decisions regarding contaminated animals should be managed by the police, in liaison with the Defence Science and Technology Laboratory (dstl), veterinary surgeons or animal welfare charities. However, in the interim and if disrobe packs are available, it may be appropriate for the owner, keeper or police officer to be provided with a pack for the animal. The packs contain gloves which could be used for handling the animal and wipes that may reduce the amount of contaminant on the animal.

It is not foreseen that decontamination of animals would be carried out using fire and rescue service mass decontamination resources. If decontamination of an animal is deemed viable and necessary, special arrangements would need to be made for the process.

For further information see:

Incidents involving animals: Physical control or restraint of the animal

Incidents involving animals: Immediate first aid for animal

Strategic actions

Fire and rescue services should:

- Provide equipment or access to information to determine and monitor wind speed and

direction

- Consider providing equipment, such as speakers or loudhailers, to enable communication with casualties from a distance
- Provide an initial supply of disrobe packs
- Have agreements in place with other agencies to establish responsibilities if companion animals are contaminated during a hazardous materials incident

Tactical actions

Incident commanders should:

- Determine and monitor wind speed and direction, using appropriate equipment, or other sources of information such as CHEMET
- Identify an appropriate area for the casualties to be evacuated to
- Evacuate casualties to the identified area
- Initiate and maintain communication with the casualties, to provide instructions and keep them informed
- Issue disrobe packs
- Provide regular updates to NRFC on incident development and casualty numbers
- Instruct the owner, keeper or police officer to restrain the contaminated companion animal and remain in the warm zone
- Issue the owner, keeper or police officer with a disrobe pack to assist with handling the animal and to reduce the amount of contaminant on it
- Request police assistance for managing the onward care of a contaminated companion animal

Control measure - Establish a triage sieve (adult and paediatric)

Control measure knowledge

The core principle of triage is to do the most for the most. The initial triage method in a multiple casualty situation is the triage sieve.

The triage sieve will identify immediately life-threatening problems based on the C < A B C > system and correctly prioritise the patients for treatment. Not doing this will potentially risk lives.

All fire and rescue services should be aware of this system and be prepared to employ it in a multiple casualty situation or at a major incident.

As a principle, in a poorly resourced scene, minimal casualty care is carried out in a multiple casualty situation. The following list provides guidance on what could be achieved without breaching the core principle of triage:

- Quickly turn a patient to protect an airway
- Encourage self help
- Encourage a bystander to apply direct pressure

With the publication of the 2013 Ambulance Clinical Practice Guidelines (JRCALC) it was acknowledged that now ambulance services are all practising C < A B C > in their initial patient assessment, the standard triage sieve needed to be updated to take account of the importance of initial assessment and treatment of catastrophic haemorrhage.

The diagram below is the new National Ambulance Service Medical Directors Group (NASMeD) Triage Sieve, which was published in 2013 for use by all ambulance staff at a major incident (NARU, 2013).

The priorities are described as:

- P1 or red tags (immediate) are used to label those who cannot survive without immediate treatment but who have a chance of survival
- P2 or yellow tags (observation) are for those who require observation (and possible later re-triage). Their condition is stable for the moment and they are not in immediate danger of death. These casualties will still need hospital care and would be treated immediately under normal circumstances.
- P3 or green tags (wait) are reserved for the 'walking wounded' who will need medical care at some point, after more critical injuries have been treated.

The JESIP casualty triage has an additional priority:

- P4 or P1E (expectant) is used for those whose injuries are so extensive that they will not be able to survive given the care/resource that is available. This is only to be used under authorisation of the Medical Incident Officer. They alone have the responsibility to match these patients' injuries with the number and type of the other casualties and the remaining resources available to the hospitals..

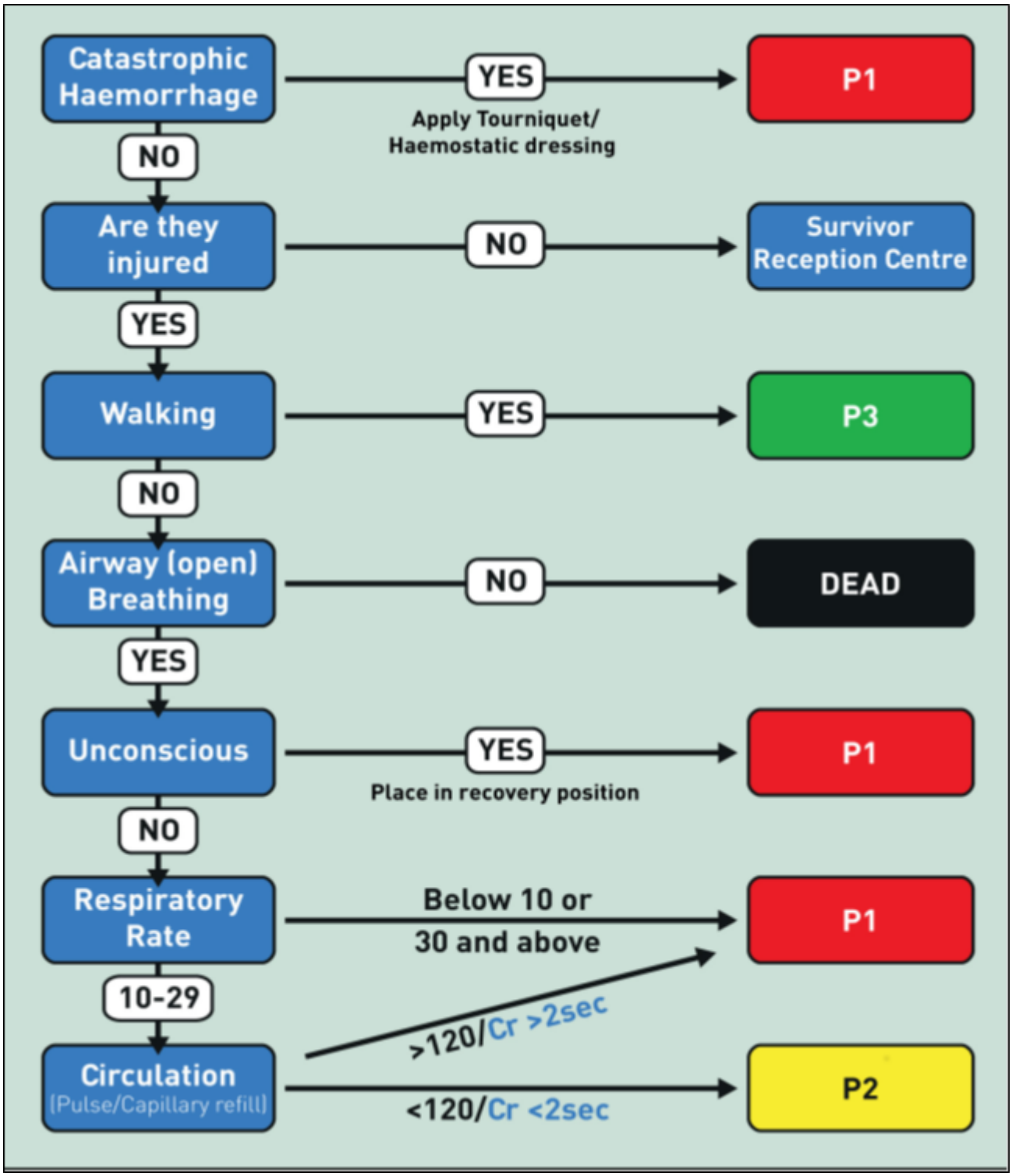

Figure 3: Triage Sieve

Source: National Ambulance Service Medical Directors Group (NASMeD)

The same triage principles apply to children. Paediatric triage tape is available, which groups children by length, weight and age and provides normal physiological values for respiratory rate and pulse in each of the groups to carry out the triage process.

Having labelled the casualty with their priority, casualties are handed over to an appropriately trained and competent practitioner. A record or log of the numbers of each priority should be kept.

When referring to casualties and the above categories at the scene of an incident, everyone should be sensitive to those who may be nearby, which could include relatives and other members of the public.

Strategic actions

Fire and rescue services should:

- Ensure that responders understand the principle of casualty triage at incidents involving more than one casualty

Tactical actions

Incident commanders should:

- Identify the number of casualties requiring medical attention and instigate a triage process
- Record the outcome of triage and communicate to medical responders

Control measure - Rescue: Hazardous materials

Control measure knowledge

When evacuating ambulant casualties, fire and rescue service personnel should be aware of the difficulty in communicating with the casualties and the potential of failing to identify a place of relative safety. To minimise this hazard, it is important that the place of relative safety is identified before personnel are committed to carry out rescues.

Until specialist responders from other services arrive (HART, SORT, police service CBRN(e) responders) fire and rescue service personnel have the only available access to the personal protective equipment (PPE) suitable to carry out immediate rescue within the scene of contamination and therefore should be the only people to enter this area.

Casualties identified as breathing and conscious but unable to walk should be regarded as a high priority to be rescued. They should be moved from the perceived area of greatest contamination and taken to an area of relative safety. At the earliest practicable opportunity, these casualties should be helped to disrobe and, if possible, undergo improvised or interim decontamination.

It is recognised that the time taken to don gas-tight suits (GTS) may compromise the ability to rescue non-ambulent, saveable life casualties in a timely manner. In these circumstances, the fire and rescue incident commander should consider the use of other acceptable PPE ensembles. Fire and rescue service structural firefighting PPE combined with self-contained breathing apparatus (SCBA) provides less protection than gas-tight suits (GTS). However, research has demonstrated that protection factors provided by this level of PPE reduces the risk to fire and rescue service personnel to a level that may be considered acceptable in circumstances where saveable-life rescues could potentially be carried out.

For more information see ORCHIDS - Optimisation through Research of CHemical Incident Decontamination Systems

It cannot be over-emphasised that this guidance is not an instruction to deploy responders into a potentially contaminated area in structural firefighting PPE and SCBA in every circumstance. The purpose is to provide incident commanders with guidance to allow them to make calculated risk-based decisions, based on all available information, on whether to deploy staff in structural firefighting PPE and SCBA as part of a plan to rescue saveable lives.

Strategic actions

Fire and rescue services should:

- Have recording systems and checklists in place in the mobilising controls to capture the need for rescues and be able to give instructions to those in need on the initial call
- Ensure personnel are aware of the principles of initial operational response (IOR)
- Understand standard protocols and rescue techniques that can be applied in a hazardous materials environment

Tactical actions

Incident commanders should:

- Commit crews to perform rescues based on the hazard assessment and joint understanding of risk (JUR)

Control measure - Disrobe

Control measure knowledge

When done effectively disrobing, followed by appropriate decontamination, has been shown to reduce contamination a level below that which is considered harmful. Disrobing should therefore be considered the primary action following evacuation from a contaminated area.

Undressing should be systematic to avoid transferring any contamination from clothing to the skin.

Fire and rescue service (FRS) disrobe packs should be made available on frontline appliances and contain a pictogram showing a safe undressing procedure that minimises spreading contamination from clothing to exposed skin. If these packs are not available, responders should consider improvising the disrobe procedures. Disrobe packs are not necessary for undressing and the lack of an alternative should not delay undressing which is an absolute priority.

Responders should consider the potential for hypothermia as well as modesty concerns. If available, alternative clothing or blankets should be used.

It is essential for crime scene investigation purposes that contaminated waste materials and clothing is contained in bags and left for the police investigation team. Where this can be achieved without compromising the speed and effectiveness of the evacuation and decontamination of casualties it should be given full attention/consideration.

Strategic actions

Fire and rescue services should:

- Ensure disrobe packs are available as part of the initial response

Tactical actions

Incident commanders should:

- Remove the outer clothing of members of the public and issue disrobe packs if available
- Instruct contaminated members of the public to disrobe and issue disrobe packs if available

- Distribute disrobe packs to casualties once they are in a place of relative safety

Control measure - Mass decontamination: Disrobe

Control measure knowledge

The vast majority of contaminants are removed if disrobing, followed by appropriate decontamination, is carried out effectively. Disrobing should be carried out in a way that avoids transferring contaminant from clothing to the skin.

Instructions on how to disrobe, and how to bag and secure clothing and personal items, are provided in pictogram form within the disrobe packs. It is important that clothing and personal items are contained in bags for police crime scene investigation purposes, especially if the incident could be a CBRN(e) event. Although very important, this process should not be allowed to compromise the speed and effectiveness of decontamination.

Disrobe packs can be distributed to casualties in a number of ways, including:

- Distributed in cages, positioned close to the edge of the hazard area, to enable casualties to collect disrobe packs
- Fire and rescue service personnel in the cold zone can throw disrobe packs into the hazard area to the casualties
- Fire and rescue service personnel, wearing appropriate personal protective equipment (PPE), distributing the disrobe packs

Casualties should be provided with disrobe packs, instructed to commence disrobing and await further instructions. Some casualties may be unable to access disrobe packs themselves, and will require assistance.

The disrobe packs use a method of unique identification numbers, to ensure that clothing and personal items are linked to the appropriate casualty.

Personnel, wearing appropriate PPE, should provide instructions, guidance and assistance to the casualties on how to use the disrobe packs.

Strategic actions

National Resilience should:

- Provide sufficient disrobe packs for the number of casualties involved

Tactical actions

Specialist responders should:

- Distribute the disrobe packs using an appropriate method
- Wear appropriate personal protective equipment (PPE) while distributing the disrobe packs
- Treat all casualties with respect and provide appropriate instructions, guidance and assistance
- Communicate with casualties throughout the disrobe process
- Ensure clothing and personal items are retained in appropriate bags, with unique identification numbers, for police investigation purposes

Control measure - Improvised decontamination

Control measure knowledge

Research of decontamination methods has shown that disrobing and dry decontamination could have a significant role from an injury mitigation and lifesaving perspective. This is dependent on the chemical contaminant involved (i.e. whether it was caustic or not) and the availability of appropriate absorbent materials in sufficient quantities. In such circumstances, dry decontamination is likely to be most effective if undertaken by first responders, as soon as possible and before specialist resources are likely to be able to arrive.

Rolls of absorbent tissue ‘blue roll’ and plastic bags have been provided to fire and rescue services (FRS) specifically for this purpose. However, any dry absorbent material may be used, for example: kitchen towel; toilet paper; paper tissues; towels and clean rags; strips of blanket or sheeting etc. Other material, such as cat litter and dry soil can also be used. All waste material, arising from the dry decontamination process, should be bagged and left in situ if possible.

Staff should be mindful, that the casualty's hair may still hold some contaminant and a method of improvised wet decontamination of the hair should be considered if there is good reason to believe it may be contaminated. Likewise, corrosive materials will also initially require a wet decontamination which can be applied via an improvised or interim decontamination solution.

For specific advice on acid attacks see National Operational Guidance: Health Hazards - Corrosive materials

Strategic actions

Fire and rescue services should:

- Secure access to appropriate specialist advice, both internal and external, on decontamination
- Incorporate the priorities of their multi-agency partners into their own response to public decontamination
- Provide procedures for improvised decontamination following initial operational response (IOR) guidance

Tactical actions

Incident commanders should:

- Implement an improvised dry decontamination process for members of the public
- Implement improvised wet decontamination where casualties have been exposed to caustic or irritant substances
- Remove the substance from skin using dry decontamination (or wet decontamination for caustic substances)

Control measure - Interim decontamination

Control measure knowledge

Although the health service has primacy for public decontamination, the fire and rescue service (FRS) is acknowledged as being the most capable emergency service due to its provision at an emergency incident. This is because of the equipment and personnel it can provide.

In the early stages of the incident and dependent on the symptoms and needs of contaminated people, the fire and rescue service (FRS) incident commander may decide (where possible in conjunction with the ambulance and police services) to establish interim decontamination.

Interim decontamination has the advantage of being a more structured and controlled method of decontamination than improvised decontamination.

The designation of an area to carry it out decontamination can greatly influence the effectiveness of the process and can reduce the impact of the process on the surrounding environment. If a 'wet' decontamination process is chosen, the run-off must be contained and prevented from entering drainage until discussed with the relevant agency and water companies.

Liaise with the environmental agencies or hazardous materials adviser (HMA) regarding appropriate disposal.

See National Operational Guidance: Environmental protection

Strategic actions

Fire and rescue services should:

- Ensure personnel who respond to hazardous materials incidents are provided with the necessary knowledge, skills and understanding to decontaminate members of public effectively
- Develop procedures for interim decontamination using standard frontline equipment
- Provide systems for resilience in the event of breakdown or fault with any item of equipment; this may include replacement equipment or alternate methodology

Tactical actions

Incident commanders should:

- Establish interim decontamination using standard frontline equipment based on hazard assessment

Control measure - Provide treatment to burns casualties

Control measure knowledge

Effective treatment of thermal and chemical burn injuries can be treated through:

- SAFE approach:
  - Shout/call for help
  - Assess the scene
  - Free from danger
  - Evaluate the casualty
- Stop the burning process with irrigation (tap water)
- Cool the burn wound, warm the patient
- Dress the affected area
- Assess and manage immediately or imminently life threatening problems
- Request specialist advice and medical response

Strategic actions

Fire and rescue services should:

- Make burn treatments available to responders likely to encounter casualties
- Train responding personnel to understand the treatment of casualties suffering from burns

Tactical actions

Incident commanders should:

- Identify the nature and extent of casualty burns and communicate this to medical support teams
- Cool skin burns using the recommended method and request specialist medical assistance
- Dress burns according to service procedures and training

Control measure - Mass decontamination: Set up

structures

Control measure knowledge

MD1 structures are used for disrobing, MD2 structures provide shower facilities, MD3 structures are used for re-robing and MD4 structures are used for emergency responders.

The MD4 structure will usually be erected first, and a team of three powered respirator protective suit (PRPS) wearers will be deployed into the warm zone; they will communicate with and reassure the casualties. A PRPS emergency team will be established at the same time.

The remaining MD structures will then be erected; they should be located as close as possible to the MD4 structure, allowing for ancillary equipment between the structures. Each area of MD operations should be considered as a sector in its own right.

Care should be taken when siting the MD structures, as it is not possible to move them during an incident. The structures, along with supporting equipment and other resources, require a large area. Advice on the location of the MD structures may be sought from the tactical advisers (TacAds) and other multi-agency partners.

The MD sector may be supported by an MD support unit (MDSU), which contains additional MD equipment.

Strategic actions

National Resilience should:

- Mobilise National Resilience (NR) resources, including tactical advisers (TacAds), to appropriate incidents to carry out mass decontamination (MD)
- Work with partner agencies to ensure the MD process is interoperable
- Provide sufficient MD structures and associated equipment for the number of casualties involved
- Provide sufficient MD4 structures and associated equipment for the number of emergency responders
- Consider requests from the police and ambulance service to support multi-agency emergency responder decontamination

Tactical actions

Specialist responders should:

- Erect the MD structures in appropriate locations, in consultation with the requesting fire and rescue service's incident commander and the DIM team
- Set up the appropriate MD equipment, with an appropriate layout, for the type and number of casualties
- Have personnel in place to carry out the MD, including providing guidance to people, operating and servicing the decontamination equipment

Control measure - Mass decontamination: Members of public

Control measure knowledge

It may be difficult to assess if casualties in the vicinity of the release have been contaminated and to what extent. Therefore it may be appropriate to put everyone who may have been exposed to the contaminant through the mass decontamination (MD) process.

If casualties have undergone any decontamination prior to the arrival of National Resilience (NR) resources, they may also be processed through clinical decontamination or MD if required.

Before entering the MD shower structure, casualties will need to remove the disrobe pack clothing in the MD undressing area. The PRPS teams should remove the discarded disrobe pack clothing from the undressing area after each group of casualties have left it. Discarded disrobe pack clothing should be kept in a suitable area, or areas, within the hazard area.

Whenever possible the maximum number of casualties should be processed through the shower structures on each decontamination cycle; this will ensure the best response for the greatest number of casualties is achieved.

However, distress of the casualties or other factors may affect the efficiency of the decontamination process. Examples of issues that may be encountered, and considerations that may assist, are provided below:

Casualties involved	Considerations for decontamination
Children	• May be less distressed if kept with their family, or accompanied by an older child • May not be able to understand or follow instructions • May need additional reassurance • May respond better to personnel whose face they can see
People with physical health conditions	• Should preferably be decontaminated by the ambulance service • May need assistance, preferably from a carer • May take longer to go through the decontamination process • Prosthetic limbs and mobility aids may need to go through a separate decontamination process
Visually impaired or hearing impaired	• Should preferably be decontaminated by the ambulance service • May require assistance or support
People with mental health conditions	• Should preferably be decontaminated by the ambulance service • May need assistance, preferably from a carer • May take longer to go through the decontamination process • May not be able to understand or follow instructions • May need additional reassurance • May respond better to personnel whose face they can see
People with gender, cultural or religious sensitivities	• Separate MD structures may need to be used, to provide a level of privacy • Community leaders may be able to provide reassurance
People who do not understand English	• Seek other casualties who are able to translate instructions and information • Consider using an interpretation service • Refer casualties to the pictograms provided in the disrobe packs • Provide demonstrations of the processes

The fire and rescue service should not be expected to independently provide decontamination for arrested or detained persons as the process can be dangerous and complex. However, the fire and rescue service may need to provide assistance to the police for the decontamination of detainees at

the scene.

The arresting police officers will accompany their detainees through decontamination to:

- Ensure evidence is not lost or discarded
- Protect fire and rescue personnel and ambulance service personnel from violence, or threats of violence
- Prevent any escape attempts

The police will need to retain clothing and property removed from a detainee, as this will be evidential property, although it may need to undergo decontamination.

Strategic actions

National Resilience should:

- Provide sufficient and appropriate decontamination materials, including absorbent material, water and water additives

Tactical actions

Specialist responders should:

- Treat all casualties with respect and provide appropriate instructions, guidance and assistance
- Communicate with casualties throughout the decontamination process
- Provide absorbent material for people to remove surface contamination
- Provide wet decontamination for people contaminated with caustic materials
- Remove discarded disrobe pack clothing and retain in the hazard area
- Assist the police with the decontamination of arrested or detained persons

Control measure - Mass decontamination: Re-robing and handover of decontaminated casualties

Control measure knowledge

When the casualties have been decontaminated, they will need to be provided with re-robe packs, delivered in cages to the MD re-robe structure. There will need to be sufficient re-robe packs delivered in time to provide clothing for decontaminated ambulant casualties leaving the MD structures.

As it can take longer for casualties to re-robe than to shower, bottlenecks will need to be controlled. This could be by slowing down the rate of decontamination or by providing additional re-robe facilities.

Some casualties may need assistance with re-robing, and personnel should provide instructions, guidance and assistance to the casualties on how to use the re-robe packs. As detailed in the control measure for Decontaminating casualties, consideration may need to be given to the types of casualties involved and appropriate adjustments made for the re-robing process.

The fire and rescue service will pass responsibility for decontaminated casualties to other agencies following the decontamination and re-robe processes.

The ambulance service will provide any immediate clinical assistance and will also be responsible for ensuring decontaminated casualties are provided with medical aftercare, including hospital treatment if required.

The police are responsible for carrying out immediate investigation once the casualties are decontaminated and re-robed. The police will set up information sharing between agencies in support of the casualty bureau function, and attempt to identify any survivors who left the scene of the incident without going through the decontamination process.

Strategic actions

National Resilience should:

- Provide sufficient re-robe packs and facilities for the number of casualties involved

Tactical actions

Specialist responders should:

- Provide re-robe packs to the casualties
- Treat all casualties with respect and provide appropriate instructions, guidance and assistance
- Communicate with casualties throughout the re-robe process
- Consider the potential for hypothermia of casualties and provide additional protection, such as emergency blankets
- Hand over the decontaminated casualties to an appropriate agency for onward care

Control measure - Detection, identification and monitoring: Provide support to mass decontamination operations

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Control measure knowledge

Detection, identification and monitoring (DIM) activity is required whenever mass decontamination or decontamination of body bags is carried out, in order to:

- Monitor the effectiveness of the decontamination process
- Monitor the environment inside the MD structures
- Check for cumulative build-up of contamination inside the decontamination structures
- Check the area where used solid waste, such as disrobe packs or brushes, are being kept

Strategic actions

National Resilience should:

- Ensure sufficient DIM teams are available to support mass decontamination of body bags

(DBB) operations

- Ensure equipment is provided to fulfill this role

Tactical actions

Specialist responders should:

- Wear the appropriate PPE when supporting mass decontamination operations
- Ensure any movement of responders does not spread contamination into the cold zone

Control measure - Mass decontamination: Environmental considerations

Control measure knowledge

The pre-determined and structured MD process has a statutory requirement to contain water, unlike unstructured or initial operational response (IOR) decontamination, where every effort should be made to contain water.

Contaminants and contaminated materials gathered during a mass decontamination (MD) response should ideally be contained at the scene until analysed and identified. Once the type of contamination has been identified, a decision can be made on the treatment needed to make the material harmless for disposal, or following a risk assessment, which disposal process can be used.

Sewage or wastewater service providers and environmental agencies should be consulted as soon as possible before discharging any contaminated water to waste, or if contaminated water has already entered the drainage system. This will enable measures to take place to protect the sewage or wastewater system or to divert contaminated water from treatment works.

Sewage or wastewater service providers and environmental agencies will try to provide prompt advice to emergency responders. Their advice on environmental impact and drainage issues should help to implement actions that will mitigate the potential impact of decontamination water run-off.

For further information on this topic refer to the National Operational Guidance: Environmental protection – Control measure: Decontamination.

Strategic actions

National Resilience should:

- Provide equipment to contain run-off from the decontamination procedure

Fire and rescue services should:

- Have arrangements in place to organise the safe disposal of contaminated run-off

Tactical actions

Specialist responders should:

- Ensure the area being used for decontamination is suitable; consider its topography for any slopes or dips which will allow run-off to flow or collect
- Establish the physical properties of the contaminant and the hazards it presents to the environment
- Ensure solid waste, such as disrobe and re-robe packs, is managed for disposal

Incident commanders should:

- Recognise drainage types and prioritise the blocking of surface drains
- Consider the potential for the contaminant to spread while the response plan is being implemented
- Assess the environmental impact of the MD response
- Assess the effectiveness of containment facilities
- Ensure that the appropriate sewage or wastewater service providers and environmental agencies are informed about the incident as soon as possible
- Seek specialist advice regarding the appropriate disposal of all run-off and other contaminated waste from the decontamination process

Control measure - Closing down a mass decontamination (MD) response

Control measure knowledge

Fire and rescue service appliances and equipment, used or deployed outside of the hazard area, should be available for return to service once the mass decontamination (MD) response to the incident is completed.

Equipment used for the decontamination process, including boilers, heaters, containment dams, should remain in place until scientific advice is obtained about the best methods for its decontamination or disposal.

The Department for Environment, Food and Rural Affairs (Defra) will take the lead role in facilitating the required decontamination or disposal processes.

All MD units should be inventory checked and shortages recorded to enable restocking, to ensure the earliest availability for redeployment.

Criminal investigations

The police service may:

- Impound fire and rescue service assets as part of their incident investigation
- Gather material evidence from fire and rescue service personnel
- Take statements from fire and rescue service personnel

Post-incident activity

Other things that should be considered post-incident include:

- Record keeping and document management
- Critical incident stress management (defusing) of crews in line with individual fire and rescue service welfare procedures
- Debriefing, subject to police guidance

Other issues may be addressed by a recovery working group if established for the incident.

Strategic actions

National Resilience should:

- Keep a record of any MD resources that are affected by equipment shortages, where it may impact on the ability for them to respond to further incidents

Tactical actions

Incident commanders should:

- Carry out an inventory check of all MD units
- Restock MD units for redeployment
- Ensure that MD equipment that has been used is decontaminated and returned to the MD-hosting fire and rescue service, subject to scientific advice
- Release equipment to the police for investigation purposes if required
- Provide evidence and statements to the police if required