Initial Operational Response (IOR) to Incidents Suspected to Involve Hazardous Substances or CBRN Materials

January 2023

Version 1

JESIP

Working Together – Saving Lives

Foreword

The UK Government's preparedness objectives for Chemical, Biological, Radiological and Nuclear (CBRN) terror attacks are captured under the Prepare pillar of the Home Office Counter Terrorism Strategy (CONTEST). The Home Office 'Strategic Framework for the Chemical, Biological, Radiological and Nuclear Response by the Emergency Services' sets out, in more detail, the strategic requirements for the emergency services to respond to CBRN incidents to meet these objectives. This document, together with the Joint Emergency Services Interoperability Principles (JESIP)[1] and 'Responding to a CBRN(E) Event: Joint Operating Principles (JOPs)' for the Emergency Services', sets out the operational delivery arrangements, put in place by the emergency services, to deliver the Home Office CBRN preparedness requirements.

Following an in-depth review, this operational guidance has been created to replace the Initial Operational Response (IOR) to CBRN Incidents (June 2015) which focused on terrorist incidents involving CBRN agents.

Since 2015, the National CBRN Centre (NCBRNC) has collated an informed data set in relation to incidents reported by emergency services across the UK. This data is regularly analysed by specialist intelligence analysts at National Counter Terrorism Policing Headquarters (NCTPHQ) to provide an evidence base to inform CBRN operational guidance.

This new guidance, Initial Operational Response to Incidents Suspected to Involve Hazardous Substances or CBRN Materials (January 2023), recognises the majority of potential, or suspected CBRN incidents are not easily categorised at an early stage. It is anticipated that by referencing a broader definition of incidents to include criminal, accidental and terrorist intent it will support earlier and more confident use of the guidance during IOR, protect the public through live saving activity and maximise safety to first responders.

IOR is focused on the activities that the public can immediately do for themselves and actions the emergency services need to undertake during the initial reporting stage and at the scene of an incident involving hazardous substances prior to the arrival of Specialist Operational Response (SOR). assets. The cause of the incident, whether deliberate or accidental, does not need to be known for the principles of IOR to be adopted. If people are exposed or contaminated by a substance the priority remains to save life.

Once a hazardous substance or CBRN incident has occurred, specialist resources should be considered to enable a transition from IOR to an effective, safe and proportionate SOR This will continue to save lives and resolve the situation. Effective multi-agency working from the outset, as defined by JESIP, will be the key to a successful IOR.

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Head of the National CBRN Centre

[1] https://www.jesip.org.uk/home

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Glossary of terms and abbreviations

BAD COLDS: Substance assessment tool (Behaviour, Appearance, Dissemination, Colour, Odour, Likeness, Deliberate, Symptoms).

CBRN: Chemical, biological, radiological and nuclear substances or materials.

CBRN(e): Chemical, biological, radiological and nuclear substances or materials combined with explosives.

CRESS: Casualty assessment tool (Consciousness, Respirations, Eyes, Skin, Secretions).

ECOSA: Emergency Co-Ordination of Scientific Advice.

FRS: Fire & Rescue Service.

IOR: Initial Operational Response to an incident.

JDM: Joint Decision Model.

JESIP: Joint Emergency Services Interoperability Principles.

JOL: Joint Organisational Learning.

JOPs: Joint Operating Principles.

M/ETHANE: Situational reporting tool used by all UK Emergency Services (Major incident declared / Exact location / Type of incident / Hazards / Access / Number of casualties / Emergency services).

NCBRNC: National Chemical, Biological, Radiological and Nuclear Centre.

NCTPHQ: National Counter Terrorism Policing Headquarters.

PALs: Publicly Accessible Locations.

RAR: Threat recognition tool (Recognise, Assess, React).

RRR: Immediate decontamination model (Remove, Remove, Remove).

RVP: Rendezvous Point.

SOR: Specialist Operational Response to an incident.

Initial operational response

The primary objectives of the Initial Operational Response (IOR) are to:

- Maximise the safety of the public and save lives
- Minimise the operational risks to responders.
- Ensure an effective transition to the Specialist Operational Response.

During incidents where there is a believed exposure to a hazardous substance the first 15 minutes are the most critical for achieving life-saving activity. IOR provides guidance to emergency services as to the immediate advice given to the public on receiving a report of a potential incident and the actions undertaken by those resources attending the scene.

IOR commences when the first report of an incident is received by the Emergency Services and provides the opportunity to immediately provide life-saving advice whilst determining a co-ordinated, controlled and consistent response. The call handler and control room staff are instrumental in the early identification of a potential hazardous substance incident and implementing an IOR response. Immediate deployment of suitable resources is critical to life-saving activity and ensuring an effective response.

The prompt sharing of information between responding agencies is critical in developing shared situational awareness. This will assist control rooms, responders and Commanders in their decision making, promoting the rapid and safe implementation of IOR.

The JESIP Joint Doctrine – The Interoperability Framework, sets out the key models and principles for an effective, multi-agency response, supporting the overarching aim of working together, saving lives and preventing harm. This approach is key to the effectiveness of IOR and therefore the principles for joint working should be adopted.

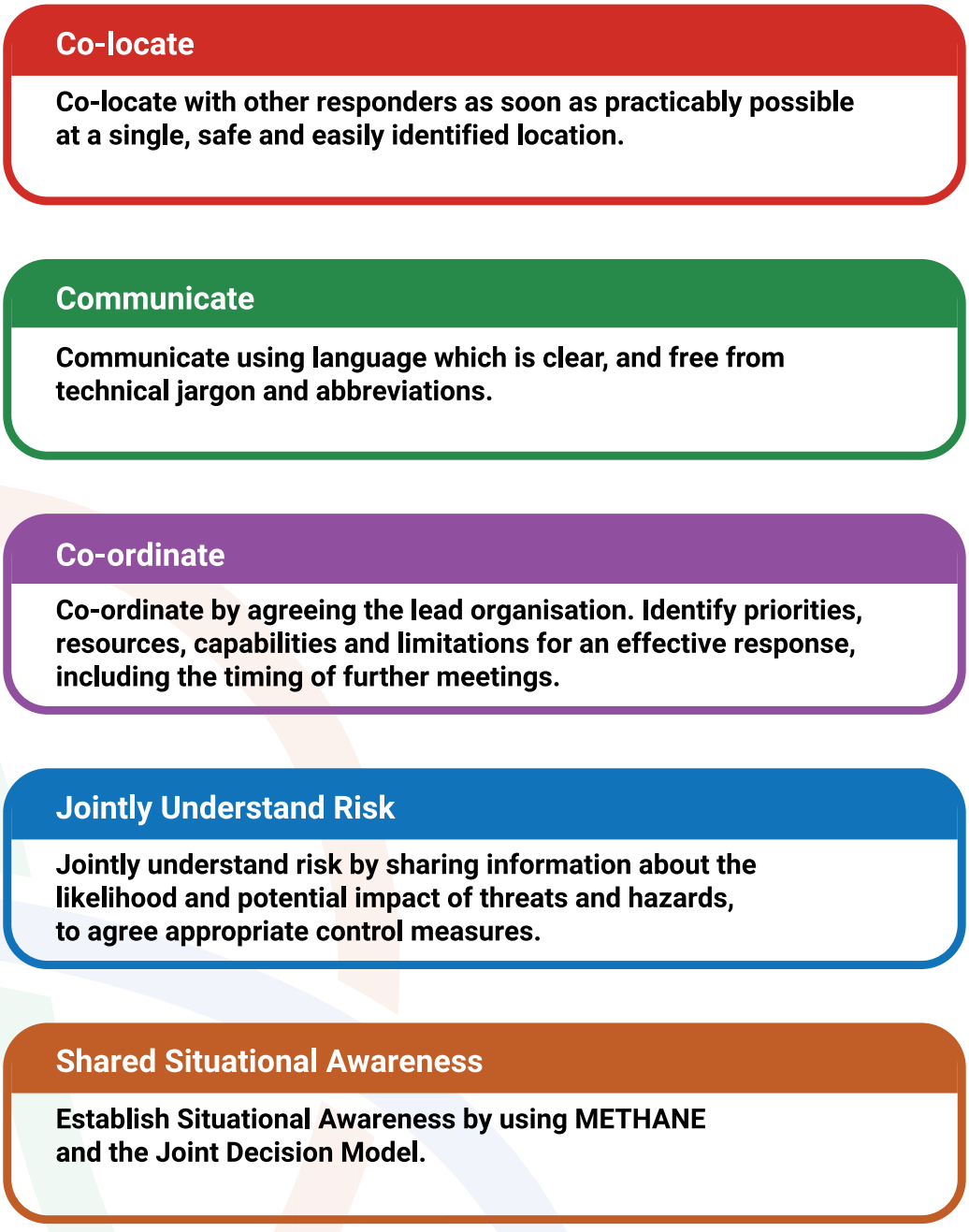

Figure 1 – JESIP principles

When working together to decide the appropriate course of action to be taken, responders should use the Joint Decision Model (JDM). [2]

The JDM assists in the development of a jointly agreed working strategy and ensure all responders understand the agreed course of action, including what is happening currently, what is going to happen, when, and by whom.

[2] https://www.jesip.org.uk/joint-doctrine/the-joint-decision-model-jdm/

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In the early stages of IOR it is unlikely there will be opportunity to develop a bespoke working strategy. Consequently, this generic strategy can be adopted but should be reviewed at the earliest opportunity:

- Save life and prevent further harm
- Minimise the spread of contamination
- Employ effective communication
- Maintain public confidence

Whilst the public are the focus, every effort should be made to maximise responder safety in the form of training, equipment and operational support from CBRN tactical and scientific advisors.

Arrangements for joint working enable incident management to follow a general pattern of:

- Working out what is going on (situation);
- Establishing what you need to achieve (direction);
- Deciding what to do about it (action)

It is an operational reality that one emergency service will arrive ahead of the others in response to an incident. This MUST NOT delay commencing life-saving activity. This document details what can be done by first responders from any agency despite their own limitations in CBRN specialist capability to respond.

When multiple agencies are on scene, a joint understanding of risk based on agency-specific dynamic risk and hazard assessments will further enhance decision making. This promotes a co-ordinated and effective multi-agency response which maximises safety, meets the working strategy and aims to deliver a prompt resolution or an efficient transition to SOR.

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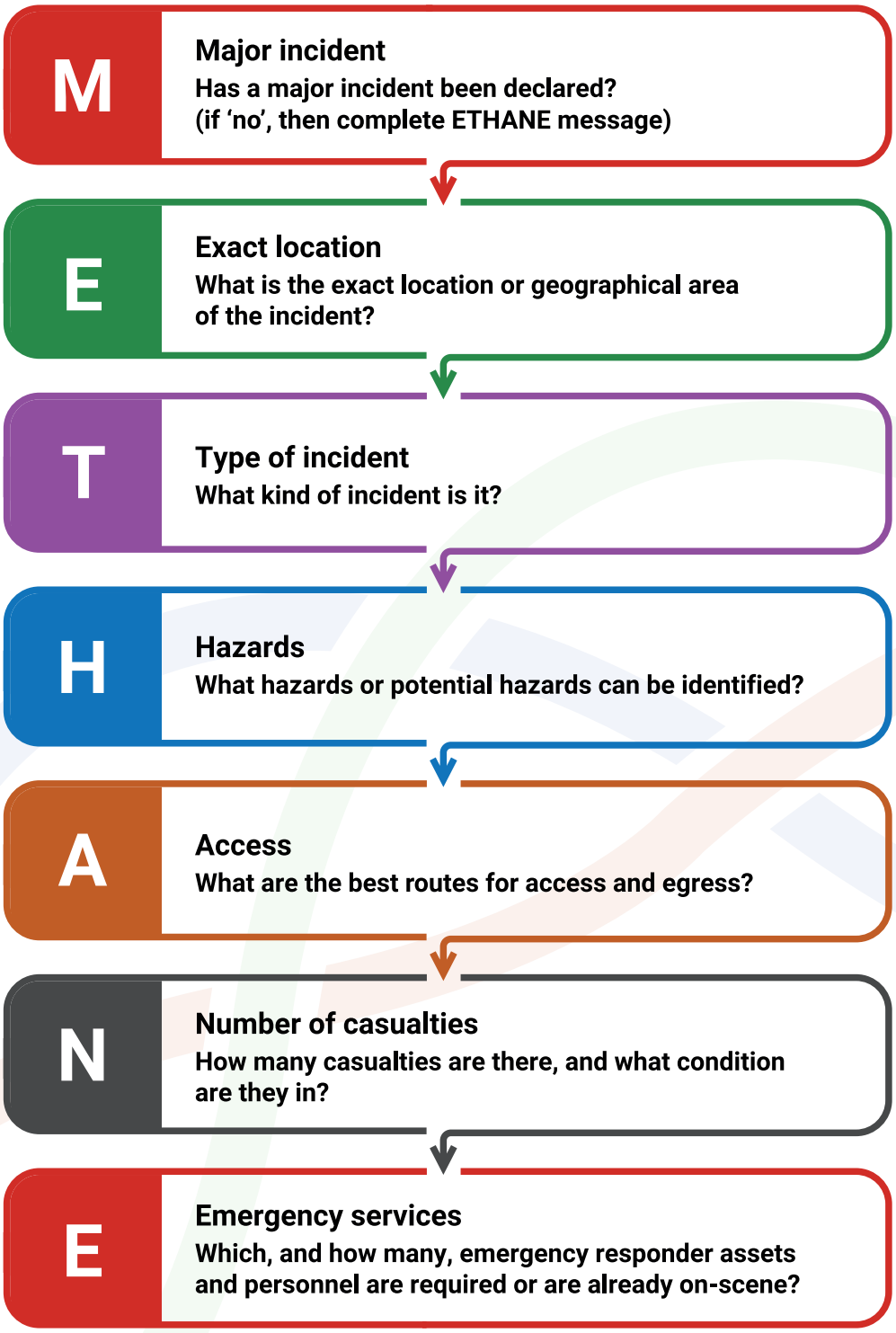
Safety critical considerations

Life-saving activity
In the event of an incident where people have been exposed to, or contaminated by, a potentially hazardous substance, the speed of advice communicated to affected people and the emergency services response is critical to saving lives. It is essential that all means of communication, either remote from or at the scene, are considered. By utilising the REMOVE[3] principles, ideally within 15 minutes of contamination, most skin contaminants can be removed or their effects reduced, thereby helping to reduce further injury or death.

Figure 3 – REMOVE protocol

[3] https://www.protectuk.police.uk/advice-and-guidance/response/remove-remove-remove-guidance-hazardous-substance-exposure

Figure 4 – M/ETHANE reporting tool



Responder safety

It is critical that responders are equipped to recognise hazardous substance incidents to effectively respond and save lives. The sharing of information between control rooms and responders from is key in the early stages of any incident to inform ongoing dynamic risk assessments. These must be shared using the M/ETHANE[4] reporting tool to develop shared situational awareness and enable a safer IOR. The use of Airwave interoperability talk groups offers an effective, immediate and secure communications platform to do this. Establishing these links must be considered a priority.

[4] https://www.jesip.org.uk/methane

Recognise, assess, react

The initial actions taken following a hazardous substance incident have a significant effect on the outcome for all involved. The following principles will aid first responders:

R – RECOGNISE the indicators of a hazardous substance incident;
A – ASSESS the incident to inform an appropriate response strategy;
R – REACT appropriately to reduce the risk of further harm.

Recognise

Information gathering from the initial call
Information gathered by control rooms will form a key part of the initial recognition of the type of incident first responders will encounter. From the call it is important to understand the following 5Ws:

- What is happening? What indicators suggest hazardous substances?
- Where is it? – Are there factors which would make this location more attractive as a terrorist target or more vulnerable to an attack e.g. a significant event, iconic location, critical national infrastructure or a Publicly Accessible Location (PAL)?
- Why is it suspicious?
- Who found it?
- When was it found?

- Indication of signs, symptoms and their severity;
- Weather conditions – in particular wind direction;
    - Environment – are there physical factors which would impact on how the incident is managed e.g., inside a room, building, outside or underground?
- Offenders – indication of deliberate act, where are they now (if known) or the direction they have left in;
- Casualty assistance – understanding what advice has been given, consequences of that advice and how to provide extra assistance or support to vulnerable people.

Indicators of a CBRN attack
In order to formally declare a hazardous substance incident as a CBRN attack two elements need to be present:

- The existence of a hazardous substance;
- The deliberate release of that substance with ideological motivation or intent

Whilst the distinction between accidental and intentional release of CBRN material is significant from a Counter Terrorism investigative perspective, the impact this has on IOR is minimal as the operational priority will remain saving lives.

It is important to be aware that any offender(s) may still be present and responders should be aware of the possibility of secondary attacks, but they must do everything they can to save life and reduce harm to the public. Early information sharing with the Counter Terrorism community and partners will maximise the response to incidents and support future investigations.

In the early stages it may be difficult to establish what has occurred and if hazardous substances have been used. Not all incidents involving hazardous substances will involve casualties, therefore any one of the following may be indicators of a CBRN incident. Multiple indicators will increase the likelihood that an incident is CBRN related.
These could include:

Signs

- The existence of a hazardous substance;
- The deliberate release of that substance with ideological motivation or intent

Physical symptoms

- Casualties can be an indicator of a hazardous substance incident and should be considered in conjunction with other indicators and signs or symptoms. These may include, but not be limited to, the physical symptoms of:
    - Disorientation and sweating;
    - Twitching and convulsions;
    - Airway irritation and breathing difficulties;
    - Eye and skin irritation;
    - Nausea and vomiting.

If unprotected responders observe incapacitated casualties for no explainable reason – they MUST NOT PROCEED any closer to avoid becoming a further casualty themselves. However, they must consider opportunities to understand what has happened or is still happening and report this back to a control room.

Unprotected responders can still assist without committing themselves into a contaminated area. Using public address systems or similar they can communicate appropriate advice and information following the REMOVE principles.

Assess

Assessing the situation
Initial assessment starts with the receiving control room and the impact that this will have on developing shared situational awareness must not be underestimated. First responders should continue to gather as much information as possible in the early stages of the incident. As a priority this must be shared with their control room and all other attending agencies not just at the outset of an incident but throughout. Control rooms must continually share updates with each other to ensure the latest information is held by all responding organisations and shared situational awareness is developed. The lack of a single piece of information should not delay initial reporting. Airwave interoperability talk groups provide the ideal tool to share information immediately and securely between responding organisations.

Effective situation reporting is vital to enable all agencies to maintain shared situational awareness. It is important that reporting is concise and consistent, following the M/ETHANE mnemonic to ensure the essential information is captured.

Responders must provide regular updates on the incident. During the early stages updates may be very frequent due to the fast-evolving situation, with new or additional information rapidly becoming available. This regular flow and sharing of information enables a joint understanding of risk which must be reviewed continuously in line with Joint Decision Model.

Substance assessment
The information received from initial reports regarding the characteristics of any substance(s) causing concern, will help to categorise and potentially lead to subsequent identification of the substance(s). The BAD COLDS tool (see below) may be used to support this process even prior to the deployment of specialist resources.

B – BEHAVIOUR - What did the substance behave like? Did it fall to the floor in a soggy lump or behave like smoke vaporising into thin air?
A – APPEARANCE - Is it powder-like, granular or crystalline, is it a liquid, a gel or a waxy solid? How much is there relative to a commonly recognised item, e.g., postage stamp, A4 sheet etc.
D – DISSEMINATION - How was it disseminated? Thrown, sprayed, mechanically spread or delivered?
C – COLOUR - Is it pure white, off-white, yellow or multi-coloured?
O – ODOUR - Did it smell? Under no circumstances should responders deliberately smell a substance as a means of determining whether it has an odour or not.
L – LIKENESS - Does it look like something you know or recognise?
D – DELIBERATE - Did the spreading or release of the substance appear deliberate or accidental?
S – SYMPTOMS - Is anyone exhibiting any symptoms?

REMEMBER: Under no circumstances should frontline responders be further exposed to known/suspected hazardous substances in order to obtain the above information. It may not be possible to carry out a full assessment during IOR. This includes being asked to determine if there is an odour.

Behaviour	• What did the substance behave like? • Did it fall to the floor in a soggy lump or behave like smoke vaporising into thin air?
Appearance	• Is it powder-like, granular or crystalline, is it a liquid, a gel or a waxy solid? • How much is there? Golf ball, cricket ball, basketball?
Dissemination	• How was it disseminated? Thrown, sprayed, mechanically spread or delivered?
Colour	• Is it pure white or off-white or yellow? • Is it multi-coloured?
Odour	• Did it smell? (Washing powder or chemical pungent smell?)
Likeness	• Does it look like something you know or recognise? (Such as talcum powder or washing powder with blue specks?)
Deliberate	• Did the spreading of the substance appear deliberate or accidental?
Symptoms	• Is anyone exhibiting any symptoms? (Such as stinging eyes?)

Figure 5 – BAD COLDS

Casualty assessment
Symptoms of exposure to some hazardous substances, such as those used in a biological or radiological attack, may not be present within the first minutes, hours or days of a release occurring. Chemical releases are often, but not always, accompanied by a more rapid onset of symptoms.

Without sufficient medical training, it can be difficult to recognise the cause of specific symptoms. Using the CRESS tool to report back key information could help health services identify the type and nature of the hazardous substance incident.

First responders, without putting themselves at undue risk, may have an opportunity to attain information from casualties which supports a CRESS assessment.

CRESS		NERVE AGENT	CYANIDE
C	**Consciousness**	Convulsions	Unconscious/ Convulsions
R	**Respiration**	Increased or reduced → stopped	Increased or stopped
E	**Eyes**	Pinpoint pupils*	Normal/Large pupils
S	**Secretions**	Increased	Normal
S	**Skin**	Sweaty	Pink → blue
Other Features		Vomiting Incontinence Slow Pulse Headache	Sudden onset

C - CONSCIOUSNESS – What is the level of consciousness?
R - RESPIRATION – What is the respiratory rate – is it increased or decreased?
E - EYES – Examination of pupils and their reaction;
S - SECRETIONS – Are there increased or decreased secretions;
S - SKIN – Examine for colour and other signs such as sweating.

Other features that should be noted are vomiting, incontinence and fever.

REMEMBER: If responders observe incapacitated casualties for no explainable reason – they must consider whether to proceed any closer to avoid becoming a further casualty themselves. It may not be possible to carry out a full CRESS assessment during IOR. Unprotected responders should avoid mouth to mouth resuscitation and use hands-only chest compressions to reduce the risk of cross-contamination to responders, whilst being aware that exhaled air may still pose a risk.

OPIATE (MORPHINE)	ATROPINE	SEPSIS	HEAT STROKE
Reduced → unconscious	Agitated/Confused	Normal, reduced or altered	Altered
Reduced → stopped	Increased	Increased	Increased
Pinpoint pupils	Large pupils/ Blurred vision	Normal	Normal/Large pupils
Normal	Dry mouth/Thirsty	Normal/ Sputum	Normal
Normal/Blue	Flushed/Dry	Warm → pale Non-blanching rash	Varied
	Fast pulse	Fast pulse Fever (>38.3°C) Bio-syndrome** No radial pulse	High temperature (>38°C)

React

Key principles
Whilst the care and safety of the public remains the focus for responding organisations there needs to be consideration about their own safety too.

- Responders must:
- Use caution and keep a safe distance to avoid exposure to themselves;
- Identify a safe approach route where necessary;
- Consider using public address systems, variable messaging boards or physical actions to assist in calling people towards them;
- Take steps to prevent cross-contamination to “clean” clothing or from each other;
- Relay as much information as possible to their control room without undue delay.

Some individuals or groups of people may need additional considerations to include them in the response. This may be due to economic factors, language barriers, race, citizenship, ethnicity, religious or cultural beliefs, family grouping and sexual or gender identity.

Evidence from exercising has taught us that the process of gaining compliance from the public becomes increasingly difficult with groups containing more than 10 people. This is a challenge that responders should be acutely aware of at mass casualty events. Responders need to understand and recognise this challenge, by applying the models and principles in this guidance will ensure that aim of working together, saving lives and reducing harm remains at the forefront of everything they do.

Safety advice to the public
If a person (or persons) are suspected to be in a hazardous area, or could potentially be affected by a hazardous substance, they should be advised in accordance with the REMOVE principles.

Additional considerations for enclosed space settings include but are not limited to:

- Consider evacuating / invacuating – for quick evacuation from an enclosed space the use of the fire alarm system **may** be beneficial;

- Consider the route out – note that some gases are heavier than air and may pool in lower areas which may affect your evacuation considerations;

- Following consultation with emergency service partners and site operators, consider shutting down air conditioning, fans and air recirculation systems but only where this action would not delay evacuation or have an adverse effect.

Advise casualties that they should:

- Avoid eating, drinking, smoking or touching their face and eyes as this can increase the risk of further contamination through ingestion, inhalation and absorption;

- Continue to move away upwind and preferably uphill from the release;

- Not to leave the area to seek hospital care as by doing so they may be putting themselves or others at risk by exposing them to contaminants which may be on their clothing or skin. Tell people that medical assistance is coming to them, and they should wait for this to arrive.

Remove people from the hazard
Removing casualties from the area or source of contamination should be carried out as a priority. Ambulant casualties should, where possible, be directed to remove themselves. Where casualties cannot self-evacuate, consideration should be given to deploying responders to rescue saveable lives. Any deployment must be informed by appropriate risk assessments carried out at the scene and these risk assessments should include input from all responders' organisations in attendance.

The Fire & Rescue Service (FRS) are trained and equipped to conduct snatch rescues and emergency decontamination of non-ambulant casualties. At the earliest opportunity, once removed from the perceived area of greatest contamination and taken to an area of safety, these casualties should be helped to disrobe and, if possible, undergo improvised or interim decontamination. This should continue until such time as appropriate medical resources take over.

Where not already done so casualties should be moved to an area upwind and ideally uphill of the incident. Consider implementing cordons to reduce the risk of further casualties. Identify and agree the best routes for access and egress for emergency services vehicles at the earliest opportunity and share these with other responding organisations.

It is important to communicate clearly to casualties and bystanders throughout the response, explaining:

- What is known about the incident;
- What is being done to help them and;
- What actions they can take to help themselves and;
- Why recommended actions are effective.

Communication[5] to casualties should begin as soon as possible, and should continue throughout the incident. Accurate and continued dialogue will help foster trust and confidence in rescue activities as well as increasing the authority of responders and promote compliance with emergency service and other interventions.

Communication must be honest, empathetic, assertive and reliable. Where possible, information should be communicated using simple language and taking into consideration the specific needs of these citizens who may not understand or be physically able to do what is being asked of them. Information should be shared using multiple platforms to maximise opportunities for citizens to receive and react, ensuring that information is consistent across platforms.

[5] https://proactive-h2020.eu/wp-content/uploads/2021/04/PROACTIVE_20210315_D1.3_V5_PHE_Guidelines-and-Recommendations_revised.pdf

Remove outer clothing
Removing potentially contaminated clothing is a critical step in the decontamination process. It is highly effective at reducing the effects of exposure to contaminants across the chemical, biological and radiological spectrum.

Disrobe procedures should, where possible, be conducted by the casualty themselves as this reduces the risk of cross-contamination and therefore further casualties. However, it is recognised that it may be beneficial for carers and family groups to support each other these procedures. Where this is not possible, FRS are well versed in providing emergency decontamination using protected responders.

Consideration should be given to ensuring the welfare and, as far as is reasonably possible, the dignity of casualties. Casualties must be advised to try to avoid pulling clothing over their head if possible and not to pull off any clothing stuck to the skin. They should be advised not to smoke, eat or drink to avoid contaminants entering the body through ingestion.

Remove the substance
For toxic chemical agents, the speed of intervention is critical to patient outcomes. Therefore, it is important to initiate decontamination as quickly as possible. One such method is Improvised Decontamination. This is the use of immediately available methods to decontaminate casualties and is a priority action that should be initiated by control room personnel or the first responder at the earliest opportunity.

Improvised decontamination

DRY decontamination should be used as the default intervention for anyone that is suspected of being **contaminated** during a suspected chemical incident **unless** there are obvious signs of burning, skin irritation or the contaminant is known to be either biological or radiological material.

Dry decontamination is the use of any available dry absorbent material such as paper tissue or cloth applied to the affected body surface to soak up or brush off as much of the contaminant as possible.

Fresh dry materials should be provided throughout the decontamination process and not passed from one casualty to another. When conducting dry decontamination, a separate piece of clean material should be used for each area of the body that may have been contaminated. Casualties should be instructed to:

- wipe their hands
- wipe their hair.
- blow their nose.
- work down their body, starting with their face and neck, followed by shoulders, arms, chest, stomach, back, legs and feet.

WET decontamination should be used if contamination with a caustic[6] chemical substance is suspected, or if the contaminant is **known** to be either a biological or radiological agent. Improvised wet decontamination is the use of copious amounts of water from any available source such as taps, showers, hose-reels, sprinklers, water bottles etc. to dilute and flush the contaminant away from the body surface.

Other natural sources of water may be considered unless this creates greater risks to the individuals affected. Where water is not available, wet wipes/baby wipes can be used as an alternative as they are effective in removing contaminants and are easier to control in terms of waste.

NOTE: Improvised Decontamination should continue until more structured interventions such as Interim or Specialist Operational Response are present. Until such time, or where immediate scientific advice determines otherwise, the process of "dab and wipe" should continue repetitively. It is important to note that when undergoing wet decontamination, you must avoid the use of any conditioners.

[6] Caustic substances may cause irritation or burning sensations on the skin and will require wet decontamination processes to remove them

Supporting vulnerable people

Vulnerable people can have different physical, communication, health, or cultural needs. Affected groups could include, but are not limited to, children, the elderly, pregnant women, those with both visible and invisible disabilities, sight and hearing loss, chronic or acute medical conditions, limited language proficiency or non-English speakers, neuro-diversity affecting the way they experience and interact with the world around them, or members of minority, cultural or vulnerable groups. Since each individual is different, it is helpful to consider a person's functional needs (what type of assistance they are likely to require)[7] when planning for the management of IOR. These functional needs are broadly separated into four areas:

Impaired ability to physically react to a hazardous substance incident or undergo decontamination (e.g., any factors which make it physically challenging for individuals to undergo decontamination).

Impaired ability to communicate during a hazardous substance incident or the decontamination process (e.g. any factors which make it difficult for individuals to hear, see, or understand instructions provided).

Different social or cultural needs (e.g. cultural norms or religious norms).

Pre-existing health factors or medical conditions (e.g. any factors which may make people more susceptible to the effects of contamination, or pre-existing conditions for which people need medication).

Do not assume that members of at-risk groups are easily identifiable and ask people if they have any specific needs that you can assist with during IOR. The vulnerable person is an expert in their own needs so do not be afraid to ask how best you can assist them and seek support from family, friends and carers who may be present or by using a buddy system.

It is important to remember that the public perception of how the emergency services and other responder organisations interact, communicate and support vulnerable people may be as significant as the impact of the actions themselves.

When vulnerable people are affected by a hazardous substance they may need additional support to remove themselves, their clothing or the substance. Consideration should be given as to how responders and commanders identify, communicate and interact with vulnerable people. This early recognition will aid responders to be aware that vulnerability may change as a result of context and environment. Responders should tailor their instructions to be accessible, inclusive, actionable by all, timely and understood whilst remembering that vulnerabilities are not always visibly identifiable.

[7] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5061579/ references wider considerations for vulnerable people as part of Mass Casualty Decontamination Guidance and Psychosocial Aspects of CBRN Incident Management: A Review and Synthesis – Holly Carter and Richard Amlôt

There may be times when assistance animals or mobility equipment are present, and consideration should be given as to how they are managed during IOR. The decontamination of any animal is part of SOR requiring specialist resources and considerations and therefore falls outside the scope of this document. However, scientific advice should be sought at the earliest opportunity in incidents where contaminated animals need to be managed.

The removal or retention of mobility equipment may have a detrimental effect far above that of the original incident. Therefore, a considered and pragmatic approach is encouraged in these circumstances. Further scientific advice regarding what can realistically be achieved should be obtained from specialists accessed through the National CBRN Centre duty officer.

Additional command & control actions

Inter-agency communication
In line with JESIP Joint Doctrine, control rooms must liaise with other responder organisations. Using the 'talk not tell' process, control room personnel must pass information to other organisations and ask what their response to the incident will be. This should include the nature and scale of the incident, immediate resource availability and decisions taken in accordance with each organisation's policies and procedures.

Organisations should then:

- Alert resources which may be in the vicinity of the hazard(s);
- Using appropriate advice and information from the scene and contingency plans, direct further assets to the scene or an agreed rendezvous point (RVP), which must be upwind and preferably uphill of the incident site[8];
- Direct the most appropriate available incident commander to the scene;
- Consider wider messaging of the REMOVE principles to responders and the public. This is a command decision which should consider:
    - Ensuring responders heading to the scene are kept informed, as well as those already at the scene;
    - Whether there could be casualties who have left the scene and may require similar advice;
    - Whether there is a large number of casualties who may not receive communications from those at the scene;
    - Whether instructions at the scene could be further promoted through localised messaging with partners, such as the owner/operator of the incident location;
    - Whether there is the potential for further exposure to the public, such as an ongoing marauding attack or the spread of a contaminant.

[8] It is possible to obtain prevailing weather conditions using the Hazard Manager application provided by the Met Office. https://www.metoffice.gov.uk/services/government/environmental-hazard-resilience/cbrn-incident-management

Command & control

Different specialist resources will arrive at the incident at different times. Therefore, the transition from IOR to SOR may take place in an undetermined sequence.

It is vital that each responder organisation identifies suitably qualified and experienced commanders to come together and formalise actions already taken, develop a joint understanding of risk to identify priorities, determine appropriate specialist resources and respond accordingly.

It is important that accurate information and intelligence is relayed to responding specialist resources when they arrive on scene. Information should be gathered and reported regularly to all multi-agency commanders and control room operators, to inform those who will be briefing resources as they arrive.

Seeking specialist advice

If the information received at the control room suggests an incident involves a hazardous substance, control room personnel should consult their local CBRN response plans and procedures which will give access to specialist assets and advisors.

The declaration of a Major Incident will activate specific plans in relation to the incident, this may include identifying the need for regional or national assets or mutual aid.

All Emergency Services have 24/7 access to the NCBRNC Duty Officer and CBRN Operations, providing a gateway to specialist scientific advice through the activation of the Emergency Coordination of Scientific Advice (ECOSA)[9] network.

For ECOSA to be effective, it must be activated as soon as possible and immediately passed situation reports from the scene to inform the delivery of singular scientific advice to multi-agency commanders.

NCBRNC has established networks for the wider Military and Counter Terrorism Policing CBRN capability, which minimises delays in notifying these specialist assets for advice or mobilisation with appropriate authorities.

[9] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/80087/sage-guidance.pdf - Page 59

Joint Organisational Learning

The National CBRN Centre are engaged with the JOL process and will ensure any lessons identified or notable practice raised via JOL will be considered in future reviews of this document.

Notes

JESIP
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Bringing together the emergency services to protect and prepare the UK against the chemical, biological, radiological & nuclear (CBRN) threat.