THE RELEASE OF CHEMICAL, BIOLOGICAL, RADIOLOGICAL OR NUCLEAR (CBRN) SUBSTANCES OR MATERIAL

GUIDANCE FOR LOCAL AUTHORITIES¹

Home Office
August 2003

¹ This guidance is for Local Authorities in England and Wales. See Footnote to Section 1.1 within for a definition of Local Authorities.
<table>
<thead>
<tr>
<th>Section &amp; Paragraphs</th>
<th>Contents</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Purpose of guidance</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Planning Assumptions &amp; Communications</td>
<td>3 – 8</td>
</tr>
<tr>
<td>3.1</td>
<td>Framework</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Doctrine</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Central government involvement</td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Regional Resilience Teams &amp; Forums in England</td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>Wales</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Lead Departments for CBRN</td>
<td></td>
</tr>
<tr>
<td>3.7</td>
<td>Civil Contingencies Secretariat and the national capabilities programme</td>
<td></td>
</tr>
<tr>
<td>3.8</td>
<td>Home Office CBRN Team &amp; the CBRN Resilience Delivery Plan</td>
<td></td>
</tr>
<tr>
<td>3.9</td>
<td>September 11</td>
<td></td>
</tr>
<tr>
<td>3.10</td>
<td>Multiple emergencies or threats</td>
<td></td>
</tr>
<tr>
<td>3.11</td>
<td>Damage, harm and disruption</td>
<td></td>
</tr>
<tr>
<td>3.12</td>
<td>Types of emergency</td>
<td></td>
</tr>
<tr>
<td>3.13</td>
<td>Communications issues</td>
<td>7 - 8</td>
</tr>
<tr>
<td>3.14</td>
<td>Public information about threats</td>
<td></td>
</tr>
<tr>
<td>3.15</td>
<td>Public, media and political interest</td>
<td></td>
</tr>
<tr>
<td>3.16</td>
<td>Public health &amp; safety information</td>
<td></td>
</tr>
<tr>
<td>3.17</td>
<td>Information pressures</td>
<td></td>
</tr>
<tr>
<td>3.18</td>
<td>Lessons learned</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Characteristics of CBRN materials</td>
<td>9 - 14</td>
</tr>
<tr>
<td>4.1 – 4.7</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>4.8 – 4.18</td>
<td>Chemical</td>
<td></td>
</tr>
<tr>
<td>4.19 – 4.22</td>
<td>Biological</td>
<td></td>
</tr>
<tr>
<td>4.23 – 4.29</td>
<td>Radiological</td>
<td></td>
</tr>
<tr>
<td>4.30</td>
<td>Nuclear hazards</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Co-ordination of the Multi-Agency Response</td>
<td>15 - 18</td>
</tr>
<tr>
<td>5.1</td>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>5.2 – 5.5</td>
<td>Notification, Confirmation &amp; Roles</td>
<td></td>
</tr>
<tr>
<td>5.6 – 5.9</td>
<td>Command and Control</td>
<td></td>
</tr>
<tr>
<td>5.10 – 5.11</td>
<td>Emergency Powers</td>
<td></td>
</tr>
<tr>
<td>5.12</td>
<td>Local Authority Role at the Police Main</td>
<td></td>
</tr>
<tr>
<td>5.13 – 5.17</td>
<td>Joint Health Advisory Cell (JHAC)</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Role of the Local Authority</td>
<td>19 – 22</td>
</tr>
<tr>
<td>6.1</td>
<td>Generic key roles</td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>Major Incident Plan (Major Emergency Plan)</td>
<td></td>
</tr>
<tr>
<td>6.3</td>
<td>Support to health providers</td>
<td></td>
</tr>
<tr>
<td>6.4 – 6.5</td>
<td>Detection, sampling and monitoring</td>
<td></td>
</tr>
<tr>
<td>6.6 – 6.9</td>
<td>Health and Safety</td>
<td></td>
</tr>
<tr>
<td>6.10 – 6.11</td>
<td>Welfare and Advice</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>6.12 – 6.14</td>
<td>Religious and Cultural issues</td>
<td></td>
</tr>
<tr>
<td>6.15 – 6.17</td>
<td>Mutual Aid arrangements &amp; Back-up Facilities</td>
<td></td>
</tr>
<tr>
<td>6.18 – 6.19</td>
<td>Recovery</td>
<td></td>
</tr>
<tr>
<td>6.20</td>
<td>Environmental remediation</td>
<td></td>
</tr>
<tr>
<td>6.21</td>
<td>Financial and economic impact</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex A</th>
<th>Local Authority Command and Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General</td>
</tr>
<tr>
<td>2</td>
<td>Local Authority Strategic Level</td>
</tr>
<tr>
<td>3</td>
<td>Local Authority Tactical Level</td>
</tr>
<tr>
<td>4</td>
<td>Local Authority Operational Level</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex B</th>
<th>Additional Planning Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>Dealing with Fatalities</td>
</tr>
<tr>
<td>3 – 4</td>
<td>HM Coroner</td>
</tr>
<tr>
<td>5 – 7</td>
<td>Temporary mortuaries</td>
</tr>
<tr>
<td>8 – 14</td>
<td>Body Holding Areas</td>
</tr>
<tr>
<td>15</td>
<td>Burial, cremation and memorial services Procedural Issues</td>
</tr>
<tr>
<td>16</td>
<td>Debriefing</td>
</tr>
<tr>
<td>17 – 19</td>
<td>Record keeping</td>
</tr>
<tr>
<td>20 – 24</td>
<td>Investigation and gathering of evidence Dealing with the Public</td>
</tr>
<tr>
<td>25 – 28</td>
<td>Warnings</td>
</tr>
<tr>
<td>29 – 30</td>
<td>Shelter or evacuation</td>
</tr>
<tr>
<td>31 – 32</td>
<td>Cordon enforcement Decontamination</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex C</th>
<th>Environmental Decontamination and Recovery Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>Local Authority role</td>
</tr>
<tr>
<td>3 – 6</td>
<td>Government Support to the Local Authority Recovery Strategy</td>
</tr>
<tr>
<td>7 - 8</td>
<td>Principles of Recovery</td>
</tr>
<tr>
<td>9</td>
<td>Key priorities for the recovery strategy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex D</th>
<th>Cabinet Office, Civil Contingencies Secretariat - National Capabilities Programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex E</th>
<th>Home Office CBRN Team &amp; the CBRN Resilience Delivery Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>38 - 40</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex F</th>
<th>Glossary of Counter-Terrorism Abbreviations/Acronyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 - 42</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex G</th>
<th>Further Reading &amp; Links</th>
</tr>
</thead>
<tbody>
<tr>
<td>43 - 46</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex H</th>
<th>Written Ministerial Statement to the House of Commons by the Minister of State, Home Office; 8 July 2003 – CBRN equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td></td>
</tr>
</tbody>
</table>
Introduction

1.1 The events of September 11th 2001 and the anthrax attacks in America of the following month have fundamentally altered the way that governments plan for potential terrorist incidents. The United Kingdom government accepts that there is a realistic possibility of some form of unconventional terrorist attack in the western world and that this could involve CBRN material. The effects of such an attack would clearly present significant consequence management problems. It is therefore vital that local authorities\(^2\) are prepared and able to respond, alongside other agencies, as effectively and efficiently as possible.

1.2 In this document, as in the Strategic National Guidance on the Decontamination of People, published by the Home Office on 3 February 2003, the term CBRN is used to describe the whole range of incidents that can occur as a result of a release of chemical, biological, or radiological material.

1.3 The focus of the first edition of this document, published in October 2001, was the release of CBRN material by terrorists. One of its principal purposes was to give local authorities an overview of the multi-agency response to a deliberate release of chemical and biological agents in the United Kingdom. That overview is also to be found in this edition of the guidance. However accidental releases, outbreaks of serious communicable diseases, contamination from overseas incidents, even domestic spillages or leakages can produce equally severe consequences to manage and from which to recover. The measures required to deal with the consequences of any crisis featuring the accidental release of toxic substances or a major infectious disease outbreak would be similar to those required for a deliberate release. It is therefore appropriate to have a generic plan that can be adapted to any credible scenario.

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\(^2\) Local Authorities are defined as County Councils, Metropolitan District Councils, London Boroughs, Unitary Authorities and Shire Districts. As set out in the draft Civil Contingencies Bill (Chapter 3, paragraph 10), although shire districts have been placed within Category 1 organisations as being likely to be involved in the local response to incidents, for the time being county councils will take full responsibility for local authority civil protection planning in their area. This is a continuation of the current arrangement under the 1948 Civil Defence Act. The draft Bill provides for regulations to be made which will allow county councils to plan on the basis of the full range of local authority functions in their area, including those of the districts."
2. Purpose of guidance

2.1 The purpose of this document is to:

(1) provide local authorities with an overview of the multi-agency response to a deliberate release of CBRN material by terrorists;

(2) summarise the characteristics and effects of widely available CBRN agents;

(3) provide a general overview of some of the consequence management problems arising from terrorist and accidental releases of hazardous materials;

(4) highlight key areas of pre-planning activity and resource management which should be considered by local authorities; and

(5) indicate where local authorities can obtain further technical or specialist information or advice.

2.2 Multi-agency strategic level planning and response are dealt with in the main sections of this document. Annex A covers the local authorities’ own strategic, tactical and operational command and control levels.

2.3 This document should be read together with other national level guidance. The most important documents are Dealing with Disaster; the Home Office Strategic National Guidance on the Decontamination of People Exposed to CBRN Substances or Materials and the Department of Health Deliberate Release Guidance: Public Health Response. Details of these publications are contained in the guide to further reading at Annex G.

2.4 Some key contingency plans and guidance documents are classified. To make their contents public would give terrorists access to material they would find valuable. The Home Office Counter Terrorism Contingency Planning Guidance is one of these documents but a general, unclassified, outline of the Counter Terrorism Contingency Plan is given in Section 5 below.

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3 In this document the term consequence management is defined as “measures to protect public health and safety, restore essential services and provide emergency relief to business and individuals affected by the consequences of a crisis (such as an act of terrorism).” This is in contrast to the term crisis management, which is defined as “measures to identify, acquire and plan the use of resources needed to anticipate, to prevent and/or resolve crisis or an act of terrorism.”

4 Throughout this guidance the terms strategic, tactical and operational are used as defined in Chapter 3 of Dealing with Disaster (revised 3rd edition) Cabinet Office, 2003 (ISBN 1-874447-42-X). In some agencies the terms Gold, Silver and Bronze are in common use as equivalent terms.
3 Planning Assumptions & Communications

3.1 Framework

Planning, response and recovery should take place within the emergency planning structures and Integrated Emergency Management doctrine set out in *Dealing with Disaster* and in accordance with the advice given in the publication *Recovery: An Emergency Management Guide (Home Office, 2000)* (120kb .pdf).

3.2 Doctrine

As described in *Dealing with Disaster*, most emergencies in the United Kingdom are handled at a local level by the emergency services and by the appropriate local authorities. Where the scale of an incident puts it beyond the capacity of local resources, the first recourse is usually to mutual aid with services in adjoining areas, and thereafter to locally agreed military assistance.

3.3 Central government involvement

There are occasions however when the incident is of a scale or complexity to require central co-ordination or support that central government becomes involved. The initial central response will then come from a pre-nominated lead government department. Details about the roles and responsibilities of central government and lead government departments are contained in Chapter 7 of *Dealing with Disaster*.

3.4 Regional Resilience Teams and Forums in England

(1) As set out in Chapter 4 of the consultation document on the draft Civil Contingencies Bill, the government is establishing a new civil protection tier. Regional Resilience Teams (RRTs) are already in place in Government Offices and Regional Resilience Forums (RRFs) have been formed to bring together the key players, map resilience capabilities within their regions and act as a bridge between central and local government. The government has also already agreed that stronger arrangements need to be put in place for the regional role in response.

(2) One of the objectives for the regional tier referred to in the consultation document is assisting with recovery. The regions have a significant interest in the recovery phase of a wide-area emergency. This links closely to their wider remit in the economic development field.

(3) In the light of these responsibilities, RRTs will have a part to play in the event of any significant CBRN release but by definition the roles and functions of RRTs and RRFs are in development.
3.5 **Wales**

The Welsh Assembly Government facilitates the operation of a High Level Group chaired by an Assembly Minister. This Group provides a forum for discussion on issues of strategic emergency preparedness and will have a part to play in the event of any significant CBRN release. The role of this Group is still in development, however the Wales National Emergency Co-ordination Arrangements provide an overarching framework for the inter-agency management of a Welsh national crisis.

3.6 **Lead departments for CBRN**

(1) In the event of a CBRN terrorist incident in Great Britain, the Home Office would initially assume lead government department responsibility for dealing with the effects of the emergency. The Home Office would be supported by other departments including the Department for Environment, Food and Rural Affairs (Defra), which also has the responsibility in England\(^5\) for co-ordinating the government’s contribution to the decontamination and recovery phase of such incidents or emergencies in the open environment. At some point, to be determined on a case-by-case basis and once the crisis management phase is concluded, the lead department responsibility would be transferred to Defra although depending on the nature and location of the incident(s), for example where releases of CBRN materials occur primarily within buildings and infrastructure, other departments might take the lead.

(2) In respect of CBRN incidents arising from non-terrorist causes, the Civil Contingencies Secretariat of the Cabinet Office (in consultation with the Home Office) would ensure that, dependent on the cause of the incident, a lead department was identified for the both the crisis and consequence management phases.

(3) Different leads apply in respect of radiation hazards\(^6\).

3.7 **Civil Contingencies Secretariat & the national capabilities programme**

The Home Secretary announced in Parliament on 3 March 2003 details of the government’s programme of work to enhance key generic capabilities to allow the country to respond to the most demanding emergencies, however caused. The Civil Contingencies Secretariat (CCS) manages this programme and drives the progress of departments involved in delivering each of the capabilities. A full list of the capabilities is shown in Annex D below.

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\(^5\) This role would be taken in the Devolved Administrations by the relevant responsible departments.

\(^6\) See Annex G for relevant links to DTI and MoD websites.
3.8 **Home Office CBRN Team & the CBRN Resilience Delivery Plan**

The Home Office leads on dealing with CBRN threats and resilience and is responsible for the decontamination capability within the programme led by CCS. A summary of the work of the CBRN Team and the programme to deliver CBRN resilience in partnership with key stakeholders is set out in Annex E below.

3.9 **September 11**

The events of 11 September 2001 showed the vulnerability of western society to asymmetrical terrorist attack\(^7\). There have since been other high-profile attacks against western targets, such as the Bali bombing. The enhanced threat of terrorism producing mass casualties justifies a new dimension to planning and to the management of the consequences of CBRN releases.

3.10 **Multiple emergencies or threats**

Organisations have normally planned on the assumption that they have adequate resources to handle one emergency at any time. The experience of September 11 has shown that multiple incidents may have to be handled simultaneously, perhaps within the boundaries of a single authority. It may not therefore be possible to rely on traditional mutual aid arrangements, as a number of adjoining authorities may all be fully stretched.

3.11 **Damage, harm and disruption**

The amount of damage or disruption resulting from a major emergency or series of incidents could far exceed the levels of devastation produced in previous disasters. It is also evident that a CBRN release, whether deliberate or accidental, may have the potential to cause serious harm and severe disruption to the delivery of vital public services over a wide geographical area\(^8\), having no regard to administrative boundaries of local authorities or other agencies\(^9\). A deliberate release of CBRN material could be particularly dangerous where a large number of people are assembled in an enclosed area and special attention should be paid to this in local plans.

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\(^7\) Asymmetrical attack - an attack the effects of which are out of proportion to the apparent ability of the attacker to achieve, e.g. 9/11 or a young hacker single-handedly bringing down vast computer systems. This is in contrast to the symmetrical warfare expected during the Cold War era with two equally well armed superpowers facing each other openly.

\(^8\) There are a number of references in this document to the ‘scene’ of an emergency. It is important to remember that planning considerations go wider than localised emergencies even where there is an identifiable scene and should include planning for wide-area consequences, particularly where biological agents are involved.

\(^9\) The report *Homeland Insecurity: Building the Expertise to Defend America from Bio-terrorism*, published by Partnership for Public Service in July 2003 noted that the anthrax mailing attacks of 2001 were small-scale challenges that still overburdened the system. Because of the anthrax attacks the Center for Disease Control had to commit as much as a quarter of its entire workforce to the response. The report can be accessed via [http://www.ourpublicservice.org/](http://www.ourpublicservice.org/)
3.12 **Types of emergency**

With a terrorist incident it is possible there would be some advance warning of the location and type of release. The government has in place arrangements to locate and disrupt terrorist devices. However, no warning may be given at all and arrangements must take into account the possibility of a no-notice attack using one or more devices and, as on September 11, co-ordinated attacks across a range of targets.
Communications issues

3.13 Public information about threats

(1) It is the government’s policy to streamline the assessments of the threat of terrorism and their communication to the public. The Home Secretary made statements to the House of Commons about terrorism and resilience on 3 March 2003, 20 March 2003 and 3 July 2003.\footnote{Copies of the Home Secretary’s statements can be found on the Home Office website at www.homeoffice.gov.uk/terrorism}

(2) In addition the Home Office launched its terrorism website on 18 March 2003, www.homeoffice.gov.uk/terrorism. The site contains advice about the threat of terrorism, what people can do to help protect themselves, what the government is doing, and copies of frequently asked questions, reports, publications and press releases.

(3) A useful source of information for both the public and emergency planners is the ongoing work of the National Steering Committee on Warning and Informing the Public (NSCWIP). Details of NSCWIP’s work can be found at www.nscwip.info

3.14 Public, media and political interest

There will be strong public interest and concern following any CBRN incident. Any significant incident involving the release of CBRN materials will attract massive domestic and foreign media attention. With television and radio channels broadcasting twenty four hours a day, every day, the ability of the media to get to the scene, interview eye witnesses or their own experts and broadcast news within minutes of an incident occurring should be anticipated in planning. There will be also intense local, national and international political interest. Councillors, MPs and MEPs will expect access to information and briefing. There will be also requests for information from foreign governments about what may have happened to their nationals or possible threats to their territory by the dispersal of agents or the movement of radioactivity.

3.15 Public health and safety information

Public and media interest will include demands from the outset for information indicating what action people should take to protect themselves, their health and property.

3.16 Information pressures

(1) Information will usually be provided by the emergency and health services in the first instance. They will issue public statements, provide
advice about what action to take, hold media briefings and conferences. Under existing protocols in counter-terrorist incidents, outputs to the media are made jointly by the police and the Government Information and Communication Service (GICS). 11

(2) However huge demands for information will be placed on local authorities. Members of the public can be expected to telephone or call in person in large numbers for advice or guidance. Web pages will attract many more hits than usual and may be quickly overwhelmed. Local Authorities should consider building contingency arrangements into their plans in anticipation of these pressures.

3.17 Lessons learned

The Emergency Planning College Library and Information Centre has developed a reputation for excellence. This was formally recognised when the Library was designated by the European Commission as the UK Document Centre for Emergency Planning. The Library holds the United Kingdom's largest collection of emergency planning information including reports of enquiries into disasters and lessons learned from exercises. It is important that reports about real incidents and exercises are routinely deposited in the College library so examples of good practice can be easily accessed.

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11 Chapter 5 of Dealing with Disaster gives detailed guidance on co-ordinating a multi-agency approach to media handling in emergencies. See also Appendix G and Section 5.3.4 (iii) of the HO Strategic National Guidance on Decontamination of People.
4 Characteristics of CBRN materials

General

4.1 CBRN materials are all very different and each present unique difficulties for responders\textsuperscript{12}. However chemical and biological agents present four main types of hazard, depending on the physical properties and characteristics of the agent released. These are:

- contact hazard
- inhalation hazard
- injection hazard
- ingestion hazard

4.2 Contact hazards are created by chemical, biological or radiological agents that can be absorbed into the skin. These agents can be in solid, liquid or vapour form. Most biological agents do not pose contact hazards, unless the skin is cut or abraded.

4.3 Inhalation hazards are created by vapour, aerosols or contaminated dust that can be inhaled into the lungs.

4.4 Injection hazards result from chemical, biological or radiological agents being injected - either by the agent moving from the injection site into the blood stream or being injected directly into a vein or artery.

4.5 Ingestion hazards result from chemical, biological or radiological agents being ingested into the digestive system.

4.6 In addition to these four types of hazard, radiological agents present a significant additional hazard that results from the radiation they emit.

4.7 Nuclear hazards, in this context, will be those resulting from a nuclear explosion. These will include extensive blast and fire damage, direct radiation effects and widespread radiological contamination.

Chemical

4.8 Chemical agents mainly present inhalation and contact hazards.

\textsuperscript{12} Detailed information and guidelines for action for health professionals about particular CBRN agents can be found on the web pages of the Public Health Laboratory Service (now part of the Health Protection Agency) http://www.hpa.org.uk
4.9 A chemical release requires an immediate “lights and sirens” response using well-established HazMat procedures. However, some types of chemical agent present a higher level of challenge than a normal accidental release.

4.10 As noted above, many of the characteristics and consequences of a release of a chemical agent by terrorists would be similar to those arising from an accidental release. However, the scale of casualties is likely to exceed anything in the planning assumptions for an accidental release. Some chemical agents can be fast acting so the response also needs to be very quick. It will be vital for first responders to remove casualties from the contaminated area and to arrange for their prompt decontamination in accordance with the methodologies set out in the Home Office Strategic National Guidance. Other important interventions will include the provision of on site medical care, protecting local hospitals and other health care facilities from the danger of cross-contamination and the avoidance of creating more casualties through the spread of the chemical. For some chemicals, specific antidotes need to be administered as soon as possible.

4.11 Some chemical materials can be delivered as vapour or aerosol and cause poisoning by inhalation which is likely to be relatively fast acting. Other chemical materials may present mainly as a liquid, which can be persistent and these will pose both a skin and inhalation hazard. However, other means of delivery, such as contamination of food or water supplies cannot be ruled out. A residual hazard (particularly with persistent agents) will cause a particular problem of contamination of equipment, vehicles and environment.

4.12 There are two broad categories of chemical agents, toxic industrial chemicals and military chemical agents. HazMat teams routinely encounter toxic industrial chemicals in responding to accidental spillages or leaks. Terrorists could obtain these agents and use them deliberately. Military agents, such as nerve agents and mustard, were developed for use in warfare and most have no commercial applications.

4.13 Chemical agents can be loosely classified by their action in the body as follows:

4.14 Nerve agents include sarin, soman and VX and are very toxic relatives of commonly used insecticides. These agents disrupt the function of the nervous system and are lethal.

4.15 Blister agents include mustard gas and Lewisite. They cause severe damage to the eyes, airways and other organs through liquid or vapour contact.

4.16 Lung damaging agents are primarily vapour hazards. They include phosgene (CG) and chlorine. They cause respiratory irritation and may
cause fluid to accumulate in the lungs when inhaled.

4.17 Gaseous cyanides, such as hydrogen cyanide, cyanogen and cyanogen chloride, are materials that inhibit transfer of oxygen from the blood to body tissues. This causes weakness, agitation, nausea and collapse and can cause rapid death at high exposure concentrations.

4.18 Ricin, a glycoprotein toxin, also has potential for use by terrorists due to the availability of castor plant beans from which it is derived.

**Biological**

4.19 A biological release is likely to become a major public health emergency. It will have strong similarities to the outbreak of a naturally occurring virus, such as SARS and may take days to first become apparent and weeks to evolve. For this reason, biological attacks can be hard to detect and/or identify.

4.20 It will be at hospitals, GPs’ surgeries and other health facilities where the consequences of a biological agent incident will become apparent as an increasing number of patients present with similar symptoms.

4.21 Biological agents can be severely disruptive and potentially devastating but they are comparatively difficult to deliver. They include anthrax, plague and smallpox.

4.22 The effects of an airborne release of a biological agent will depend upon the nature of the disease that the agent causes and the effectiveness of preventative measures and treatment. A crucial determinant of the potential number of casualties is the ability of the disease to spread from person to person. Unless the release is announced, detection and minimisation of casualties will be dependent upon early identification of unusual patterns of illness by doctors and laboratories. Water or food supplies could also be used to spread biological agents. Chlorinating and/or boiling may eliminate or minimise the danger in many, but not all, organisms.

**Radiological**

4.23 Radioactive materials are used for many purposes in industry, medicine and research. Exposure of the UK population to radiation from medical and industrial activity is closely controlled.

4.24 Radioactive materials give rise to two types of radiological hazard. First from external exposure to the radiation they emit or, secondly, internal exposure through absorption of radioactive material into the body.
Radiation Effects

4.25 Adverse health effects associated with radiation exposure can be split into two categories. There are direct effects, which generally arise shortly after exposure to a radiation dose. The severity of these effects depends on the level of dose and ranges from nausea and vomiting, impaired lung function to death. For a given total dose, the severity of the effects tends to be less for protracted exposure to a low dose than for a short exposure to a high dose.

4.26 Radiation can also cause long term effects that may arise many years after exposure, such as the development of cancer or hereditary disease in future generations. The severity of this type of effect is independent of the dose that was originally received. However, the probability of an individual developing this type of effect is related to the dose received and there appears to be no safe level.

4.27 Types of radiation

There are three main types of radiation: alpha, beta, and gamma radiation.

Alpha Radiation

Alpha particles are the heaviest and most highly charged of the nuclear radiations. However, alpha particles cannot travel more than a few inches in air and are completely stopped by an ordinary sheet of paper. The outermost layer of dead skin that covers the body can stop even the most energetic alpha particle. Therefore, exposure to alpha radiation outside the body is not a serious hazard. However, if ingested through eating, drinking, or breathing contaminated materials, they can become an internal hazard, causing damage to internal organs.

Beta Radiation

Beta particles are smaller and travel much faster than alpha particles. Typical beta particles can travel several millimetres through tissue, but they generally do not penetrate far enough to reach the vital inner organs. Exposure to beta particles from outside the body is normally thought of as a slight hazard. However, if the skin is exposed to large amounts of beta radiation for long periods of time, skin burns may result. If removed from the skin shortly after exposure, beta-emitting materials will not cause serious burns. Like alpha particles, beta particles may damage internal organs if ingested by eating, drinking, or breathing contaminated materials. Beta-emitting contamination also can enter the body through unprotected open wounds or the lens of the eye.

Gamma Radiation

Gamma rays are a type of electromagnetic radiation transmitted through space in the form of waves that travel at the speed of light.
Gamma rays are pure energy and therefore are the most penetrating type of radiation. They can travel great distances (e.g., a mile in open air) although the dose received by an individual reduces as the square of the distance from the source. Gamma rays can also penetrate most materials requiring a substantial thickness of earth, lead, concrete or water to provide an effective barrier. This creates a problem for humans, because gamma rays can attack all tissues and organs.

4.28 Internal Exposure to Radioactive Material

Radiological material can enter the body through four primary routes:

- Absorption: Some kinds of radioactive material can be absorbed directly into the body through the skin. Clothing provides some protection, especially in the case of light exposure. Contaminated clothing should be removed to prevent the radioactive particles from transferring to the body.

- Inhalation: Radioactive particles that are breathed into the lungs not only provide a direct dose of radiation, but they can concentrate in particular organs (e.g., lungs, bones, or thyroid).

- Ingestion: Radioactive particles may be ingested if a person's hands become contaminated and then the person fails to decontaminate before eating. Radioactive material may also be ingested if water or food supplies become contaminated, or if radioactive particles deposited on the ground are eaten by animals whose meat or milk is consumed by the public. Careful monitoring of water and food supplies is required after a radiological incident.

- Injection: Radioactive particles can enter the body through breaks in the skin through open wounds or if contaminated shrapnel cuts into the skin.

4.29 Radiological Dispersion Devices

Radiological Dispersal Devices (RDDs) are designed to disseminate radiological material into the atmosphere. The media often use the term "dirty bomb" to refer to RDDs. These weapons consist of conventional explosives packaged with materials such as nuclear waste by-product. A dirty bomb does not result in a nuclear explosion. When the explosives detonate, radioactive particles are dispersed into the atmosphere. RDDs might also include a substance such as napalm or industrial glue to ensure that radioactive particles will not easily be washed away after the incident. Dirty bombs are multi-hazard weapons. In addition to radiation exposure, they may inflict explosive hazards as well as mechanical hazards from shrapnel in the device or resulting from building collapse.
Nuclear Hazards

4.30 In the context of this guide, the term nuclear hazards refers to an Improvised Nuclear Device (IND). An IND will result in a nuclear explosion although it is likely to be very much less powerful than a military nuclear weapon. The resulting hazards will include widespread blast and fire damage and intense direct radiation effects (including gamma rays and neutrons). Large amounts of radioactive material will be spread downwind over a very wide area. There will also be significant problems with electronics and communication systems as a result of the electromagnetic pulse (EMP) from the explosion.
5. CO-ORDINATION OF THE MULTI-AGENCY RESPONSE

Introduction

5.1 The arrangements for responding to the credible threat of a release of CBRN material by terrorists are unusual because the response may be initiated at the Strategic level, or even by central government. The response involves central government as a key player, and the military are likely to be brought in. It is critical therefore that the response is genuinely multi-agency and communication between all agencies is of the highest quality. Ministers and senior officials representing the appropriate departments lead the central government involvement from the Cabinet Office Briefing Room(s) (COBR).

Notification, Confirmation and Roles

5.2 Any terrorist incident is a crime and the Police Incident Commander remains in operational command. As soon as it appears that a terrorist threat has been made or terrorist action has taken place, the police will notify central government and the national plan will be brought into operation to augment local resources. This will involve a range of national assets some of which focus on the management of the crisis (preventing or mitigating the incident itself) whilst others concentrate on consequence management. A Government Liaison Officer (GLO) from the Home Office leads a Government Liaison Team (GLT) based at the Police Main Base Station (PMBS). The GLT will also include a central government official acting as Consequence Management Liaison Officer (CMLO).

5.3 The role of the Government Liaison Officer, leading the Government Liaison Team, is:-

(i) to keep COBR fully informed of the development of the incident;
(ii) to ensure that the police interest is taken fully into account at COBR;
(iii) to ensure that the Government’s views are kept in mind at the scene and
(iv) to see that the flow of communications between the scene and COBR works smoothly.

In this way, the Government Liaison Officer takes some of the pressure off the Police Incident Commander.

5.4 The Consequence Management Liaison Officer (CMLO) is part of the Government Liaison Team. S/he provides the link between the centre and the incident concentrating on consequence management issues, ensuring that the appropriate local agencies are fully engaged in the response and that the recovery phase is being considered.
5.5 Local authorities will normally be informed about terrorist incidents directly by the police but the CMLO on the Government Liaison Team will ensure that this has been done.

**Command and Control**

5.6 The multi-agency strategic command for an incident of this nature will be set up in what is known as the Police Main Base Station (PMBS). The PMBS will normally be at the Police Headquarters for the force in whose area the incident occurs. However, the Police Incident Commander may decide, taking into account the location of the incident, toxicity of the material being dispersed and the prevailing meteorological conditions that Police HQ would be unsafe and designate an alternative site.

5.7 In the Government Liaison Team at the PMBS, there will normally be representatives of the Home Office, the Cabinet Office Civil Contingencies Secretariat, Foreign and Commonwealth Office, Department of Health/National Health Service, the military, Crown Prosecution Service (CPS) amongst others. There may also be representatives from the Department of the Environment, Food and Rural Affairs (including the Drinking Water Inspectorate), Food Standards Agency, Environment Agency, Department of Trade and Industry, and others dependent upon the nature of the incident.

5.8 If the terrorist incident takes place in one of the Devolved Administrations, representatives from the relevant departments of the devolved government will be present.

5.9 Also at the PMBS will be representatives of the Ministry of Defence whose specialist resources may be required by the Police Incident Commander. These include personnel trained to operate in protective equipment, to gain access to controlled space, to carry out specialist searches, and to render safe any devices which may be found. In addition to these specialist assets, the military may also be able to provide assistance of a more general nature, under the terms of Military Aid to the Civil Community (MACC) as they would for other emergencies. Requests should be made either through the normal channels at the local level or through the local Divisional Headquarters Liaison Officer at the Police Main Base Station.

**Emergency Powers**

5.10 It will be for ministers to decide if emergency powers should be invoked on the basis of information about the scale and nature of the incident. They may decide to recommend the declaration of a state of emergency in accordance with the Emergency Powers Act, 1920 or to consider if there may be emergency powers available in relevant sectoral legislation.
5.11 The modernisation of emergency powers is currently under consideration as part of the progress towards a Civil Contingencies Bill\(^{13}\).

**Local Authority role at Police Main Base Station**

5.12 The local authority Chief Executive (possibly with the Emergency Planning Officer in support) would normally be expected to attend multi-agency strategic (Gold) meetings at the PMBS. Whoever represents the local authority must be able to take high-level, strategic decisions on behalf of that authority. If more than one local authority is involved or affected by the incident, a swift decision will be required as to how their interests are to be represented at the PMBS to prevent unnecessary duplication and use of resources. Pre-planning should address the methods and reasoning by which such a decision can be reached quickly. Issues to be discussed at Multi-agency Strategic meetings include the decontamination strategy, media and public information strategy, dealing with central and local government politicians and VIPs, and the strategy for remediation, reoccupation and recovery. Multi-agency tactical level issues that may be referred for a longer-run or strategic view include decisions about whether to evacuate or shelter, effective road closures, and temporary accommodation for displaced persons.

**Joint Health Advisory Cell (JHAC)**

5.13 A key element of the multi-agency response to an incident of this nature, in which there is a clearly identified threat to public health, will be the establishment of a Joint Health Advisory Cell (JHAC)\(^{14}\) at the Police Main Base Station.

5.14 JHAC is a Strategic group which will be set up, at the request of the Police Incident Commander, by the Director of Public Health (DPH) for the area affected by the incident (who has the legal responsibility for public health issues). The DPH in turn will be supported by a Consultant in Communicable Disease Control and other health experts, a press officer, an Environmental Health Officer (EHO) from the local authority, and representatives from Defra, the Environment Agency and the water companies\(^{15}\). The choice of EHO will depend on the nature of the incident and the expertise available within the staff pool. Additional members would be alerted by central government and would normally include a senior scientific authority from Dstl, Porton Down (the Atomic Weapons Establishment at Aldermaston and the NRPB would advise for a radiological/nuclear incident), a military medical adviser and a police liaison officer. Although the Director of Public Health is responsible for servicing meetings of the JHAC, individual members will

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\(^{13}\) See Chapter 5 of the Draft Civil Contingencies Bill, Consultation Document published by the Cabinet Office, June 2003.

\(^{14}\) Further details about the role of JHAC can be found in the document ‘Deliberate Release of Biological and Chemical Agents’ published jointly by the DH and the NHS in March 2000

\(^{15}\) Or equivalent government departments/agencies of the Devolved Administrations.
wish to ensure they have their own administrative or secretarial support.

5.15 The main purposes of the Joint Health Advisory Cell are to:

- take advice on the health aspects of the incident from a range of experts;
- provide advice to the Police Incident Commander on the health consequences of the incident including those relating to evacuation or containment;
- agree with the Police Incident Commander the advice to give to the public on the health aspects of the incident;
- maintain a written record of decisions made and the reasons for those decisions.

5.16 The Joint Health Advisory Cell will also, as necessary, need to:

- liaise with the Department of Health and the Health Protection Agency;
- formulate advice to health professionals in hospitals, ambulance services and general practice;
- formulate advice on the strategic management of the health service response;
- establish the information base needed to evaluate the long-term health consequences of the incident;
- instigate any health related investigations found to be necessary;
- in the recovery phase, take responsibility for co-ordinating more detailed assessments of any immediate health impacts.

5.17 The local authority representative will be part of the information gathering process of the JHAC and will help the public health officials to assess how best to inform the general public. They will also need to keep in close touch with their authority’s Environmental Health officials and gather enough relevant information to brief the Chief Executive at the Police Main Base Station.
6. ROLE OF THE LOCAL AUTHORITY (see also Annexes A and B)

Generic key roles

6.1 As set out in Dealing with Disaster and in the Strategic National Guidance on the decontamination of people exposed to CBRN substances or materials, the generic key roles of the Local Authority in response to an incident are to:

- Support the emergency services
- Co-ordinate the response by voluntary agencies
- Support the local community
- Lead the long term recovery process\textsuperscript{16}
- Work towards the restoration of normality
- Maintain normal services

Major Incident Plan (Major Emergency Plan)

6.2 On being informed of a deliberate release, or a credible threat, the appropriate local authorities would be expected to invoke their generic major incident procedure. As with all major incidents that actually do, or have the potential to, affect large numbers of people across a widespread area, there is a key role for local authorities in terms of practical measures and logistical support.

Support to Health providers

6.3 For an incident of this type, the health community will set up an extensive programme of healthcare and advice and there may be requests to local authorities for the use of buildings and assistance with travel, distribution of medicines, provision of equipment and a range of other services. Local authority emergency plans should clearly identify the nature and extent of existing links to partners, in particular relationships with Strategic Health Authorities, NHS Trusts, Primary Care Trusts and all local health care providers. This is especially important in terms of services provided to the general public e.g. counselling, welfare, access to general practitioners and the setting up of temporary medical centres and/or body holding areas and mortuaries.

Detection, sampling and monitoring

6.4 Assessment and monitoring for a deliberate release of chemical or biological material would be done by the emergency services\textsuperscript{17} or

\textsuperscript{16} The term “recovery” is as defined in the Home Office publication Recovery: An Emergency Management Guide. See Section 10.

\textsuperscript{17} Advice on the suitability of equipment to detect, identify and monitor CBRN releases has been given by the Home Office to chief officers of police. Annex H below gives ministerial advice to businesses on detection kits for hazardous materials.
specialist agencies e.g. Dstl, Porton Down or AWE Aldermaston, but it may be some time before national resources arrive on the scene.

6.5 Information about the properties of any CBRN materials, their behaviour and how they react with other substances is an important issue for local authorities and their partner organisations, to enable them to take the right actions in the remediation and long run recovery phases of an incident. This information will normally be available through the Joint Health Advisory Cell or Consequence Management Liaison Officer on the Government Liaison Team.

Health and Safety

6.6 The extreme toxicity of materials that could be used in a deliberate attack make health and safety issues even more important than after an accidental release or naturally occurring outbreak.

6.7 Under the arrangements set out in the Home Office Strategic National Guidance document, it is not a function of local authority staff to enter areas of known CBRN contamination or where there is a likelihood of secondary contamination from contamination casualties (the Hot or Warm Zones). As soon as the release of CBRN material is known or suspected, every effort must be made to protect local authority staff. Immediate advice should be obtained from the health service on medical surveillance and recording of staff who may have been exposed to the hazardous material.

6.8 Unless specified in the contract of employment, the involvement of local authority staff in the consequence management phase of a CBRN incident would be dependent upon the willingness of the members of staff concerned. Some members of staff may be reluctant to attend rest or survivor reception centres, drive vehicles in which decontaminated victims have travelled etc. and this should be taken into account in planning. The same considerations may apply to members of the voluntary organisations.

6.9 Environmental Health Officers may be asked for advice on possible effects from the various kinds of agents which may be released or on health and safety issues and risks.

Welfare & Advice

6.10 As noted in paragraphs 6.1 and 6.2 above, local authorities have a major role to play following an emergency of this type. The potential scale and nature of such emergencies mean that large numbers of people are likely to be affected and thus require some form of help during the recovery and rehabilitation phase. These will include casualties and survivors, their relatives, friends and colleagues as well as members of the local and wider community. While it is the role of the local authority to co-ordinate the welfare response it is acknowledged that they cannot
6.11 For example, local authorities will need to consider with the health community the provision of help-lines and drop-in centres for those who need information and re-assurance. Social Services staff may need to visit clients in their own homes or workplaces to offer comfort, reassurance or advice. They will also provide the gateway to other care and support services, possibly to include counselling, based on local knowledge and accurate information about individual requirements.

Religious and Cultural issues

6.12 Local authorities and other responding agencies must ensure that their plans and arrangements adequately reflect and address the needs of those members of religious and ethnic minorities who are involved in a major incident.

6.13 They should provide for discussion at an early stage with appropriate religious and ethnic community leaders to ensure that customs and beliefs are respected, language problems are addressed and requirements for medical treatment, hygiene, diet and places for prayer are met. There may also be concerns about how the dead are handled, depending on the faith of the deceased and the timing of funeral arrangements.

6.14 Various sections of the faith communities have already established plans and it is important that as far as possible, these complement and are integrated into local authority contingency arrangements.18

Mutual Aid Arrangements & Back-up Facilities

6.15 Mutual aid arrangements between authorities already exist in many places and are very likely to be needed for an incident of this scale and nature. There is potential for a widespread geographical area to be affected for prolonged periods with the consequent loss of vital services and equipment, during which time neighbouring authorities can provide support and assistance to alleviate the situation. An element of resource pooling by a consortium of authorities, or through existing regional co-ordination arrangements, should enable an effective emergency response to be made to the stricken area whilst ensuring that adequate ‘home’ cover is maintained.

6.16 It is worth reviewing mutual aid arrangements however as a number of local authorities may have contracts or agreements for goods and services with the same suppliers. In the event of a CBRN incident with wide-ranging consequences, these suppliers may find themselves being

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18 See also Section 8 & Appendix F of the Strategic National Guidance on the Decontamination of People Exposed to CBRN Substances or Material (Home Office, February 2003).
called upon by a number of clients at the same time stretching them beyond their usual or stated capacity.

6.17 The provision of a “back-up” emergency centre should also be considered. The widespread dispersal of any CBRN material could affect existing centres of activity and operation, thus compromising the local authority’s overall management of the response and the delivery of day to day core services.

Recovery

6.18 In addition, as set out in the guidance document *Recovery: An Emergency Management Guide* (Home Office, 2000), after the involvement of the emergency services decreases, the local authorities will take the lead role in the rehabilitation and reconstruction of the community. The aim is to reach a point where additional demands on services have been reduced to the level at which they were before the incident occurred. Issues to be considered in the recovery phase will include the immediate and ongoing safety of the area, disposal of contaminated waste, environmental monitoring, support for business recovery, provision of information and advice and the restoration of public confidence.

6.19 The relevant local authorities should consider whether a special planning group for reoccupation and recovery should be set up early in the incident to prepare advice and proposals for the multi-agency strategic and the local authority’s management team. A safe, orderly and speedy evacuation will require the co-operation of the police, local authority and a number of local agencies. Once the incident has passed and the area declared safe again, local authorities will have a major re-occupation role to play if a large-scale evacuation has taken place. In this, they will work closely with the police and other statutory agencies, to ensure a safe, orderly and speedy return home for the evacuees.

Environmental Remediation

6.20 The extent and severity of the environmental clean-up will depend on the type of agent and the level of contamination. Close liaison will be required with all relevant agencies. The decontamination methods used could include treatment with neutralising agents, grass cutting, wash down and the removal of topsoil and foliage. The degree of contamination will vary and therefore the length of time residents are excluded will also vary. It may be long-term. It might be safer to evacuate residents while decontamination takes place to prevent exposure to materials disturbed by the clean-up process. See also Annex C below.

Financial and economic impact

6.21 Advice on these issues is contained in the publication *Recovery: An Emergency Management Guide* (Home Office, 2000). See also Annex C, Section 8 (f).