

# Health Building Note 11-01: Supplement A – Resilience and emergency planning in primary and community care



**Health Building Note 11-01  
Supplement A – Resilience and emergency  
planning in primary and community care**

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# Preface

## About Health Building Notes

Health Building Notes give “best practice” guidance on the design and planning of new healthcare buildings and on the adaptation/extension of existing facilities.

They provide information to support the briefing and design processes for individual projects in the NHS building programme.

## The Health Building Note suite

Healthcare delivery is constantly changing, and so too are the boundaries between primary, secondary and tertiary care. The focus now is on delivering healthcare closer to people’s homes.

The Health Building Note framework (shown below) is based on the patient’s experience across the spectrum of care from home to healthcare setting and back, using the national service frameworks (NSFs) as a model.

## Health Building Note structure

The Health Building Notes have been organised into a suite of 17 core subjects.

**Care-group-based** Health Building Notes provide information about a specific care group or pathway but cross-refer to Health Building Notes on **generic (clinical) activities** or **support systems** as appropriate.

Core subjects are subdivided into specific topics and classified by a two-digit suffix (-01, -02 etc), and may be further subdivided into Supplements A, B etc.

All Health Building Notes are supported by the overarching Health Building Note 00 in which the key areas of design and building are dealt with.

### Example

The Health Building Note on accommodation for adult in-patients is represented as follows:

“Health Building Note 04-01: Adult in-patient facilities”

The supplement to Health Building Note 04-01 on isolation facilities is represented as follows:

“Health Building Note 04-01: Supplement 1 – Isolation facilities for infectious patients in acute settings”

Health Building Note number and series title	Type of Health Building Note
Health Building Note 00 – Core elements	Support-system-based
Health Building Note 01 – Cardiac care	Care-group-based
Health Building Note 02 – Cancer care	Care-group-based
Health Building Note 03 – Mental health	Care-group-based
Health Building Note 04 – In-patient care	Generic-activity-based
Health Building Note 05 – Older people	Care-group-based
Health Building Note 06 – Diagnostics	Generic-activity-based
Health Building Note 07 – Renal care	Care-group-based
Health Building Note 08 – Long-term conditions/long-stay care	Care-group-based
Health Building Note 09 – Children, young people and maternity services	Care-group-based
Health Building Note 10 – Surgery	Generic-activity-based
Health Building Note 11 – Community care	Generic-activity-based
Health Building Note 12 – Out-patient care	Generic-activity-based
Health Building Note 13 – Decontamination	Support-system-based
Health Building Note 14 – Medicines management	Support-system-based
Health Building Note 15 – Emergency care	Care-group-based
Health Building Note 16 – Pathology	Support-system-based

## Other resources in the DH Estates and Facilities knowledge series

### Health Technical Memoranda

Health Technical Memoranda give comprehensive advice and guidance on the design, installation and operation of specialised building and engineering technology used in the delivery of healthcare (for example medical gas pipeline systems, and ventilation systems).

They are applicable to new and existing sites, and are for use at various stages during the inception, design, construction, refurbishment and maintenance of a building.

All Health Building Notes should be read in conjunction with the relevant parts of the Health Technical Memorandum series.

### Activity DataBase (ADB)

The Activity DataBase (ADB) data and software assists project teams with the briefing and design of the healthcare environment. Data is based on guidance given in the Health Building Notes, Health Technical Memoranda and Health Technical Memorandum Building Component series.

1. Room data sheets provide an activity-based approach to building design and include data on personnel, planning relationships, environmental considerations, design character, space requirements and graphical layouts.
2. Schedules of equipment/components are included for each room, which may be grouped into ergonomically arranged assemblies.
3. Schedules of equipment can also be obtained at department and project level.
4. Fully loaded drawings may be produced from the database.
5. Reference data is supplied with ADB that may be adapted and modified to suit the users' project-specific needs.

### Note

The sequence of numbering within each subject area does not necessarily indicate the order in which the Health Building Notes were or will be published/printed. However, the overall structure/number format will be maintained as described.

# Executive summary

This Health Building Note provides resilience and emergency planning guidance specific to the needs of primary and community care buildings (and other related facilities) of which there are over 30,000 that support 90% of patient access to NHS services. Guidance particular to the needs of acute hospitals is provided in Health Building Note 00-07.

In terms of the built environment, resilience is the ability of a building or engineering installation to withstand the impact of threats (man-made with malicious intent) and hazards (man-made or natural, without direct malicious intent).

This guidance provides:

- a strategic approach to resilience planning;
- technical guidance on measures to enhance resilience.

The guidance is based on the Integrated Emergency Management model, which is the UK's national approach to emergency planning. The model aims to help identify hazards and threats, assess the associated risks, develop measures to mitigate those risks, and to prepare plans for responding to an emergency should it occur.

Primary care and community settings need different measures from secondary care settings to cope with such threats. Primary and community care premises tend to be smaller facilities, with less security and greater public access, and are more likely to be in more remote locations. Not all primary and community care buildings will be able to be resilient against all incidents. This may be because their size limits, or precludes, being able to provide services to a larger population than those registered with the GP or other primary and community care contractor practice. Also some premises may be sited on a flood plain. In such cases continuity plans should address what fallback/contingency arrangements have been agreed.

Resilience issues should be considered early in a procurement process. The measures required to achieve resilience should be incorporated into the project brief. Design proposals should then be reviewed to assess whether the level of resilience proposed meets the requirements set out in the project brief. Furthermore,

within reasonable commercial limits a degree of resilience planning in a project may in the longer term be more economic, deliver a more durable asset that retains its value, and may even reduce operational costs by inspired design or reduced insurance costs.

General architectural guidance on the design of primary and community care buildings is available in 'Facilities for primary and community care services'. This manual and other documents provide technical guidance on a wide range of measures to enhance resilience, including architectural features and the design of engineering services such as electricity, water and ventilation. Any such design and engineering decisions should reflect sustainability and carbon footprint policies.

Changing patterns of provision of healthcare are resulting in a wider variety of style of premises from which primary and community care are delivered. Provision may range from the more traditional type of general practice premises, through to multi-purpose community use premises, walk-in centres, primary and community care centres, and up to community hospital-type premises. The precise pattern of ownership, or use, of any given piece of healthcare estate may change over time; but the basic resilience principles will remain essentially the same.

In order to improve their resilience and thereby their readiness to plan and respond to incidents and maintain continuity of clinical care and services, it is suggested that General Practitioners and primary and community care providers give immediate priority to undertaking the following:

- creating a resilience plan using examples and methods available on, for example, the website of the Royal College of General Practitioners (RCGP);
- undertaking a risk assessment, so that risk points and critical assets are identified and understood;
- installing emergency generator plug-in points at all major facilities. This is now a minimum provision. Some facilities are provided with permanent generators and fuel supplies;
- ensuring that there are procedures in place for the backing-up of computer data including consideration

of access to, for example, off-site and/or portable access to computer records;

- reviewing telephony resilience, including off-site call diversion and considering what arrangements need to be in place to trigger diversion remotely;
- using the RCGP/BMA guidance, considering “buddying up” with other practices, and using other premises to help develop the resilience of all parties;
- identifying areas that can be used if necessary as isolation facilities, for potentially-infected patients, or contaminated casualties;
- exploring the range of options available for the provision of heating, energy and water supplies, taking into account the need for sustainability as well as for resilience;
- reviewing access and egress arrangements including the location of points, methods and the need, for

example, to separate staff from patients and other users in the event of an incident;

- reviewing staff training to ensure that the principles of resilience are understood and that any plans developed are understood by staff;
- asking the appropriate commissioner to link with the Local Resilience Forum (LRF), or equivalent, to discuss the role of the LRF and its partner agencies in supporting resilience in General Practice and primary and community care community at its next meeting;
- asking the appropriate commissioner for contact details of your Local Security Management Specialist (LSMS) to seek advice on security-related matters.

Please note: some of this work should have formed part of the flu pandemic planning undertaken in 2009/2010.



# Contents

Preface	About Health Building Notes The Health Building Note suite Health Building Note structure Other resources in the DH Estates and Facilities knowledge series Health Technical Memoranda Activity DataBase (ADB)	
Executive summary		
Acknowledgements		
<b>1 Introduction</b>		<b>1</b>
	Purpose and scope Intended audience Applicability to building types Exclusions Definitions NHS facility Resilience and resilience management Emergency Seeking resilience advice Introduction Role of the NHS Security Management Service Crime Prevention Design Advisors Integrated Emergency Management (IEM) Related guidance	
<b>2 The need for resilience in the primary and community care estate</b>		<b>5</b>
	Overview Emergency preparedness and resilience – what does resilience in primary and community care look like? Planning for resilience Primary care in rural and remote settings – resilience issues Case study – Bellingham Practice Commissioning resilience Risk management	
<b>3 The legal, regulatory, policy and best practice framework</b>		<b>12</b>
	NHS Emergency Planning Guidance Health Building Note 00-07 – ‘Resilience planning for the healthcare estate’ The Regulatory Reform (Fire Safety) Order and fire guidance BS 25999 Business Continuity The NHS Resilience and Business Continuity Management Guidance: interim strategic national guidance for NHS organisations Health Technical Memoranda NHS Security Management Service lockdown guidance	
<b>4 Improving primary and community care and general practice resilience by design</b>		<b>17</b>
	Energy and sustainability	



	Eaglescliffe Health Centre – a case study	
	Power resilience	
	Telephony resilience	
	Infection control/contamination resilience	
	Heat resilience	
	Flood resilience	
	Water resilience	
	Computer resilience	
	Access resilience	
	Sacrison Medical Centre – a case study	
	Grey water management	
	Alternative sources for power generation	
	Heating	
	Lighting	
	NHS South of Tyne and Wear	
	IT installations	
	Electricity supplies	
	Gas	
	Water	
	Telephones	
	Equipment	
	Lessons learnt	
	New build versus retrofitting	
<b>5 Systems</b>		<b>22</b>
	Clusters	
	Buddying-up	
	Buddying considerations	
	Buddying up steps	
	Further clusters	
	Example of GP buddying	
	Flooding and loss of water supply at Hexham – case study	
	Background and context	
	Maintenance of the supply chain	
<b>6 Physical systems</b>		<b>26</b>
	Hot and cold water systems	
	Resilience of electrical supplies	
	Waste/foul water arrangements	
	Access and security	
	Primary care denial of access	
<b>7 References</b>		<b>28</b>

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# 1 Introduction

## Purpose and scope

- 1.1 This Health Building Note (HBN) provides guidance on resilience, specifically for providers of primary and community care and those who advise and support them. This HBN should be read in conjunction with Health Building Note 00-07 – ‘Resilience planning for the healthcare estate’. Health Building Note 00-07 defines built environment resilience, as the ability of a building or engineering installation to withstand the impact of threats (man-made with malicious intent), and hazards (man-made or natural, without direct malicious intent).
- 1.2 This guidance is relevant to all premises providing NHS care, whether they are part of an NHS-owned estate, the estate of contractor professions, or that of third-party developers supplying premises and buildings-facilities working in support of, and in partnership with, NHS services.
- 1.3 This guidance should be considered in the planning and briefing of professional advisors, when developing new schemes, and in the operation and development of the existing estate. It is intended to support the delivery of appropriate levels of emergency preparedness and resilience, relevant and proportionate to the role and function of the facility concerned.
- 1.4 Any measures introduced should take account, and reflect the equalities and human rights, of those whose access to care may prove more difficult, such as disabled people, those with learning disabilities, those with long-term conditions, mothers and babies, children and older people, those in rural locations, and those at a socio-economic disadvantage.

## Intended audience

- 1.5 This guidance is relevant to any primary and community care facility in which NHS services are delivered. This makes the guidance relevant for:

- general medical practitioners; general dental practitioners; pharmacists; nurses and clinicians responsible for delivering and providing primary and community health services;
- appropriate commissioner executive and non-executive directors;
- primary and community care managers and practice managers;
- continuity of clinical care and services, and resilience teams;
- emergency planning teams;
- estates and facilities managers (employed directly by the NHS and private sector providers);
- third Party Developers (3PD)
- engineers, architects and designers;
- NHS general management, and executives with security and/or emergency planning and continuity of clinical care and services and resilience portfolios;
- commissioners of new buildings and refurbishments;
- Strategic Health Authorities.

## Applicability to building types

- 1.6 The guidance is applicable to the following building types:
  - GP premises;
  - health centres;
  - primary and community care centres;
  - resource centres;
  - urgent care centres (including walk-in centres and minor injuries units);
  - community hospitals (also known as intermediate care hospitals);

- dental surgeries;
- pharmacies.

1.7 This guidance has been written with the provision of new-build facilities in mind. However, the principles described apply equally to any substantial refurbishment or extension of existing buildings.

## Exclusions

1.8 This Health Building Note does not provide detailed design guidance for care in patients' homes.

## Definitions

1.9 For the purposes of this guidance the following definitions apply.

### NHS facility

1.10 All buildings, infrastructure, equipment, plant, embedded systems, and related items that support the delivery of healthcare and services of all types – irrespective of their ownership or operation by any third parties.<

### Resilience and resilience management

1.11 Any activity undertaken to give NHS facilities the capacity to anticipate, prevent, prepare for, respond to, and recover from, disruptive challenges that would otherwise prevent the organisation from meeting its primary duties. The terms subsume “business continuity management”; “emergency planning and/or management”; “risk management”; and their derivatives. Where appropriate, the singular term “resilience” is used throughout.

### Emergency

1.12 The Civil Contingencies Act 2004 defines an emergency as “an event or situation that threatens serious damage to human welfare in a place in the UK, the environment of a place in the UK, or war or terrorism which threatens serious damage to the security of the UK. For the NHS, a major incident is defined as:

- Any occurrence that presents serious threats to the health of the community, disruption to the service or causes (or is likely to cause) such numbers or types of casualties as to require special arrangements to be implemented by hospitals, ambulance trusts or primary and community care organisations.

1.13 The NHS service-wide objective for emergency preparedness and response is:

- To ensure that the NHS is capable of responding to major incidents of any scale in a way that delivers optimum care and assistance to the victims, that minimises the consequential disruption to healthcare services, and that brings about a speedy return to normal levels of functioning; it will do this by enhancing its capability to work as part of a multi-agency response across organisational boundaries.

## Seeking resilience advice

### Introduction

1.14 Informed advice on any aspect of security, resilience or emergency planning may be obtained via an Emergency Planning Officer, at the relevant appropriate commissioner, who can identify any specific considerations that need to be addressed, in developing the resilience needs of primary and community care buildings and facilities. This may include, for example, access to the Local Resilience Forum (LRF) risk register; and liaison with security management services. Security advice should be from the Local Security Management Specialist (LSMS).

### Role of the NHS Security Management Service

1.15 On behalf of the Secretary of State for Health (SofS), the NHS Security Management Service (NHS SMS) is responsible for all matters related to the management of security within the delivery of NHS services (that is, the protection of patients, staff and property). It is a statutory requirement for each health body to nominate a Local Security Management Specialist (LSMS) who provides health bodies with expertise in security management at a local level.

1.16 The NHS Security Management Service, in association with the Department of Health's Emergency Preparedness Division, develops practical guidance on the security of NHS healthcare sites for Local Security Management Specialists (LSMSs). This guidance has included:

- actions to be taken to initiate and implement a lockdown;
- counter-terrorism guidance;
- casualty protocols;

- development of training materials on responding to emergency scenarios;
- bespoke security training within the NHS that will inform an emergency response.

1.17 Working with a wide range of stakeholders, the NHS SMS has developed good practice guidance in relation to general security management, building design and protection of staff, all of which will support resilience and emergency planning in primary and community care settings.

1.18 The dissemination of this guidance is primarily through the network of LSMs, and further details of their role and responsibilities can be found on the NHS Business Services Authority website.

### Crime Prevention Design Advisors

1.19 A Crime Prevention Design Advisor (CPDA) is a specialist crime prevention officer, trained at the Home Office Crime Reduction College, who deals with crime risk and designing out crime advice for the built environment. In addition to physical security measures the officer will consider defensible space, access, crime and movement generators, all of which can contribute to a reduction in crime and disorder. In some police forces this role is given the title of Police Architectural Liaison Officer.

### Integrated Emergency Management (IEM)

1.20 The Department of Health uses the model of Integrated Emergency Management as the basis for its approach to emergency planning.

1.21 It is recognised that emergencies can take many forms, such as:

- physical emergencies such as floods and fires;
- disruptions to supply chains leading to shortages of products;
- disruptions to utilities leading to unavailability of resources such as gas, electricity, water and telecommunications;
- disruption caused by infectious disease, for example pandemic influenza;
- disruption caused by contamination of facilities by a patient (whether a deliberate primary act against the facility or secondarily as the result of treating a victim brought in unexpectedly contaminated);

- accidents or security issues.

1.22 ‘Best practice guidance for healthcare engineering’ (DH, 2006) states that: “resilience of the various systems and services (for example water and fuel) is ideally provided at the design stage of a healthcare facility. This could include:

- priority allocation of the site by local utility suppliers, which provide alternative routes for site supply, should parts of the external infrastructure be damaged or contaminated;
- resilient internal infrastructure systems, which provide flexibility in services supplies to buildings;
- provision of alternative fuel sources, with appropriate storage capacity on-site (for example, fuel oil as back-up to natural gas for boiler plant);
- enhanced levels of on-site standby capacity for electricity supplies by the use of combined heat and power (CHP) systems, the sizing of standby generator plant, and flexible electrical distribution systems;
- appropriate monitoring and storage capacity for, for example, water supplies.
- designing layout of the site to facilitate locking down of the site in the event of an incident;
- incorporating features that aid wayfinding for patients, staff and the public, allowing traffic management in the event of an incident.

Figure 1 Integrated emergency management



- 1.23 Planning and designing for resilience whenever the opportunity arises – that is, when new sites, or buildings, or departments, are being considered and when major refurbishments are taking place – is a key responsibility of the management board.”
- 1.24 See ‘Best practice guidance for healthcare engineering’ in Health Technical Memorandum 00.

## Related guidance

- 1.25 This manual draws together best practice and lessons learned from documents listed below. These documents are explained in more detail in ‘The legal, regulatory, policy and best practice framework’, and full references are available in ‘Related sources of guidance, good practice and lessons learned’.
- HBN 00-07 – ‘Resilience planning for the healthcare estate’
  - The Civil Contingencies Act 2004
  - NHS Emergency Planning Guidance
  - NHS Business Continuity Management Guidance
  - BS 25999
- 1.26 The design, construction and operation of primary and social care facilities should comply with all relevant aspects of Health Technical Memoranda, statutory requirements and best practice to ensure high-quality engineering installations and services suitable for their application. Changes in clinical practices have resulted in an increasing provision of clinical functions within the primary and social care sector that were previously undertaken within the acute sector. As a consequence, clinical risk, business continuity risk, and safety factors are becoming more critical within the primary and social care sector. This brings the requirement for safe and resilient engineering services in support of the environment and equipment used to fulfil the functions of the premises.
- 1.27 See [Chapter 3, ‘The legal, regulatory, policy and best practice framework’](#) and [Chapter 7, ‘Related sources of guidance, good practice and lessons learned’](#).

## 2 The need for resilience in the primary and community care estate

### Overview

2.1 When health facilities or health systems fail, either structurally or functionally, the result is that they are not available for the care of the population they serve. There is therefore a need to ensure that primary and community care facilities are built with a level of resilience that makes sure that they have the capacity and capability to maintain services in the event of a disruptive event or an emergency. This can be achieved by:

- ensuring the structural resilience of primary health service facilities;
- having systems in place that will enable the functioning of all providers of primary and community health services (and the settings where that might be provided or supported in the aftermath of a disruptive event or emergency);
- improving risk reduction in the primary and community care settings.

2.2 A Department of Health report highlighted the need for resilience guidance for primary and community care premises ('Report on the lessons learned from the Summer 2007 flooding experiences from an estates and facilities perspective', DH Gateway Reviews and Estates & Facilities Division: August 2008):

"It was perceived that for community and primary and community care premises, resilience is considered as a 'nice to have', with most facilities not having any basic resilience such as, for example, an emergency generator on site. All agreed that some resilience infrastructure should be included at the design stage..."

2.3 Primary and community health services, and the settings where services are provided or supported, are a significant investment, and any occasion on which they fail represents an economic and social burden for the community. Protecting critical primary and community health service facilities

from the effects of disruptive events and emergencies is possible by considering the principles of resilience in the design and construction of new facilities and through selecting and retrofitting facilities identified as being key to maintaining services.

2.4 Factors that influence the ability of health facilities to withstand disruptive events and emergencies are:

- the location, design specifications and resilience of the materials used;
- the security measures in place to protect staff, patients and property;
- the vulnerability of the population using the facilities;
- the potential increase in the demand for healthcare following a disruptive event or emergency;
- the availability of health services staff able to sustain a response;
- damage to equipment;
- disruption to the supply chain (including the supply of medicines etc);
- disruption to utilities and services including power, water, sanitation, and waste management.

### Emergency preparedness and resilience – what does resilience in primary and community care look like?

2.5 The functioning of secondary care is dependent upon the contribution of primary and community care and vice versa, particularly when planning for mass casualty and pandemic scale incidents. Without appropriate planning and strengthening of the primary and community care infrastructure and resilience, a sudden influx of patients could overwhelm acute Emergency Departments, if they have no access to primary and community care facilities.



- 2.6 Buildings used by the primary and community care estate should therefore closely integrate their service operations and strategic obligations with secondary care operations, to enable compliance with any statutory and strategic emergency preparedness plans.
- 2.7 The resilience of the primary and community care engineering infrastructure should also be adequate to enable vital clinical services to continue functioning during the loss of normal incoming supplies to the premises.
- 2.8 At an early stage of the design, the extent to which primary and community care premises will be integrated into the Primary Care Trust's emergency preparedness and resilience plans should be established to determine the level of risk and resilience needed for the premises to meet the required emergency preparedness demands over the predicted timescales. This will include giving priority to increasing capacity for handling large volumes of people (although for most GP practices, in most situations, this should not be a major consideration).
- 2.9 Generally, primary and community care premises will be categorised as high resilience or low resilience. Where cluster arrangements have been made between groups of GP practices (for example community flu plans) it may be reasonable to establish one set of premises in each cluster with high resilience, whilst others in the clusters would have a more basic resilience (which should include a resilient gas, water and electrical power supply).
- 2.10 Facilities that might be considered as having high resilience may include (for example):
- those that are located in a large community – that is, that are not in an isolated rural location;
  - those that have the capacity to handle larger numbers of patients;
  - those able to deal with increased traffic flow;
  - those near to recreational hard standing that could be used for temporary accommodation locations.
- 2.11 To meet emergency preparedness requirements, the various engineering services within each primary and community care facility will have different levels of resilience, dependent upon the assessed risks and provisions necessary to ensure that vital clinical services are sustained operational during an emergency situation.
- 2.12 Health Technical Memorandum 06-01 'Electrical services supply and distribution', Medical Electrical Installation Inspections (MEIGaN) and Health Building Note 00-07 provide specific advice on the design and level of resilience required relating to individual engineering services and medical installations. Further guidance is provided in 'The NHS Emergency Planning Guidance 2005' (NHS EPG) and the 'Civil Contingencies Act 2004' (CCA 2004). In conjunction with this guidance, the following specific elements ought to be considered for high resilience premises:
- protected electrical circuitry and commissioned emergency access to mobile generators or on-site N+1 generators with adequate supplies of fuel being stored on site to sustain full services;
  - protected local electrical supplies and circuits, through the use of Uninterrupted Power Supply (UPS) and Integrated Power System (IPS) secondary sources of supplies;
  - protected quality of supply of engineering services, so as to prevent damage to equipment;
  - protected water supply with appropriate on-site storage (at least eight hours' capacity);
  - resilient heat or commissioned access to alternative emergency heating (for example emergency supply contract or provision of portable electric heaters);
  - resilient cooling (access to cooling facilities);
  - resilient phone communication, with expansion capacity sufficient for practice cluster groups;
  - additional secure storage for consumable supplies and spare parts;
  - provision of an isolation room with alternate access;
  - places where minor surgical, operative and investigative procedures are undertaken;
  - video consultation facilities with secondary care;
  - clean and dirty access routes;
  - two-route broadband and dual electrical supplies;
  - premises designed with a high degree of innate security;
  - physical security measures to protect staff, patients and property;

- direct access (that is, via an ambulance loading bay);
  - wheelchair and trolley access for all areas;
  - location of electrical switchgear away from any potential flooding (for example on the first floor if in a flood-prone location);
  - a large area capable of taking temporary structures and an ambulance service decontamination unit together with any water drainage and electrical hook-ups (this could be a car park);
  - provision of connection points for mobile clinical diagnostic and treatment facilities including drainage;
  - extra capacity and redundancy of internal multifunctional space, especially in the context of:
    - (i) primary and community care services within market towns outside the conurbations;
    - (ii) the shift to care in the community;
    - (iii) and increasing use of community hospitals and larger primary and social care buildings.
- integrated with the major incident and continuity of clinical care and services plans of overarching organisations, for example the appropriate commissioner;
  - actions to link with secondary care providers where appropriate, for example where out of hours services and walk-in centres are co-located with secondary care services such as Emergency Departments, to ensure that the standards and processes being used are as similar as possible;
  - training and exercising, which should be a formal part of staff training and education for the organisation, including suitable exercises to support the requirements of the site and the likely risks faced;
  - the development of plans for how a response will be mounted, taking account of the requirements of different times of the day and days of the week, and the different circumstances that may apply, for example the numbers of staff on duty.

2.16 The starting point for planning should be the identification of local risks. Other important points for planning and responding are that:

- planning should be flexible to allow the response to be tailored to the event, with dynamic risk assessment;
- there is a need to be more joined up, and to make use of existing local planning arrangements, for example Local Resilience Forums;
- resources should be sought from a wide range of agencies and private sector partners – locally, nationally and internationally.
- call-off contracts (negotiated by appropriate commissioners) should be considered, if practicable;
- having the right up-to-date contact details is critical. This requires, for example, a regularly-updated organisational diagram of post-holders and their contact details at appropriate commissioner level;
- it is acknowledged that it is difficult to fully exercise a resilience plan and therefore other ways of testing the arrangements need to be developed.

## Planning for resilience

2.13 NHS bodies and primary and community care providers will need to develop a locality-specific plan for resilience.

2.14 It is imperative that the planning process starts with a risk assessment. Locality-specific resilience plans should be informed by risks most likely to impact on the locality, and the wider local area, using relevant resources including the Community Risk Register. This should include the risks associated with the specific location where services are being delivered. It should be possible to get this information from your Local Resilience Forum via the emergency planning officer of your appropriate commissioner. This risk assessment will not only direct mitigating measures but also lead the planning regime, for a continuation of critical services, as far as is reasonably practicable.

2.15 It is suggested that this planning phase should include:

- the development of locality- and site-specific resilience plans that should, wherever possible, be integrated with the continuity of clinical care and services plans of users. They should also be

- 2.17 Guidance is needed on arrangements for warning and informing, particularly delivering urgent alerting.

## Primary care in rural and remote settings – resilience issues

- 2.18 Most of the risks common in urban and suburban practices apply to rural practices, but may have a greater impact, or require different solutions because of the remoteness of their rural location. The opportunity for timely support or support from nearby practices may be limited, whilst the risks of isolation due to natural events such as adverse weather is likely to be higher.
- 2.19 Consideration may need to include provision for onsite electricity generation, rather than dependence upon being able to buy in generators when required. This should be sufficient to power: lighting, a proportion of IT requirements, near-patient testing, and telephony. It may also be required to power the pumps for heating systems. Whilst ecological solutions to power generation may be a resilient alternative solution in some areas, they too have limitations.
- 2.20 Heating solutions may be limited in remote areas, and some of the environmental solutions such as ground/air source heat pumps may provide a resilient and appropriate solution.
- 2.21 Communication is an area of major vulnerability; both voice and data systems are liable to disruption, but the option of mobile phones to provide an alternative may not be available or may be unreliable or of insufficient capacity. It may be appropriate to make the systems of remote or isolated premises more resilient to loss by the use of Universal Power Systems with extended duration for PABX systems. Consideration may need to be given to systems to allow microwave transmission of data as an alternative to N3 connection. In extreme cases satellite telephony may be an appropriate backup system. Modern building systems and insulation can also be impenetrable to mobile and other radio signals; the impact of this should be considered, and if appropriate, signal boosters should be considered within the building.
- 2.22 Rural or isolated practices may be more vulnerable to disruption of supply chains, making the supply of key supplies such as fuel oil, disposable clinical materials, drugs or even the delivery of a generator an issue. Consideration could be given to this in

building design by relative over-capacity for storage of key items, and building resilience into telephony systems. Dispensing practices normally expect to be frequently restocked by wholesalers, sometimes as frequently as twice daily even in rural areas, and these practices utilise IT solutions to monitor stock levels and automate re-ordering. In order to be more resilient, practices may need to develop both larger physical stores and also manual stock control/re-ordering systems. Consideration should be given to ensuring that there is space available for holding stockpiles of key drugs and supplies.

- 2.23 Resilience of communication is a significant issue for both provision of IT services and voice telephony. Many rural and isolated market town practices have very slow N3 connections (still only 2 Mbps), and microwave links might produce a better solution. Reliance on mobile phones as an alternative source for communication is unpredictable.

## Case study – Bellingham Practice

- 2.24 Bellingham Practice is one of the most rural practices in England, covering 800 square miles and having over 3000 patients, many living in remote farming locations across the practice.
- 2.25 The surgery in Bellingham was purpose-built in 1984. There are two surgeries a day at the main surgery in Bellingham, and branch surgeries on two days a week at Otterburn Memorial Hall. It is a non-dispensing practice.
- 2.26 Resilience is currently supported by:
- a generator for provision of basic lighting, telephony and computing, due to the fact that:
    - (i) heating is currently provided by electric storage heating, which struggles to cope with severe weather, and to sustain heat for a whole day. This need could not normally be supplied by temporary generators;
    - (ii) telephony has a 2-hour Uninterrupted Power Supply (UPS) system;
    - (iii) mobile phone coverage in Bellingham is adequate, but once outside the village it is unreliable;
    - (iv) the practice has an N3 connection to the NHS computer spine. Remote access to practice computer systems is not available;

- (v) access to alternative clinical refrigeration may become an issue.

### Note

N3 underpins and enables the delivery of the new IT systems and services for the NHS in the National Programme for IT. The National Programme applications will mostly require bandwidth in excess of that provided by NHSnet, the predecessor to N3. The N3 network provides the essential technical infrastructure through which the benefits to patients and staff from the new systems and services will be fully realised and sustained in the future. For many practices, N3 is an aspiration.

- 2.27 A new extension is under construction and will be co-located with the community paramedic service. An air source heat pump is being installed to give air source heating and solar-powered water heating, both augmented with electric heating. Fuel oil heating is not possible, as tanks would be too close to the building. Mobile phone coverage in the new build is uncertain at the moment, but it will probably be adequate as the new build is a wooden building with glass fibre insulation. There will be some use of light tubes. There will be no special provision for water storage, as proximity to the Kielder Reservoir gives resilience.
- 2.28 During recent severe weather, ad hoc arrangements were made to ensure that staff were available to provide a service. This has included, for example, one partner staying with a family in the town/village, and another partner staying in a local hotel, as there were concerns that the difficulty and unreliability of journeys to work made this the only way to ensure provision of service. Four-by-four transport was an essential requirement and was obtained locally. The community paramedic service was an essential element of continuing to provide a primary and community care service in severe weather. Access to fuel will be required to support this response.

### Commissioning resilience

- 2.29 ‘The NHS Resilience and Business Continuity Management Guidance: Interim Strategic Guidance for NHS Organisations’ (DH, June 2008) identifies that commissioning resilience is fundamental to ensure that all organisations are able to achieve robust arrangements for dealing with incidents. Appropriate commissioners need to ensure that for all functions for which they are responsible, the highest level of service to patients is maintained, regardless of what might happen to clinical/non-clinical procedures or the infrastructure of facilities. The Civil Contingencies Act 2004 identifies appropriate commissioners as Category 1 Responders, and imposes a statutory requirement on the appropriate commissioner to have robust business continuity management arrangements in place, to manage disruptions to the delivery of services, ensuring that all commissioned service providers are capable of providing services at an appropriate level:
- “... ensure that those organisations delivering services on their behalf (e.g. contracted out services) or capabilities which underpin service provision (e.g. information technology and telecommunications providers) can deliver to the extent required in the event of an emergency. This is because services remain part of an organisation’s functions even if they do not directly provide them.”
- 2.30 The Civil Contingencies Act is in the process of being updated. Current information about the CCA and related matters can be found at the UK Resilience website.
- 2.31 It is desirable that the appropriate commissioner’s business continuity management requirements are explicitly described and covered by commissioning, procurement and contract management processes. In the context of the NHS, the World Class Commissioning (WCC) programme aims to include:
- understanding and forecasting market demand;
  - prioritising investment against outcomes;
  - understanding how best to configure service;
  - working with partners to deliver service.
- 2.32 Against this background, the following points needed to be considered to help ensure resilience in healthcare:
- costing resilience when budgets are tight;
  - outlining clear responsibilities within the contracts;
  - needing to get the balance right within the contract between commissioning and contracting resilience;

- seeing emergency preparedness as an umbrella to include response, recovery, BCM, major incident plans etc.

2.33 Initially, a great deal of healthcare commissioning had focused mostly on the procurement and contract elements. As the process has matured, commissioners have defined their commissioning intentions and thereby have been able to provide further definition of what commissioning for resilience may include. NHS Sheffield provides a practical example of commissioning for resilience:

- emergency planning and continuity of clinical care and services responsibilities for all appropriate commissioners and NHS trusts as Category 1 responders are spelt out in the CCA 2004, so emergency planning will be covered by the requirement in every contract that legal responsibilities will be discharged. This can be achieved by ensuring that the requirement is understood and agreed during contract negotiations;
- co-operation and collaboration in emergency planning across health economies exists in the

NHS already. There is a need to seek to ensure that agreements are formalised in, for example, Memoranda of Understanding (MOUs) and mutual aid agreements. Providers' commitment can be sought in this process by commissioners;

- commissioning for resilience, which means negotiating and agreeing in advance how the commissioner expects providers to contribute to the response to an emergency and how the commissioner will support and resource that contribution, will need to be established. This will require commissioners and providers of health services to work collaboratively to develop commissioning and determine contractual issues to support the intention.

## Risk management

2.34 Risk assessment is seen, in the Civil Contingencies Act, as the first step in the emergency planning process. It ensures that local responders make plans that are sound and proportionate to risks. Within each Local Resilience Forum, NHS organisations have responsibility in the context of multi-agency planning to contribute to the Community Risk Register. NHS organisations will therefore need to undertake risk assessment exercises appropriate to their facilities and services. Risk management and assessment is a key role for the person designated as the emergency planning officer or lead for an organisation. NHS organisations without a designated emergency planning officer or lead may wish to consider designating such a role to support the process. For General Practice, the Local Medical Committee (LMC) as the statutory body may well have a role, as it did in pandemic flu planning.

2.35 Each NHS organisation is required to undertake its own internal risk assessment, in order to inform its own response and to contribute an input to the multi-agency risk assessment.

2.36 The 'Report on the lessons learned from the Summer 2007 flooding experience from an Estates and Facilities perspective' noted that from the Hull and East Yorkshire experience, "extended risk-assessed continuity of clinical care and services planning had risen up the agenda, and in general terms the national guidance which is out there (for example Health Technical Memoranda) proved useful and continues to be reviewed against local requirements. Trusts should also be encouraged to utilise the Business Continuity Framework as



Flooding at Gas House Lane Surgery, Morpeth, Northumberland Images courtesy of Dr Fred O'Neil

detailed in BS 25999 Part 1 to ensure consistency and compliance with national models.”

2.37 Risk management should focus on the following risks, and how they can be mitigated:

- risks specific to the location of a facility, for example being on a floodplain or being located near a nuclear power plant;
- risks that can occur anywhere, for example pandemic influenza, utilities failure, or contamination arising from any clinical incident (not necessarily a chemical, biological, radiological and nuclear (CBRN) incident).

## 3 The legal, regulatory, policy and best practice framework

- 3.1 This chapter gives an outline of the main legal, regulatory, policy and guidance documents that support the development of resilience for all providers of healthcare and the settings where that might be provided or supported.
- 3.2 NHS organisations and primary care providers owe a duty of care to both their patients and their staff. This common-law duty of care requires them to take reasonable care and skill in treating and providing other services to patients, and in providing a system of work for their employees.
- 3.3 In addition to common law, there are a number of relevant obligations set out in legislation, including the Health and Safety at Work etc Act 1974 (HSW), which establishes a general duty on employers to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all their employees (section 2(1) of the HSW). This general duty on employers is particularised in relation to maintaining systems of work which are safe and without risk to health (section 2(2)). In particular, employers should provide information, instruction, training and supervision that is necessary to ensure, so far as is reasonably practicable, the health and safety at work of employees; to ensure that access to and egress from a workplace are safe and without risks to health and safety; and to ensure that the working environment is safe and adequate as regards facilities. Employers (and self-employed persons) have general health and safety duties to conduct their undertaking in such a way to ensure that persons not employed are not exposed to health and safety risks. People in control of non-domestic premises also have a general health and safety duty (section 4) to towards persons who are not their employees.
- 3.4 In making arrangements for resilience and continuity of clinical care and services, NHS bodies and primary and community care providers may also need to consider their general statutory duties relating to human rights and equality.

### NHS Emergency Planning Guidance

- 3.5 The ‘NHS Emergency Planning Guidance’ and its underpinning documents provide general guidance, information and context for NHS organisations. This includes an overview of important related legislation including the Civil Contingencies Act 2004 (the CCA) and its categorisation of organisations as Category 1 or Category 2 responders. The responsibilities of each category of responder and the designation of NHS organisations are shown in brief below.

#### Note

The CCA is currently being reviewed and these categorisations may change in 2010.

- 3.6 **Category 1:** those organisations at the core of the response to most emergencies and subject to the full set of civil protection duties. For the NHS these include NHS acute and foundation trusts, ambulance trusts and appropriate commissioners. The Health Protection Agency (HPA) is also a Category 1 responder.
- 3.7 **Category 2:** co-operating bodies less likely to be involved in the heart of planning work but that would be heavily involved in incidents that affect their sector. For the NHS, Strategic Health Authorities are Category 2 responders.
- 3.8 General Practitioners are not listed as responders under the Act; the responsibility for their emergency planning and response falls to the local appropriate commissioner.
- 3.9 The purpose of the NHS Emergency Planning Guidance is to describe a set of general principles to guide all NHS organisations in developing their ability within the context of the requirements of the CCA to:
- maintain plans to deal with emergencies;

- maintain plans to continue the provision of critical services and functions throughout an emergency as far as is reasonably practicable;
- respond to a major incident or incidents or emergency; and
- manage recovery whether the incident or incidents or emergency has effects locally, regionally or nationally.

### Health Building Note 00-07 – ‘Resilience planning for the healthcare estate’

3.10 Health Building Note 00-07 provides guidance on assessing, developing and implementing resilience in the NHS. Health Building Note 00-07 is principally directed at larger NHS and related facilities such as hospitals. It aims to help NHS bodies to determine an appropriate resilience level for a site, building or installation against a range of threats and hazards, with particular reference to threats originating from terrorist operations and their impacts and consequences. It provides:

- a strategic approach to resilience planning;
- technical guidance on measures to enhance resilience in NHS facilities.

3.11 The guidance in Health Building Note 00-07 is consistent with the UK Government standard threat and risk assessment and emergency planning doctrine. This ensures an approach that is consistent with other public bodies, while allowing NHS bodies to preserve the unique requirements of the Health Service.

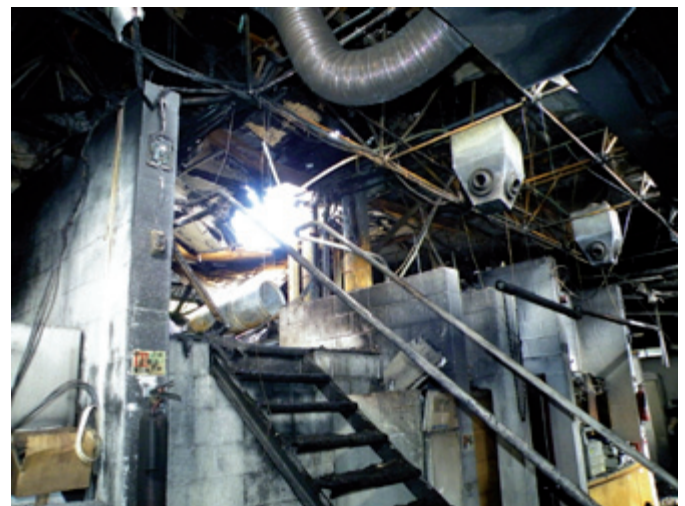
3.12 Health Building Note 00-07 is issued as best practice guidance for all NHS organisations, and those who advise and support them. It is relevant to the NHS estate, private sector premises, and buildings servicing NHS requirements, such as the extended family of clinical service delivery organisations and their associated supply chains. Health Building Note 00-07 should be considered in the planning and briefing of new schemes and in the operation and development of the existing estate.

### The Regulatory Reform (Fire Safety) Order and fire guidance

3.13 All primary and community care premises are governed by the Regulatory Reform (Fire Safety) Order 2005 (the Order). This places a statutory duty on employers, owners and occupiers of premises used as workplaces to undertake fire risk assessments, minimise the likelihood of fire occurring, and reduce the potential for harm from the effects of fire and smoke. There are also duties relating to staff training and cooperation with other occupiers of the premises.

3.14 The Government has produced guidance to assist employers to meet their duties under the Order. Specific guidance is available for healthcare premises (‘Fire safety risk assessment – healthcare premises’), which includes primary and community care premises.

3.15 Additionally, the Department of Health produces a suite of healthcare-specific guidance for the NHS under the heading of ‘Firecode’. Whilst Firecode is predominantly aimed at the acute healthcare sector, the guidance suite contains information on



Fire damage at Gold Street Medical Centre, Northamptonshire



developing a fire safety policy, staff training, housekeeping, fire risk assessment and arson prevention, and could easily be applied to the primary and community care sector.

- 3.16 Firecode is available to the NHS free of charge. HM Government fire safety guides are freely available from the Communities website.
- 3.17 The local fire and rescue service can also assist in providing advice. For new buildings, ‘Secured by design’ and your local police authority can provide advice in reducing the risk from arson (find your local police authority on the Association of Police Authorities website).
- 3.18 The risk from fire is a very real threat in primary and community care premises, resulting from accidental occurrence or deliberate actions. Taking simple measures can play a significant part in reducing the risk and effect of fire.
- 3.19 A common cause of deliberately-started fire in community premises is setting light to wheelie bins. Very often these are sited adjacent to the building. As the fire develops, flames spread up the outside face of the building, setting light to overhanging eaves, causing fire to spread into and through the roof space. A simple measure to reduce this risk is to relocate the wheelie bin to a position away from the building, perhaps in a secure compound or chained to a wall or fence.
- 3.20 Firecode – ‘Health Technical Memorandum 05-01: Managing healthcare fire safety’ requires all organisations to report outbreaks of fire attended by the fire service to be reported to the Department of Health via the efm-information website. The primary intention of this reporting process is to inform the development of future Firecode guidance.

## BS 25999 Business Continuity

- 3.21 BS 25999 has been developed by a broad-based group of world-class experts, representing a cross-section of industry sectors and the Government. It establishes the process, principles and terminology of Business Continuity Management (BCM).
- 3.22 It provides a basis for understanding, developing and implementing continuity of clinical care and services within an organisation, and gives confidence in business-to-business and business-to-customer dealings. It also contains a comprehensive set of requirements based on BCM best practice and covers the whole BCM lifecycle.

3.23 BS 25999 is suitable for any organisation, large or small, from any sector. It is particularly relevant for organisations which operate in high-risk environments such as finance, telecommunications, transport and the public sector, where the ability to continue operating is paramount for the organisation itself and its customers and stakeholders.

3.24 BS 25999 comprises two parts:

- Part 1, the Code of Practice, provides BCM best practice recommendations. Please note that this is a guidance document only;
- Part 2, the Specification, provides the requirements for a Business Continuity Management System (BCMS) based on BCM best practice. This is the part of the standard that you can use to demonstrate compliance via an auditing and certification process.

3.25 An NHS-specific version of the Standard has been developed and is available from BSI (British Standards Institute).

3.26 BSI is also developing a Publicly Available Specification (PAS) numbered 2015. PAS 2015, ‘Resilience in Healthcare Settings’, aims to:

- give health organisations a framework for the development and refinement of resilience within their organisation;
- improve resilience in the health sector in the United Kingdom;
- reduce the possibility of loss of life or causing injury;
- ensure, through the adoption of resilience principles, the continuous operational delivery of healthcare services when faced with a range of disruptive challenges, for example staff shortages, denial of access, failures in technology, loss of utility services and failure of key suppliers.

## The NHS Resilience and Business Continuity Management Guidance: interim strategic national guidance for NHS organisations

3.27 The NHS Resilience and Business Continuity Management Guidance (Department of Health, 2008) gives the chief executive officer of each NHS organisation responsibility for ensuring that their organisation has a business continuity management

process in place that will address the requirements for ensuring continuity of clinical care and services as required by the Civil Contingencies Act.

- 3.28 The British Medical Association (BMA) and the Royal College of General Practitioners (RCGP) have been working in support of this approach to help General Practitioners and primary and community care services to develop continuity of clinical care and services, and resilience plans to provide advice and guidance.
- 3.29 The General Practitioners Committee of the BMA (GPC) and Royal College of General Practitioners (RCGP) have been working together through a joint RCGP/ GPC Emergency Planning Group (Pandemic Influenza). The aim of the group is to provide advice and guidance specific to general practice on a range of issues that will need to be dealt with in the event of a pandemic.
- 3.30 GP practices were advised to have service continuity plans for reasons of clinical governance and business planning. Most practices put in place a process to consider what plans would be needed in the event of an influenza pandemic.
- 3.31 The joint planning group produced a framework that practices can use to build their own plans, together with a worked example and a PowerPoint toolkit (see ‘Business continuity planning for GPs (British Medical Association website)’) to help practices in developing their own plans.
- 3.32 The roles and responsibilities of key resilience partners are set out in documents published by the Civil Contingencies Secretariat. The two key documents are:
- Emergency Preparedness (see ‘UK resilience (Cabinet Office)’);
  - Emergency Response and Recovery.
- 3.33 The Care Quality Commission (CQC) is the independent regulator of health and social care in England. In its guidance about compliance, ‘Essential standards of quality and safety’, it states: “6D People who use services benefit from a service that:
- wherever it is required, has in place a planned and prepared response to major incident and emergency situations. This prepared response should include arrangements for sharing information with other providers, provision of mutual aid and arrangements for engagement

with appropriate emergency planning and civil resilience partners across the local area;

- is aware of and has arrangements in place to respond to any requirements made of the provider by the Civil Contingencies Act 2004;
  - in partnership, practises, monitors and reviews all of the plans that are in place.”
- 3.34 This is reflected in Regulations issued by the Secretary of State – the Health and Social Care Act 2008 ([CQC] Regulated Activities) Regulations 2010, Regulation 9(2).

## Health Technical Memoranda

- 3.35 Health Technical Memoranda give comprehensive advice and guidance on the design, installation and operation of specialised building and engineering technology used in the delivery of healthcare.
- 3.36 The focus of Health Technical Memorandum guidance is on healthcare-specific elements of standards, policies and up-to-date established best practice. They are applicable to new and existing sites, and are for use at various stages during the whole building lifecycle.
- 3.37 The best place to start is to read ‘Policies and principles of healthcare engineering’, a generic overview which covers the following issues:
- overview of engineering services guidance;
  - statutory and legislative requirements;
  - professional support;
  - operational policy;
  - training and workforce development;
  - emergency procedures and contingency planning;
  - training, information and communications;
  - maintenance;
  - engineering services.
- 3.38 Guidance on specific types of engineering service can be found under the “Healthcare environment” tab in this website or within the Health Technical Memorandum series of documents as follows:
- Decontamination (Health Technical Memorandum 01);
  - Medical gases (Health Technical Memorandum 02);

- Ventilation systems (Health Technical Memorandum 03);
- Water systems (Health Technical Memorandum 04);
- Fire safety (Health Technical Memorandum 05);
- Electrical services (Health Technical Memorandum 06);
- Environment and sustainability (Health Technical Memorandum 07);
- Specialist services (Health Technical Memorandum 08);
- older HTM 2000 series guidance documents.

3.39 See also 'Policies and principles of healthcare engineering' in Health Technical Memorandum 00.

## **NHS Security Management Service lockdown guidance**

3.40 In 2009, the NHS Security Management Service (NHS SMS) published guidance for health bodies

to support them in developing a lockdown plan to manage “the process of controlling the movement and access – both entry and exit – of people (NHS staff, patients and visitors) around a trust site or other specific trust building/ area in response to an identified risk, threat or hazard that might impact upon the security of patients, staff and assets or, indeed, the capacity of that facility to continue to operate” (NHS SMS Lockdown Guidance, published April 2009).

3.41 The guidance focuses on the physical act of lockdown, and whilst the emphasis is on security, the principles can be used by the likes of Emergency Planning Officers and Risk Managers in support of their wider roles and responsibilities around resilience and continuity of clinical care and services management. The guidance can only be accessed by LSMSs via a secure intranet, although LSMSs can share this document with local stakeholders. This document should be referred to as resilience plans are developed.

## 4 Improving primary and community care and general practice resilience by design

### Energy and sustainability

- 4.1 The need for primary and community health services premises to be resilient is emphasised by the need to respond to:
- the effects of climate, for example flooding, extreme weather, air quality;
  - the cost and security of energy supplies, including rising demands for energy and increasing costs.
- 4.2 Resilient buildings should be able to operate under all conditions. There is a need for building fabric and architecture to support the principles of resilience and for this to be driven by a good understanding by clients of what they might demand from construction methods and materials.
- 4.3 Resilience in energy use would include:
- combined heat and power (CHP);
  - ground source heat pumps;
  - decentralised heating systems;
  - use of natural ventilation;
  - fresh-air systems with heat recovery;
  - efficient air-conditioning;
  - high-energy efficient design and thermal performance;
  - reduction in demand for artificial lighting;
  - rainwater recycling;
  - air source heat pumps;
  - wind generation;
  - solar pre-heated arrays for heating of domestic hot water.
- 4.4 There is clearly overlap between the resilience of premises and the sustainability issues, and both aspects' advantages should be considered when planning new buildings and their sustainability.
- 4.5 The NHS produces more carbon emissions than any other public sector organisation in Europe. It has a carbon footprint of around 18 million tonnes CO<sub>2</sub> per year, which comprises:
- energy (22 per cent);
  - travel (18 per cent);
  - procurement (60 per cent).
- 4.6 'Saving Carbon, Improving Health – an NHS Carbon Reduction Strategy for England' (NHS and the Sustainable Development Unit, 2009) calls for the NHS to reduce its 2007 carbon footprint by 10 per cent by 2015. It sets out key actions for NHS bodies including:
- establishing a board-approved Sustainable Development Management Plan;
  - signing up to the Good Corporate Citizenship Assessment Model;
  - monitoring and reporting on carbon;
  - actively promoting carbon awareness at every level of the organisation.
- 4.7 Health Technical Memorandum 03-01 – 'Specialised ventilation for healthcare premises' recommends the use of natural cross-ventilation (reliant on window openings on opposing sides of the building). This is in line with reducing carbon footprints but may conflict with requirements for acoustic privacy. It also proposes that project teams consider this issue on an individual scheme basis, balancing specific privacy requirements against the capital and revenue cost benefits, as well as the improved sustainability profile that a naturally ventilated solution can offer.
- 4.8 Natural ventilation should not be considered where it could jeopardise control of infection issues.
- 4.9 Account should be taken of the recommendations in the following documents:
- current editions of Building Regulations and approved codes of practice;

- Energy Efficiency Office and Carbon Trust best practice guidance;
- ‘Sustainable development in the NHS’;
- ‘Sustainable development: Environmental strategy for the National Health Service’;
- Health Technical Memorandum 07-02 – ‘Encode – making energy work in healthcare’;
- Health Technical Memorandum 07-07 – ‘Sustainable healthcare buildings’;
- Building Services Research and Information Association (BSRIA) publications;
- CIBSE publications – design guides, energy codes, technical memoranda, lighting guides, climate change levy.

## Eaglescliffe Health Centre – a case study

4.10 Eaglescliffe Health Centre, Stockton-on-Tees was rebuilt in 2009, and is home to a five-partner General Practice serving 8300 patients, and to a variety of community services such as podiatry, physiotherapy and ante-natal care. Resilience was an early consideration in the design; this allowed several features to be incorporated without substantial impact upon the budget. A local risk assessment did not establish any particular risks needing specific consideration.

### Power resilience

4.11 Temporary electrical power loss was addressed by the use of uninterruptible power supply (UPS) units on critical infrastructure. A generator hook-up point for a single essential use circuit was inserted together with appropriate electrical surge protection, allowing longer breaks in power to be managed with a portable generator. Alternative energy and heat sources were considered but excluded due to site limitations.

### Telephony resilience

4.12 This was prepared using both land line and internet telephony with the facility to divert calls at

exchange level if required. Additional cabling was placed in one meeting room to allow it to be used as emergency office/telephony space during an extended incident.

### Infection control/contamination resilience

4.13 A dedicated Isolation examination and consulting room was built which can be accessed with minimal exposure to others in the waiting room.

### Heat resilience

4.14 Maximising insulation limits exposure to loss of heating in winter, and over-heating was minimised by use of good solar design rather than reliance upon air-conditioning.

### Flood resilience

4.15 The building is not at risk of fluvial flooding due to its location, but all paper, including records, are stored on the first floor.

### Water resilience

4.16 A stored water tank with approximately eight hours of conservative use was built into the plumbing.

### Computer resilience

4.17 The server is located on the first floor with all telephony, and this room is air-conditioned to limit malfunction due to over-heating and is positioned to benefit from a northerly aspect.

### Access resilience

- 4.18 The facility was designed with two entrances such that one could be deployed for emergency decontamination if required without affecting access into the building.
- 4.19 Case study written by: Dr Simon N Stockley, Eaglescliffe Medical Practice.

## Sacriston Medical Centre – a case study



Sacriston Medical Centre, Sacriston, County Durham

4.20 The building of primary care premises to meet the requirements of a sustainable building with low environmental impact is well understood, but the fact that there are additional benefits to resilience has been less explored. This was explored with the help of Sacriston Surgery, County Durham, who have recently completed a sustainable build.

### Grey water management

4.21 These systems remain expensive to fit and their cost-effectiveness is currently debatable; however, in areas prone to water shortage their ability to add to primary care resilience may be something that should be considered.

### Alternative sources for power generation

4.22 All these systems are dependent upon external conditions for their power, so cannot be considered resilient on their own, but may offer a degree of resilience in areas prone to electrical power loss.

### Heating

4.23 Loss of heating and warmth from a building can detract from its usefulness; working in a cold environment is not pleasant for long periods and makes physical examination and treatment of patients difficult. Good thermal insulation and under-floor heating can mitigate the effects of lost heating for a reasonable period. Ground source and air sourced heat pump systems can reduce reliance on fuel sources, and in some cases can provide cooling to a building too. All heat systems are vulnerable to loss of electrical power for pumping, which would need to be augmented if disrupted. Similar considerations apply to the heating of water

for washing, although the electrical power requirements are less.

### Lighting



4.24 Loss of electrical light during daylight hours can have significant impact upon the safe use of a building, particularly the circulation areas where windows are less prevalent. The sustainable use of sun tubes (light tubes) drawing light into these spaces from the roof can improve resilience by providing a functional level of lighting to corridors and stair wells. Similarly, the use of more conventional design elements to bring natural light into a building also has benefits for its resilience. Wind generation can also be used to provide lighting/small power electricity.

4.25 Case study provided by Dr Martin Judson, Sacriston Medical Centre, Sacriston, County Durham.

## NHS South of Tyne and Wear

4.26 NHS South of Tyne and Wear has a strategy to develop and deliver Primary Care Centres (PCCs) across the area it serves. PCCs support the achievement of key appropriate commissioner strategic aims to modernise patient services, improve health, reduce inequalities and improve access to health services. They do this by:

- extending the range of services available to patients;
- bringing care nearer to where they live and work;
- acting as a catalyst for service modernisation and facilitating the reconfiguration of service delivery models.

4.27 In addition, PCCs improve the quality of primary and community care premises, providing a new tier of accommodation which is functional, fit for purpose and focused on meeting patient need.

4.28 Their Head of Estates and Facilities suggests that the issues below need to be taken into account.

### IT installations

4.29 These are provided with automatic backup generation and fire suppression in the main appropriate server space.

### Electricity supplies

4.30 All appropriate commissioner-owned health centres are being fitted with plug-in points for external generators and a changeover switch. This facilitates bringing in an external generator that can power up selected supplies (or all supplies if the generator is big enough) in the building.

4.31 By having a changeover switch, the building's existing mains circuits are being used (none of these is duplicated). In minor operating suites in health centres, battery backup to the main operating light is provided. There are also Uninterruptible Power Supply (UPS) arrangements for computer equipment.

4.32 In PCCs (which include walk-in facilities, diagnostic and planned care) a view is taken on

incorporating permanent backup generation on site. Currently two of the three completed facilities have this (sized to power the whole building). These have automatic start-up.

### Gas

4.33 There is no provision for backup gas supplies. A stock of electric heaters is held for emergency use. Consideration should also be given to the provision of dual fuel boilers capable of burning either propane or butane to help avoid surges to electricity systems in buildings.

### Water

4.34 All new facilities are designed with 8 hours' stored supply (for full operation of the building).

This is a higher standard than is generally recommended in guidance. Users should also note that there are costs associated with the maintenance of safe stored water that need to be explored before agreeing to stored water supplies.

### Telephones

4.35 As well as Internet Protocol (IP) telephony in most buildings, separate traditional telephone cable is also provided in a separate duct from the fibre optic cable, but this will only provide one or two lines due to cost (and is generally not available in rural areas). Fire alarms, security and lift installations also have separate telephone lines. Staff generally are issued with work mobile phones. As the COIN develops it will allow users to dial into any handset so that staff can relocate with their number in an emergency to any other trust location.

### Equipment

4.36 There is no backup refrigeration held on site, but additional suitable fridges are available in the event of power loss, theft or malfunction.

### Lessons learnt

4.37 Flood risks are checked on any new site, and high-risk areas are avoided. On occasion it is necessary to locate at least part of a facility on low-risk flood areas, but this can be unavoidable in urban areas where there are few potential sites. Within reason, efforts are made to set floor levels to further minimise risk.



### **New build versus retrofitting**

4.38 Existing buildings are being upgraded as above. A common issue is with water storage, as there usually is not enough space or structural capacity to go for a full 8 hours. In these cases water storage is made as large as the site can accommodate.



## 5 Systems

- 5.1 This intention of this chapter is to emphasise the need for explicit, locality/service-specific and integrated command, control and coordination arrangements to be developed to support resilience in primary and community care settings. Although this should not differ from existing systems, it is imperative that these are established early and maintained throughout. It does not seek to duplicate the strategic national guidance on command and control given in ‘Strategic command arrangements for the NHS during a major incident’.
- 5.2 The definition of “command” used is:  
“the authority for an agency to direct the actions of its own resources (both personnel and equipment)” – Cabinet Office (2007) Lexicon of Multi-Agency Emergency Management Terms Version 1.0  
and control is defined as:  
“the authority to direct Strategic and Tactical operations in order to complete an assigned function, including the ability to direct the activities of other agencies engaged in the completion of that function” – Cabinet Office (2007) Lexicon of Multi-Agency Emergency Management Terms Version 1.0.
- 5.3 The experience of NHS organisations faced with disruptive challenges and emergencies demonstrates clearly the need for there to be well-established and practised arrangements for command, control and coordination in place to ensure as successful an outcome as possible to the event.
- 5.4 Command, control and coordination arrangements for disruptive events and emergencies affecting the resilience of primary and community care settings need to be site-specific and an integral part of existing command, control and coordination processes for major incidents already used by NHS organisations. They should use the same terminology, on-call mechanisms, command suites, communication methods, and other faculties and mechanisms. However, there needs to be a clear review of processes that take account of features that may be particular to resilience scenarios in primary and community care settings, such as:
- the possibility that crucial parts of the infrastructure may be lost at some point in the process, for example command suite, power, communications systems;
  - the role of external agencies;
  - the need to track patients and staff;
  - the need to fall back to a remote location to maintain the command centre;
  - the need to be able to provide command, control and coordination support out of hours as well as when the site is fully staffed;
  - the ability to integrate the need to provide an internal focus to support the internal response with the need to have an outward-facing focus to support multi-agency liaison;
  - the need to ensure that senior commanders are able to focus entirely on command and control. For instance, in the event of an incident, media interviews may need to take place. A dedicated person should be identified for the purposes of media liaison who is not involved in incident command and control;
  - the need to maintain links with other NHS organisations, including the appropriate commissioners and the body overseeing primary and community care commission management arrangements.
- 5.5 Primary and community health organisations, including GPs, therefore need to give emphasis to reviewing command, control and coordination processes in the context of the need to establish resilience. Reference should be made to the ‘Strategic command arrangements for the NHS during a major incident’.

## Clusters

### Buddying-up

- 5.6 Planning for primary care resilience is enhanced if medical, care, dental, pharmacy and ophthalmic service providers are prepared to provide each other with appropriate mutual aid. This kind of “buddying” arrangement has been promoted previously as part of pandemic flu planning (see ‘Preparing for pandemic influenza: Guidance for GP practices’, published jointly by the Royal College of General Practitioners and the British Medical Association working with the Department of Health, December 2008), but can also provide practical support when faced with other challenges, such as loss of access to premises or infrastructure. The arrangements can be formal or informal, but coordination across a locality so that all practices/ services are included would seem sensible. It may also be possible to improve the built resilience of several practices covered by a buddying agreement by improving the resilience of a single building.
- 5.7 ‘Preparing for pandemic influenza: Guidance for GP practices’ recommended that GP practices work together in groups – buddying-up – to make maximum use of all staff available and make GPs as resilient as possible. Practices should work together in a pandemic. A buddying-up system is proposed in which clusters of practices will actively cooperate for pandemic work, sharing resources and exchanging staff as necessary.
- 5.8 Some practices have already drafted plans of how buddying-up would work for them locally. An example of this is available on the RCGP’s Pandemic and Flu Planning page. This guidance uses the Teesside model as the basis for buddying-up information. The model involves 15–20 doctors working in a buddying-up group covering 25,000 patients. See the following two documents:
- ‘Primary Care Pandemic Continuity Agreement, Tees Primary Care Services’
  - ‘Caduceus Medical Practice Influenza Plan’.
- 5.9 Buddying-up groups can be based on naturally-occurring groups such as those in a discrete locality. However, no practice should be left isolated. It is sensible to consider ensuring that not all members of the cluster use the same building when considering their arrangement. Primary care organisations (PCOs) together with the Local Medical Committee (LMC) will, if necessary, step

in to ensure that all practices are members of a local buddying-up group.

- 5.10 LMCs have a role to play in helping with the formation of buddying-up groups. The process will generally follow the steps outlined in ‘Buddying up steps’ below.

### Buddying considerations

- 5.11 Buddying with services/practices that use different buildings and different locations reduces vulnerability to some threats.
- 5.12 Buddy in groups of sufficient size to ensure members are less likely to be adversely impacted by the loss of key individuals as a result of illness or adverse conditions. (Combined list sizes of over 20,000 have been suggested.)
- 5.13 Information technology and systems vary between practices and services, and some consideration of how this might be managed may need to be made. This may become easier as we move towards remote “cloud” servers and only require secure connection to access them.
- 5.14 Commissioners should explore appropriate buddying arrangements with their service providers.

### Buddying up steps

- 5.15 **Step one:** Identify neighbouring practices to form a buddying-up group, and notify the PCO and LMCs.
- 5.16 **Step two:** Form a working group within the cluster of buddy practices. All practices in the cluster should be represented. Agree how often the group will meet on a regular basis, both before the pandemic and during it.
- 5.17 **Step three:** The working group should draw up a combined pandemic flu plan. This will build on individual practices’ service continuity plans. It should identify the existing capacity, responsibilities and constraints that each practice has in providing services during a pandemic so that resources can be pooled.
- 5.18 **Step four:** Buddy practices may have to combine temporarily during a flu pandemic. Because of this, it is necessary to identify which IT systems are used in the buddying-up group and discuss compatibility and how practice staff could work together and operate the different systems.

## Further clusters

- 5.19 Any gaps in service provision will be identified and, if the cluster cannot fill them, outstanding issues should be shared with the local PCO.
- 5.20 PCOs will be able to add to practice resources by relocating other healthcare workers into practices as necessary. Practices should be aware that the number of extra staff available will be limited as all sectors will be affected by the pandemic. Health professionals from the private sector may also augment the NHS workforce along with recently retired staff and senior trainees.
- 5.21 Within each buddying-up cluster, practices retain contractual responsibility for their listed patients, but responsibility for clinical decision-making will belong to the treating clinician (and/or their employed staff seeing the patient) irrespective of which practice within the cluster the patient belongs to.
- 5.22 From the report of the lessons learned from the Summer 2007 flooding experiences from an estates and facilities perspective (DH Gateway Reviews and Estates and Facilities Division), the summary of the Hull and East Yorkshire experience states:  
“the arrangements whereby General Practitioners work together with each other, for example, by pairing up, worked well and provided support to enable services to continue throughout a difficult period”.
- 5.23 A successful response to emergencies in the UK has demonstrated that joint working and support can resolve very difficult problems that fall across organisational boundaries. Large-scale events have shown that single organisations acting alone cannot resolve the myriad of problems caused by what might, at first sight, appear to be relatively simple emergencies caused by a single source.
- 5.24 Mutual aid can be defined as an arrangement between organisations within the same sector or across sectors and across boundaries, to provide assistance with additional resource during an emergency, which may overwhelm the resources of an individual organisation.
- 5.25 The NHS Emergency Planning Guidance gives general guidance about mutual aid. This is:  
“The SHA must be able to assume strategic control of incidents as required. Each SHA needs to ensure that it has an overview of all incidents within its boundary and that appropriate arrangements are

made to allow for a well co-ordinated response, taking into account the requirements of the Civil Contingencies Act. SHAs must take a proactive lead in guaranteeing the availability of practical mutual aid and support, both within their area and across SHA boundaries.

“In developing arrangements for mutual aid, NHS organisations will need to be clear what aid might be required, what they themselves can offer and who their partners are. Administrative boundaries, including national boundaries within the UK, should not be a reason for failing to work with organisations over those boundaries in developing mutual aid arrangements.

“If the scale of an incident escalates beyond the local SHA’s capacity or area, or if its duration or nature is such that wider NHS resources are required, the SHA will enact mutual aid protocols with neighbouring SHA(s) and, where appropriate, the devolved administrations of Scotland, Wales and Northern Ireland. For events that require mutual aid on a large scale, the Department of Health, via the Department of Health (DH) Major Incident Coordination Centre, can implement national co-ordinating arrangements. These arrangements are intended to support the SHAs, ensure wider NHS resources are made available and wider government assistance is accessed, as required. Usually it will be the role of SHAs to contact the DH Major Incident Coordination Centre.”

- 5.26 The importance of having good mutual aid arrangements has been acknowledged by the publication of a short guide produced jointly by the Cabinet Office, the Local Government Association (LGA) and the Society of Local Authority Chief Executives (SOLACE), aimed at local authorities. This guide seeks to state the case for the benefits of mutual aid and to encourage action by offering advice on a range of practical considerations.

## Example of GP buddying

- 5.27 Eaglescliffe Medical Practice and Yarm Medical Centre are located on opposite sides of the River Tees. They provide primary care services to a community that spans both sides of the river. The river has a history of flooding and there is a standing arrangement between the two practices that in the event of flood, or impending flood, they will look after the other’s patients. This arrangement has been expanded to cover other

threats such as the loss of premises, power and refrigeration.

## Flooding and loss of water supply at Hexham – case study

### Background and context

- 5.28 In early January 2005, the North East region suffered a period of heavy rainfall, resulting in many swollen rivers and streams. On the night of 8 January, the force of high levels of water brought down trees and debris which severed the main water supply pipes located 1••• metres under the river bed of the Tyne, just west of Hexham (Northumberland), which linked the main reservoir with the town of Hexham and the surrounding areas of lower Tynedale.
- 5.29 Within hours, over 1000 properties had lost their water supply. Within two days 10,000 properties were relying on emergency supplies. Schools, doctors' surgeries and a busy leisure centre were closed, and businesses had been advised not to open. Supplies were gradually restored over the next six days, although the supply of bottled water continued until 17 January. Schools re-opened after a week.
- 5.30 Full details of how the incident was handled are available on the Cabinet Office website.

### Maintenance of the supply chain

- 5.31 Supply chain risk is an important issue where failure can mean disruption of critical services, damage to reputation, and financial losses. The strategic challenge is to protect against supply chain risk whilst taking advantage of the opportunities.
- 5.32 The NHS Business Services Authority is a special health authority of the National Health Service (NHS) in England and Wales. It was created on 1 October 2005 following a review by the Department of Health of its "arm's length bodies". It began operating on 1 April 2006, bringing together five previously separate NHS business support organisations. Since April 2009, the NHSBSA is managed based on its services, which include NHS Supply Chain.
- 5.33 NHS Supply Chain provides customer-focused healthcare products and supply chain services to the UK's National Health Service (NHS), enabling trusts, hospitals and other healthcare organisations to focus on patient care.
- 5.34 The objective of this guidance is to provide a common understanding of the options available to emergency planners for coordination, prioritisation and acquisition of emergency supplies.
- 5.35 The guidance is based on the following key principles:
- Local Resilience Forums should inform the setting up of multi-agency logistic support capability as a standard part of their emergency planning, response and recovery arrangements;
  - regional offices should facilitate support arrangements within a region;
  - central Government should provide strategic guidance and advice, and also support and co-ordination in the event of exceptional circumstances;
  - at all levels, stockpiling of supplies should be a last resort after all other options have been tested.
- 5.36 Based on local-level best practice, the guidance also provides a check list of options and considerations for:
- agreeing what stock levels will be held on site in accordance with predicted roles in incidents;
  - prioritising requirements for emergency supplies;
  - choosing the appropriate method of supply acquisition.
- 5.37 Consideration also needs to be given to ensuring resilience in terms of engineering services, stock levels of consumables/emergency supplies and accessibility.
- 5.38 See 'Logistics Operations for Emergency Supplies: Guidance for Emergency Planners' for further information.

## 6 Physical systems

### Hot and cold water systems

6.1 Water storage and distribution systems should be designed in accordance with Health Technical Memorandum 04-01 – ‘The control of Legionella, hygiene, “safe” hot water, cold water and drinking water systems’. It should be noted that before installing water storage, users will wish to explore the costs that will be incurred for ensuring the safety of that stored supply.

### Resilience of electrical supplies

6.2 It may be appropriate to provide separate essential and non-essential small power distribution systems or a dual unified system. This will enhance the resilience of the electrical services as well as facilitating the ability to test and repair faulty system components whilst sustaining continuity of supply to operational areas. Electrical supply resilience provisions should comply with the requirements of Health Technical Memorandum 06-01.

### Waste/foul water arrangements

6.3 Attention will be required in planning arrangements for the collection, storage and disposal of waste/foul water, particularly in rural or isolated areas.

### Access and security

6.4 Earlier in this manual, reference has been made to the need for consulting advisers such as the Crime Prevention Design Advisor (CPDA), who is a specialist crime prevention officer trained at the Home Office Crime Reduction College, who deals with crime risk and designing-out-crime advice for the built environment. In addition to physical security measures the officer will consider, for example, how crime and disorder can be reduced through defensible space and access. In some police forces this role is given the title of Police Architectural Liaison Officer.

6.5 Those with responsibility for security matters in primary healthcare facilities should liaise with their local Local Security Management Specialist (LSMS) on the NHS Security Management Service (NHS SMS) objectives for new builds and refurbishments and other information that may be relevant for planning for resilience.

6.6 The LSMS have access to the ‘NHS Safe and Secure Health Facilities’ website, which promotes the need for security to be considered at an early stage of any new build or rebuild process and outlines the NHS SMS objectives for new builds and refurbishments.

6.7 Another useful source of information is Health Building Note 11-01 – ‘Facilities for primary and community care services’. It makes proposals for addressing physical issues regarding security and access, particularly out-of-hours access arrangements. It also proposes that all schemes should be considered against the criteria set down by the ‘Secure by Design’ initiative. An individual should be made responsible for decisions on security. On small schemes it may be sufficient to follow the principles of this guidance. For larger schemes a formal application should be made and sign-off achieved. The ‘Secure by Design’ initiative covers the public realm in and around the building. Advice should also be sought from stakeholders and service providers relating to personal safety and protection of property.

6.8 For out-of-hours access arrangements ‘Facilities for primary and community care services’ proposes that the following facilities may remain open to the public even when the rest of the building is closed:

- in-patient accommodation;
- the counselling suite; \* out-of-hours urgent care, including diagnostics facilities, if provided;
- waiting spaces, WCs and information points (not usually the whole of the daytime waiting area);

- a suite of meeting rooms with WC and beverage facilities.
- 6.9 Public access to the building during this time will need to be well monitored and controlled from a reception point. Staff may additionally require out-of-hours access to:
- administration spaces;
  - staff rest facilities.
- 6.10 Facilities required for out-of-hours access should be located together, where possible, to enable the rest of the building to be shut down, easing security arrangements and reducing operating costs. This will also minimise user journeys around the building during this time.
- 6.11 'Facilities for primary and community care services' makes suggestions for door access control systems that include the following:
- primary and social care premises will generally require controlled access to the building at the staff entrance and, internally, to staff areas;
  - where door access control systems are required, these should consist of an approved door entry system (such as an electronic keypad or fob), installed in conjunction with a separate door entry intercom system;
  - internal systems should be vandal-resistant;
  - external door entry systems should be compatible with insurance requirements, weatherproof and vandal-resistant.

### Primary care denial of access

- 6.12 There are situations where it may become impossible to use an undamaged practice, due to either lack of access or incidents requiring evacuation. This has occurred when practitioners have been unable to reach a practice due to severe weather, or been asked to leave a practice at the request of the police due to nearby incidents such as bomb threats or fires. These incidents may be

sudden, allowing little time for consideration or pre-planning, and may last for many hours.

- 6.13 Building systems into premises may help services/practices to function in the short term, particularly where they can be supported by buddy practices. Function and patient care can be assisted by the facility to redirect incoming lines to the practice remotely at an exchange level; and to access health records and clinical systems at the location where the displaced service is required to practise from. This requires mobile access to clinical systems, and planning to provide this should be considered when procuring clinical information technology. This was used to good effect in the southeast in 2008 when roads became impassable with snow; practitioners were able to provide appropriate telephone advice to patients whilst supported by external access to their clinical systems.
- 6.14 This could have proved useful if it had been available to a practice in the northeast who found themselves unable to access their practice for two days due to a bomb threat. They experienced significant difficulty in prescribing appropriate replacement medication to the surrounding community, who were similarly displaced at very short notice.



*Snow at Crawley Down Health Centre. Copyright SP Web Connections; Crawley Down Village Website Association*

## 7 References

Health Building Note 00-07 – ‘Resilience planning for the healthcare estate’.

[Royal College of General Practitioners \(RCGP\) website.](#)

[NHS Business Services Authority website.](#)

Health Technical Memorandum 00 – ‘Policies and principles of healthcare guidance’.

[Civil Contingencies Act 2004.](#)

[NHS Emergency Planning Guidance 2005.](#)

[NHS Business Continuity Management Guidance. BS 25999.](#)

Health Technical Memorandum 06-01 – ‘Electrical services supply and distribution’.

[Bellingham Practice website.](#)

[The NHS Resilience and Business Continuity Management Guidance: Interim Strategic Guidance for NHS Organisations. DH, 2008.](#)

[UK Resilience website.](#)

[Health and Safety at Work etc Act 1974.](#)

[Firecode.](#)

[Fire safety risk assessment – healthcare premises.](#)

[Department for Communities and Local Government.](#)

[Secure by design.](#)

[Association of Police Authorities website.](#)

Firecode – Health Technical Memorandum 05-01 – ‘Managing healthcare fire safety’.

[PAS 2015, ‘Resilience in Healthcare Settings’.](#)

[Business continuity planning for GPs \(British Medical Association website\).](#)

[UK resilience \(Cabinet Office\).](#)

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[Saving Carbon, Improving Health: NHS Carbon Reduction Strategy for England. Sustainable Development Unit.](#)

[Good Corporate Citizenship Assessment Model.](#)

Health Technical Memorandum 03-01 – ‘Specialised ventilation for healthcare premises’.

Sustainable development in the NHS. DH, 2001.

[Sustainable development: Environmental strategy for the National Health Service. DH, 2005.](#)

Health Technical Memorandum 07-02 – ‘Encode – making energy work in healthcare’.

Health Technical Memorandum 07-07 – ‘Sustainable healthcare buildings’.

[Strategic command arrangements for the NHS during a major incident.](#)

[RCGP pandemic flu page.](#)

[Primary Care Pandemic Continuity Agreement, Tees Primary Care Services.](#)

[Caduceus Medical Practice Influenza Plan.](#)

[Hexham case study on the Cabinet Office website.](#)

[Logistics Operations for Emergency Supplies: Guidance for Emergency Planners. Cabinet Office, April 2009.](#)

Health Technical Memorandum 04-01 – ‘The control of Legionella, hygiene, “safe” hot water, cold water and drinking water systems’.

Health Building Note 11-01 – ‘Facilities for primary and community care services’.

### **Related sources of guidance, good practice and lessons learned**

**The Civil Contingencies Act (2004). London: The Stationery Office**

The Civil Contingencies Act 2004 places a statutory responsibility on all Category One responders to maintain plans to ensure that they can continue to exercise their functions in the event of an emergency, so far as is reasonably practicable. This duty relates to all functions, not just emergency response.

### **NHS Emergency Planning Guidance. Department of Health**

The NHS Emergency Planning Guidance 2005 and its underpinning documents provide general guidance, information and context for NHS organisations. This includes an overview of important related legislation including the Civil Contingencies Act 2004 (the CCA) and its categorisation of organisations as Category 1 or Category 2 responders.

### **The NHS Resilience and Business Continuity Management Guidance: interim strategic national guidance for NHS organisations (2008). Department of Health**

The NHS Resilience and Business Continuity Management Guidance 2008 gives the Chief Executive Officer of each NHS organisation responsibility for ensuring that their organisation has a business continuity management process in place that will address the requirements for ensuring continuity of clinical care and services as required by the CCA.

### **The Operating Framework for the NHS in England 2012–13**

The operating framework for the NHS in England 2012–13 sets out the business and planning arrangements for the NHS. It is accompanied by annexes (some part of the document, some web-based only) which provide more detail on the priorities, how they are measured and how the new arrangements for managing the system will work.

### **Pandemic flu**

<http://www.dh.gov.uk/en/Publichealth/Flu/PandemicFlu/index.htm>

### **NHS guidance on planning for disruption to road fuel supply: strategic national guidance for NHS organisations**

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_089955](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_089955)

Department of Health Heatwave plan for England (2009). NHS.

### **Monitor: the independent regulator of NHS Foundation Trusts**

Monitor is the independent regulator of NHS Foundation Trusts in England.

### **The Care Quality Commission**

The Care Quality Commission is the independent regulator of health and social care in England.

### **Cabinet Office guidance**

Expectation and Indicators of Good Practice Set for Category 1 and Category 2 Responders (2009). Cabinet Office.

### **NHS Security Management Service**

<http://www.nhsbsa.nhs.uk/SecurityManagement.aspx>

### **Saving Carbon, Improving Health: an NHS Carbon Reduction Strategy for England, NHS and the Sustainable Development Unit (2009)**

The strategy shows the scale of reduction in carbon required for the NHS to progress towards the Climate Change Act requirements, and recommends key actions for the NHS.

### **CRC Energy Efficiency Scheme**

Formerly known as the Carbon Reduction Commitment, this is the UK's mandatory climate change and energy saving scheme. The CRC commences April 2010. It is central to the UK's strategy for improving energy efficiency and reducing carbon dioxide (CO<sub>2</sub>) emissions, as set out in the Government's Climate Change Act 2008.

### **Securing the Future – UK National Sustainable Development Strategy (2005). Defra**

The strategy sets out Defra's position on the use of natural resources to deliver Public Service Agreement 28: Secure a healthy natural environment for today and the future.

### **Sustainable Development Commission**

This website includes latest sustainable development news and green and sustainable case studies. The Sustainable Development Commission has published environmental tools for the health sector.

It has also produced guidance on issues for appropriate commissioners. The guidance sets out the steps an appropriate commissioner can take to manage transport and reduce fuel use. The Sustainable Development Commission also published a case study on how Nottingham's appropriate commissioner successfully used its corporate citizenship tool.

<http://www.corporatecitizen.nhs.uk/transport.html>



<http://www.sd-commission.org.uk/publications/downloads/050929-Nottingham-PCT-PiP.pdf>

### **Sustaining a Healthy Future: Taking Action on Climate Change (2008). Faculty of Public Health**

This publication includes checklists for practical action; policy recommendations; a health-check tool against which all organisational strategies can be measured; examples of existing good practice; and a directory of useful organisations and resources.

## **Building Standards**

### **BS 25777, Information and communications technology continuity management. Code of practice**

This British Standard gives recommendations for information and communications technology (ICT) continuity management within the framework of continuity of clinical care and services management provided by BS 25999.

### **British Standard 25999 Parts 1 & 2**

BS 25999 Parts 1 and 2 is the common standard for all organisations in England. It is recommended that all NHS organisations aspire to comply with the requirements. This will help ensure that all organisations are working to a common standard that will aid collective resilience.

## **Commissioner estate management**

### **Transforming Community Services (2009). DH**

This publication contains the guiding principles for managing assets under the new organisational structure

for the NHS. The new structure directs appropriate commissioners to become commissioners of healthcare services from providers under contract.

### **Management of NHS Assets in Scotland (2009). Audit Scotland**

This report examines the way the Scottish health service strategically manages its £5 billion worth of land and buildings, vehicles, medical and IT equipment. Focus is on the health service in Scotland, but principles of effective management of health sector assets can be applied generally across the UK.

### **Developing an Estate Strategy: Second Edition (2005). DH**

Provides NHS guidance and gives best practice advice.

### **Strategic Health Asset Planning and Evaluation (SHAPE)**

SHAPE is a web-enabled, evidence-based application that informs and supports the strategic planning of services and physical assets across a whole health economy.

### **The Royal College of General Practitioners and the British Medical Association guidance on continuity of clinical care and services and resilience**

[http://www.bma.org.uk/sc/health\\_promotion\\_ethics/influenza/panflugp/flupanprep.jsp](http://www.bma.org.uk/sc/health_promotion_ethics/influenza/panflugp/flupanprep.jsp)