Royal Borough of Kensington and Chelsea

Kensington and Chelsea Borough Risk Register

Version: 15

OFFICIAL

May 2025



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1. Introduction and Background

This document is for use by the Kensington and Chelsea Borough Resilience Forum and members of the public and is intended to inform organisational business continuity and emergency response planning and is updated annually following the release of the London Risk Register (LRR).

Risk assessment underpins the work of the Kensington and Chelsea Borough Resilience Forum (BRF). Assessments within the Borough Risk Register (BRR) drive the development of capabilities to prevent, mitigate, respond to, and recover from incidents.

Publication of the Borough Risk Register is designed to assist residents and businesses develop their emergency arrangements and to inform about the risks in the local area.

Planning is based on 'reasonable worst-case scenarios' informed by historical and scientific data, modelling, and professional expert judgement of both the likelihood and impact of a risk. The inclusion of a risk does not mean it is expected to happen, nor that the impact would be as serious as the description provided.

Each risk is scored for impact and likelihood. The likelihood is expressed as the "annual likelihood of each reasonable worst-case scenarios occurring, with the assessment valid for two years". Impacts are rated between "Limited" (1) and "Catastrophic" (5). The likelihood and impact scores are combined to give an overall risk rating.

The Borough Risk Register provides information on specific local risks and response arrangements in addition to the overviews provided on a pan London and national level by the <u>National</u> and <u>London Risk Registers</u>.

2. Risk Registers

2.1 National Risk Register

The National Risk Register sets out the assessment of the likelihood and potential impact of a range of risks that may directly affect the UK'. The publication of information on these risks is intended to encourage public debate on security and help organisations, individuals, families, and communities to prepare for emergencies.

The Register provides an assessment of the most significant emergencies which the United Kingdom and its citizens could face. These risks are summarised into three categories: accidents, natural events (collectively known as hazards) and malicious attacks (known as threats).

The different risks are compared on a like for like basis, which helps in making decisions about which to plan for and what their consequences are likely to be. The National Risk Register is intended to capture the range of emergencies that might have a major impact on all or significant parts of the UK.

It provides a national picture of the risks we face, and is designed to complement Community Risk Registers, already produced and published locally by emergency planners. The driver for this work is the Civil Contingencies Act 2004, which also defines what we mean by emergencies and what responsibilities are placed on emergency responders to prepare for them.

2.2 Community Risk Registers

Community Risk Registers consider the likelihood and potential impact on a range of hazards occurring in specific areas of England and Wales. The London specific risk register is approved and published by London Resilience Forum, which has been established under the Civil Contingencies Act. They include representatives from the local emergency services and public, private, and voluntary organisations. To produce the Community Risk Registers, Local Resilience Forums use a combination of their judgement about each risk, as well as guidance provided by Central Government.

The Royal Borough of Kensington and Chelsea is part of the London Resilience Forum with all other London Boroughs. All boroughs across London feed into the London Risk Register through the sub-regional resilience forums.

2.3 Borough Risk Registers

Borough Risk Registers consider the main risks specific to the Borough. These are taken from the London Risk Register and adapted for local use. The Borough Risk Register is designed to be a living document that will be revised and updated as and when required. The Borough Risk Register will include other site-specific risks when relevant.

3. Risk Assessment Methodology

This version of the Kensington and Chelsea Borough Risk Register is aligned to the 2025 London Risk Register and the 2022 National Security Risk Assessment, with changes made to the methodology where necessary to contextualise risks for London. For more detail on the LRR risk assessment methodology see appendix 1.

4. Understanding the Risk Register

Risks are grouped by theme and presented in order of overall rating within that theme, with the highest risks first. Themes are based on common features and consequences, which makes it easier to understand the risk in context and to consider which risks might influence, or be influenced by, others. Risk themes are accidents and system failures, human and animal disease, societal risks, natural hazards, cyber-attacks, and terrorist threats.

The headings used on the London and Borough Risk Registers are as below,

this is done to enable easy comparison between the two documents:

Risk ID Rating	Sub- Category	Outcome Description	Likelihood	Impact	Controls in Place	Last Review
	Lead					Next Review

Risk ID: Unique reference number for each risk. R denotes risk is also a national risk.

Rating: Overall risk rating based on likelihood and overall impact.

Sub-Category: In some cases, risks are sub-categorised for ease of comparison with similar risks.

Lead: The Organisation responsible for the assessment of the risk in London.

Outcome Description: A summary of the reasonable worst-case scenario used to inform the risk.

Likelihood: Assessed from 1-5 where 1 is the least likely and 5 more likely. (A table with probabilities associated with each score is available at the end of this document.)

Impact: Assessed from 1-5 where 1 is the lowest impact and 5 more impactful.

Controls in place: Plans and procedures in place to mitigate this risk.

Last review / next review: Dates of the last review of that risk, and planned date for the next review

4.1 LRR Risk Review Schedule

All risks with an overall rating of "Very high" and "High" will be reviewed yearly, other risks will be reviewed every two years; London Risk Register review dates are in the right-hand column of the register.

New risks from the NSRA will be reviewed the year after they are introduced by the London Risk Advisory Group to capture any new learning and will thereafter be reviewed yearly or every two years, as appropriate.

4.2 Controls

Controls specific to the type of incident referred to are listed in the register below. In addition, there are many generic plans, procedures and principles that aid multi-agency working in incident response and national initiatives that are used to aid responders in complex situations. These include:

- London Emergency Services Liaison Panel (LESLP)
- Joint Emergency Services Interoperability Principles (JESIP)
- Pan-London emergency response plans and frameworks are available on <u>london.gov.uk</u> covering generic response procedures, consequence-based planning for use in various incidents, and incident-specific plans.
- Royal Borough Kensington and Chelsea Major Incident Response Plan (MIRP).

5. New risks, removed risks and risks under review

Following last years' comprehensive review of risks to London, under the newly updated 2022 NSRA which incorporated significant methodological changes, new risks were added to the London Risk Register in 2025 to better reflect the risk picture across the capital.

20 risks were added as a result of these changes:

- R12: Non-state nuclear attack urban area
- R17: Chemical, biological or radiological attack on water supply infrastructure
- **R19**: Conventional attack on chemical infrastructure
- **R40d:** Marauding terrorist attack firearms
- **R21b:** Attack on UK electricity infrastructure cyber
- **R80:** Major outbreak of foot and mouth disease
- **R80b:** Major outbreak of animal disease Avian Influenza
- **R20a:** Attack on UK gas infrastructure conventional
- **R23a:** Malicious attack on fuel supply infrastructure conventional
- **R23b:** Malicious attack on fuel supply infrastructure cyber
- **R24:** Cyber-attack—health and social care system
- **R04a:** Person-borne improvised explosive device
- **R11:** Assassination of a high-profile public figure
- **R25:** Cyber-attack transport sector
- **R26:** Cyber-attack—telecommunications systems
- **R30:** Malicious attack UK Financial CNI
- **R80D:** Major outbreak of animal disease—African Swine Fever
- **R80c:** Major outbreak of animal disease African Horse Sickness
- **R28:** Cyber-attack government critical systems loss
- **R29:** Cyber-attack government data breach

6. Chronic Risks

Chronic risks are distinct from acute risks contained in the main section of this register, in that they pose continuous challenges that erode our economy, community, way of life, and/or national security. Chronic risks also pose a particular threat to more vulnerable members of the local community, whose capacity to recover from local incidents may have been deteriorated by chronic, cascading risks. Generally, but not always, these manifest over a longer timeframe. While chronic risks also require robust government-led responses, these tend to be developed through strategic, operational or policy changes to address the challenges rather than emergency civil contingency responses. Acute risks on the other hand are risks that may require an emergency response from government, such as wildfires or biological attacks.

7. Borough Contextualization Statement

The Royal Borough of Kensington and Chelsea forms one end of the West London Sub Region of the London Resilience Forum area, which also comprises the London Boroughs of Brent, Ealing, Harrow, Hillingdon, Hounslow, Hammersmith and Fulham, and the City of Westminster. The Royal Borough is also bordered by the London Borough of Wandsworth in the South the other side of the River Thames.



Figure 1:Map of the Borough of Kensington and Chelsea.

7.1 The Borough

The Royal Borough of Kensington and Chelsea is the smallest borough in London, covering just over 4.7 square miles, it is one of the most densely populated and diverse areas in Europe. The Borough is made up of complex-built environments with several large buildings up to 30 floors high. There are also complex underground structures beneath the Borough including the Circle, District, Central, Piccadilly and Hammersmith and City Lines stopping at 13 stations (12 underground, 1 overground).

The Borough is home to internationally renowned museums and universities, major department stores and shopping areas, it has approximately 25,800 visitors a day (2022). Additionally, the borough is home to many embassies and High Commissions, this concentration of popular and prestigious institutions contributes significantly to the Borough's hazard profile, both in terms of 'risk' and of 'threat'.

30% of households have a language other than English as their main language; 46% of residents were born in the United Kingdom, the fourth-lowest proportion of all local authorities in England and Wales.11.8% of residents are Muslim requiring that any response takes account of the specific needs of this community, there are also smaller populations of Jews Hindus and Buddhists. At 67.8% RBKC has the third lowest rate of residents who identify as UK nationals present serval additional challenges. 12.8% of resident have a long term health condition that limits their ability to undertake day to day activities; There is a significant difference across wards particularly in the north of the borough compared to the rest of the borough.

Indicators such as the borough health gradient reveal considerable variations in the Borough's demographic profile. This diversity highlights the importance of community resilience programmes to the Borough.

7.2 The Grenfell Fire

On 14 June 2017, a fire broke out in the 24-storey Grenfell Tower block of flats in North Kensington, causing 72 deaths. It was the deadliest UK residential fire since the Second World War.

Consequently, a key element of the Council's longer-term response to the fire has been an extensive and wide-ranging review of its resilience arrangements and community resilience programmes in partnership with our communities – so we are ready to support residents and ensure our response will always be rapid and treat people with humanity and dignity."

7.3 Significant Events

The Borough is home to the Notting Hill Carnival, an event run by a community-based charity which is held every August Bank Holiday on the streets of North Kensington. The event has grown into Europe's biggest free street-based arts event, attracting a million-plus visitors. A key event within the Borough for the Council and its multi-agency partners. Planning to support Carnival is a year-long undertaking, the planning cycle recommencing every year with a multi-agency debrief with the Carnival organiser a few weeks after the event and involving a wide breadth of Council resources. Due to its size and the complexity of its operations, Carnival demands a fully integrated multi-agency approach that must be based in and work closely with, the community of North Kensington and close cross-border working where the event's footprint crosses into the City of Westminster and Brent.

The RHS Chelsea Flower Show is held in May over five days and attended by roughly 157,000 people each year. The grounds of the Royal Hospital Chelsea are filled with the largest collections of flowers in the world. There are many show gardens, each one created with attention to detail by some of the world's leading garden designers. This is a ticked event. Around the same dates, Chelsea in Bloom takes place in King's Road. This offers breathtaking displays made of fresh flowers that are free to visit and attracts more than a million people to the area.

7.4 Economic Infrastructure

There are key NHS sites in the Borough including three hospitals The Chelsea and Westminster, The Royal Brompton and The Royal Marsden, a Walk-in Centre at St Charles Health and Wellbeing Centre along with several private hospitals. Some of these sites and other research facilities throughout the borough study

biological substances. All facilities are aware of their security and handling requirements.

The Borough is also home to The Royal Hospital Chelsea along with 3 Fire Stations: North Kensington, Kensington, and Chelsea, a Police station in Kensington and an Ambulance Station in North Kensington.

There are three major shopping destinations in High Street Kensington, the Kings Road Chelsea and Sloane Square/ Street. Additionally, there is the world-renowned Portobello Road Market in North of the Borough which sees approximately 100,000 visitors a week.

There is a range of educational institutions in the borough including both independent and state-funded primary and secondary schools, colleges and several higher education institutions, including Imperial College London.

7.5 Transport Infrastructure

A significant part of the border with Hammersmith and Fulham is a railway track running Clapham up to Willesden with four stations along the boundary at Kensington Olympia, West Brompton, Shepherds Bush, and Imperial Wharf

Major arterial routes through the borough including, the Westway A40 in the North across Ladbroke Grove, Kensington High Street the A315, the A4 which travels along Cromwell Road and The A3212 running along Chelsea embankment in the South. Along with the A3220 running north to south from the embankment to the Westway A40, most of these are managed by Transport for London except for Kensington High Street.

Victoria coach station, although not in the Borough, sits just across the border in the City of Westminster and is a key terminus for both national and international bus and coach services.

Part of the Borough are underneath the flight path into London Heathrow and London City Airports, Police and Air Ambulance Helicopters regularly use the airspace above Kensington and Chelsea, as do Royal flights into and out of Kensington and Buckingham Palaces. Private and commercial helicopters regularly follow the Thames through London.

7.6 Hazardous Sites

Though there are no major industrial sites or sites subject to the Control of Major Accident Hazard Regulations within the Borough, there are two council-run swimming pools at Chelsea and Kensington leisure centres and several privately operated pools in local gyms and hotels.

There is a National Grid Distribution Pipeline covered by the Pipeline Safety Regulations, which enters the north of the Brough running the short distance to the old Kensal Gas Works, the second pipeline of note runs to the old Fulham Gas Works Site near to the border in the south of the Borough.

Orion Demolitions operates a waste processing site on Canal Way, London W10 5AZ, although should a fire occur it is unlikely to mean the reasonable worst case scenario for L54c Fires involving landfill and waste processing sites. A major fire lasting several days/weeks in a landfill or waste processing plant requiring significant resources to resolve. Significant environmental impacts affecting a number of London regions with other impacts to local transport, schools, hospitals and energy infrastructure. With the reasonable worst case scenario for the site considered to be, a fire lasting a day or two but disruptive to local business.

8. Kensington and Chelsea Risk Register: High-Level Summary Risk Matrix

			R76 Drought, R89 High- Altitude	R50a National Electricity Transition R14	L54a Fires in Purpose-Built High-	
	5		Electromagnetic Pulse (HEMP), R95 Nuclear attack by a state on the UK mainland or UK overseas interests, R21b Attack on UK electricity infrastructure – Cyber R12 Non-state nuclear attack – urban area	Biological attack unenclosed urban area	Rise Flats, R78 Pandemic	
	4	L66 Radioactive incident caused by mishandling of radioactive material, R59 Accidental fire or explosion at an onshore fuel pipeline, R53 Radiation Release from overseas nuclear accident, R45 Aviation Crash	R51 Failure of Gas Supply Infrastructure, R48 Loss of Positioning, Navigation and Timing (PNT) Services, R80a Major outbreak of foot and mouth disease, R08 Malicious Aviation Incident	R75c Surface Water Flooding, R73 High temperatures and Heatwave, R16a Chemical attack – unenclosed urban area R16b Chemical attack – enclosed urban area R21a Attack on UK electricity infrastructure – conventional R07 Malicious Rail Network Attack L54e Major fire in care homes and hospitals, R54b Fires in major entertainment and/or public building	R65 Major Fire, R79 Outbreak of emerging infectious diseases, R71 Severe Space Weather, R64 Food Supply Contamination, R74 Low temperatures and heavy snow, R17 Chemical, Biological or Radiological attack on water supply infrastructure, R19 Conventional attack on chemical infrastructure, R40d Marauding terrorist attack - firearms	R02 Conventional attack on government R40b Land based terrorist attack - improvised explosive device.
	3	HL23 Bridge Collapse, HL22 Building collapse, R63 Water Supply Infrastructure	HL105 Complex Built environments, R47 Disruption of space-based services, R50b Regional failure of electricity network, R10 Strategic hostage taking.	R40 Railway Accident, R77 Poor Air Quality, R49 Simultaneous loss of all fixed and mobile forms of communication, R44 Accident involving high consequence dangerous goods, R75a Coastal/Tidal Flooding, L19 Groundwater flooding, R80b Major Outbreak of Animal Disease – Avian Influenza, R20a Attack on UK gas infrastructure – conventional, R23a Malicious attack on fuel supply infrastructure – Conventional, R23b Malicious attack on fuel supply infrastructure - Cyber	R67 Volcanic Eruption, R72 Storms and Gales, R15 Radiological attack – unenclosed urban area, R09 Malicious Maritime Incident R20b Attack on UK gas infrastructure – Cyber	R55b Technological failure at a UK critical finial market infrastructure, R84 Industrial action (firefighters), R87 Reception and integration of British Nationals arriving from overseas, R82 Public Disorder, R24 Cyber- attack - health and social care system, R04a Person-borne improvised explosive device R04c Marauding attack (low sophistication, R05b Maritime Terrorist Attack – Marauding Terrorist Firearms attack on a passenger ferry
Impact	2	R61 Accidental work related (laboratory) release of a hazardous pathogen, R38 Insolvency affecting fuel supply	R86 Industrial action (fuel supply),	R83 Industrial action (public transport), R37 Insolvency of supplier of critical services to public sector, HL10 Local accident on motorways and major trunk roads, R26 Cyber-attack - telecommunications systems	R55a Technology Failure at a systematically important retail Bank, R36 Major Social Care Provider Failure R39 Failure of a supplier of CNI chemicals, R05a Maritime Terrorist Attack – Vehicle borne improvised explosive device (VBIED), R13 Anthrax letters	R11 Assassination of a high-profile public figure L54c Fires involving landfill and waste processing sites
Ē	1	R54 Radiation exposure from transported, stolen or lost goods, R68	R30 Malicious Attack – UK Financial CNI	R32 Major interference in UK democratic process, HL21 Land Movement, R41	R25 Cyber-attack – transport sector	

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	Earthquake, R80d Major Outbreak of Animal Disease – African Swine Fever R80c Major Outbreak of Animal Disease – African Horse Sickness		Larger Passenger Vessel Accident, R28 Cyber-attack – government critical systems loss R29 Cyber-attack– government data breach		5
	1 - Low	2 - Medium/Low	3 - Medium	4 - Medium/High	5 - High
	Likelihood	•	·	•	

9. Kensington and Chelsea Risk Register

9.1 Accidents and system failures

Risk ID Rating	Sub-category Lead	Outcome Description	Likelihood	Impact	Controls in Place	Last Review Next Review
R50a VERY HIGH	UK Power Network	National Electricity Transmission A total national blackout due to the loss of the GB National Electricity Transmission System caused by damage to or technical failure of the transmission network. The technical recovery process (Black Start) could take up to 5 days; however, there is the potential for wide-area power disruptions for up to 14 days, potentially affecting millions of consumers.	3	5	 Utilities' testing and maintenance regimes. UK Power Network Energy System Emergency Plan. UK Power Network PN Energy Emergency Communication Plan. UK Power Network Energy Black Start Plan. Business Continuity Plans. London Resilience Partnership Power Supply Disruption Framework Business Continuity Plans for Category 1 and 2 responders, businesses, and other key organisations. Major Incident/Emergency Plans for Category 1 and 2 Responders. 	Oct 2024 Oct 2025
R64 VERY HIGH	Local Authority	Food Supply Contamination A major contamination incident involving a microbiological pathogen in the food chain. This would cause illness, hospitalisation and possible fatalities over a period of time and an overall response time of months.	4	4	Food Safety Act 1990. Food Safety and Hygiene (England) Regulations 2013. Monitoring of imports. Local Authority Environmental Health Sampling Public Health England monitoring and surveillance. Food Standards Agency plans.	Dec 2024 Dec 2025
L54a VERY HIGH	London Fire Brigade	Fires in purpose-built high-rise flats Major fire in a block of flats containing 80 compartments. Potential for 150-200 fatalities and 200 casualties. Changed from impact 4 as the impact of a Major Fire has been increased for the Royal Borough of Kensington and Chelsea because of the impact past events will have on the reaction to any further major fires in the Borough Potential for up to150 fatalities and 200 casualties.	4	5	Regulatory Reform (Fire Safety) Order 2005 Fire Safety Approved Document B Fire & Rescue Services Act 2004 London Fire Brigade Guidance Note 29 London Fire Brigade Operational tactical and building plans London Fire Brigade Urban Search & Rescue Teams (USAR) Fire Service National Resilience Assets London Ambulance Service Hazardous Area Response Team (HART) Local Authority Dangerous Structures Engineer. Casualty Bureau London Resilience Partnership Frameworks including: Mass Fatalities Framework, Mass Casualties Framework, Humanitarian Assistance Framework	Oct 2024 Oct 2025

R65 VERY HIGH	London Fire Brigade	Major Fire A major fire in a building resulting in up to 140 fatalities and 200 casualties, significant damage to the building affected and disruption to local transport services for up to a week.	4	4	Regulatory Reform (Fire Safety) Order 2005 Fire Safety Approved Document B Fire & Rescue Services Act 2004 LFB Guidance Note 29 LFB Operational tactical and building plans LFB Urban Search & Rescue Teams (USAR) Fire Service National Resilience Assets LAS Hazardous Area Response Team (HART) Local Authority Dangerous Structures Engineer Casualty Bureau London Frameworks including: • Strategic Coordination Protocol • Mass Fatalities Framework • Mass Casualties Framework Humanitarian Assistance Framework	Nov 2023 Sept 2025
R54b VERY HIGH	London Fire Brigade	Fires in major entertainment and/or public building Major fire in a large public or commercial building such as a sports stadium, hotel, night club, tourist attraction, transport building, infrastructure, shopping centre or office block resulting in up to 50 fatalities and 250 casualties	3	4	Regulatory Reform (Fire Safety) Order 2005. Fire Safety Approved Document B. Fire & Rescue Services Act 2004. London Fire Brigade Guidance Note 29. London Fire Brigade Operational tactical and building plans. London Fire Brigade Urban Search & Rescue Teams (USAR). Fire Service National Resilience Assets. London Ambulance Service Hazardous Area Response Team (HART). Local Authority Dangerous Structures Engineer. Casualty Bureau. London Resilience Partnership Frameworks including: • Structural Collapse Framework • Mass Fatalities Framework, • Mass Casualties Framework, • Humanitarian Assistance Framework	Dec 2024 Dec 2026

R40 HIGH	Transport for London	Railway Accident Up to 30 fatalities and up to 100 casualties, (fractures, internal injuries - burns less likely). Possible loss of freight. Major disruption to rail line including possible closure of rail tunnel.	3	3	Railway and Transport Safety Act 2003 Railways (Access and Management) Regulations 2005 Railways (Accident Investigation and Reporting) Regulations 2005 Railways (Licensing of Railway Undertakings) Regulations 2005 Railways Act 2005 The Health and Safety (Enforcing Authority for Railways and Other Guided Transport Systems) Regulations 2006 The Railway Safety Levy Regulations 2006 The Railways Act 1993 Transport Act 2000 Health and Safety at Work etc. Act 1974 The Railway (Safety Case) Regulations 2000	Oct 2024 Oct 2025
R44 HIGH	London Fire Brigade	Accident involving high consequence dangerous goods A road or rail tanker containing dangerous goods and/or "high consequence" dangerous goods are involved in an accident leading to fire and an explosion. Up to 5 fatalities and up to 150 casualties. The explosion will cause varying degrees of damage to property and infrastructure depending on their distance from the incident. This risk would result in a toxic plume/gas cloud which would be harmful to the population, resulting in the evacuation of the immediate area.	3	3	Health & Safety at Work etc. Act 1974 Control of Substances Hazardous to Health Regulations 2002 Management of Health & Safety at Work Regulations 1999 Reporting of Injuries Diseases and Dangerous Occurrences Regulations Business Continuity Plans for Category 1 and 2 responders, businesses, and other key organisations. Major Incident/Emergency Plans for Category 1 and 2 Responders. London Strategic Coordination Protocol	Dec 2024 Dec 2025
R48 HIGH	Port of London Authority	Loss of Positioning, Navigation and Timing (PNT) Services A severe technical failure, due to either hardware failure or human error (e.g., software error, operator error), in the US Global Positioning System (GPS) satellite constellation leads to data corruption of the GPS service. The outage last for at least 30 days and restoration of full capability takes several more weeks.	2	4	Contingency planning for a large-scale incident of this type would remain with central government	Nov 2023 Nov 2025

R49 HIGH	London Fire Brigade	Simultaneous loss of all fixed and mobile forms of communication Loss of fixed and mobile telecommunications (both voice service and internet access) for up to 100,000 people for up to 7 days.	3	3	Civil Contingencies Act 2004 Telephone provider demand and network capacity management strategies Individual organisation Business Continuity arrangements. London Resilience Partnership Frameworks including: • Responding to Telecommunications Disruption.	Sept 2023 Sept 2024
R51 HIGH	Utilities Sector Panel	Failure of Gas Supply Infrastructure A technical failure or accident in an upstream oil/gas facility, gas import pipeline terminal, or Liquefied Natural Gas (LNG) import reception facility leading to disruption in UK gas supplies.	2	4	Department for Energy & Climate Change Upstream Crisis Management plan. HM Government Downstream Oil Emergency Response Plan (DOERP). Local Downstream Oil Emergency Response Plan (DOERP). UK Power Networks System Emergency Plan. London Resilience Partnership Frameworks including: • Fuel Disruption Framework Local Authority Fuel Shortage Response Plan and local DOERP	Nov 2023 Sept 2025
R55b HIGH	Business Sector Panel	Technological failure at a UK critical financial market infrastructure Technological systems failure that causes an outage of a systemically important UK financial market infrastructure lasting at least five days. This would significantly impact the processing of financial transactions, which might include interbank transactions, central securities depositories, payment systems and central counterparties.	5	3	Authorities Response framework – Financial Conduct Authority Financial Authorities Response Framework Conduct Authority Financial services Sector legislation and regulation. Business Continuity Management. The Sector Response Framework.	Dec 2024 Dec 2025
HL10 MEDIUM	Transport for London	Local accident on motorways and major trunk roads Multiple vehicle incident causing up to 10 fatalities and up to 20 casualties (internal injuries, fractures, possible burns); closure of lanes or carriageway causing major disruption and delay.	3	2	Traffic management cameras (CCTV and ANPR). Road Traffic Enforcement Officers. National Highways 'Static Vehicle Detection'. The Road Traffic Act 1988. The Road Vehicle (Construction and Use) Regulations 1986. The Traffic Management Act 2004.	Oct 2024 Oct 2026
HL105 MEDIUM	Accident Local Authorities	Complex built environments. Consequences of a major incident affecting large buildings or complex built environments. Incidents in these facilities/areas have the potential to trigger a complex chain of events that lead to serious consequences for public safety.	2	3	Health and Safety at Work Act 1974. Management of Health & Safety at Work Regulations 1999. Fire and Rescue Services Act 2004 & guidance pursuant to the Regulatory Reform (Fire Safety) Order 2005. Safety at Sports Grounds Act 1975. Fire Safety and Safety of Places of Sport Act 1987. Local building safety systems and practices.	Sept 2023 Sept 2025

					Safety Advisory Groups in place at major sports grounds.	
HL22 MEDIUM	Local Authorities	Building Collapse The collapse of a large building (high-rise block, shopping mall etc.). Up to 100 fatalities depending on the size and construction of the building, occupation rates, and 350 casualties. Potential for a number of persons to be trapped or missing. Localised loss of power and other essential services. Local access routes are affected due to road closures.	1	3	Building control regulations enforced by Local Authorities. Construction, renovation, maintenance and demolition standards and enforcement. Emergency Services and other responder's specialist resources. Dangerous Structures Engineer.	Nov 2024 Nov 2026
HL23 MEDIUM	Local Authorities	Bridge Collapse Roads, access routes and transport infrastructure impassable for considerable length of time. Severe congestion over wide geographical area. Emergency access into/out of large, populated areas severely restricted. Potential for trapped or missing people.	1	3	 Building Control regulations enforced by Local Authorities. Regular inspections under the Highways Act 1980. Height and weight restrictions and signs reduce the likelihood of an incident. Local Authority Dangerous Structures Engineer. London Resilience Partnership Frameworks including: Structural Collapse Framework Mass Fatalities Framework, Mass Casualties Framework, Humanitarian Assistance Framework 	Dec 2024 Dec 2026
R36 MEDIUM	Local Authorities	Major Social Care Provider Failure The failure of a major domiciliary care provider affecting 20,000 vulnerable people and their families.	4	2	Contingency planning for a large-scale incident of this type would remain with Central Government Local authority service continuity plans	Nov 2023 Sept 2025
R37 MEDIUM	Local Authority	Insolvency of Supplier of Critical Services to public sector Insolvency of a supplier of critical IT services supporting operational systems or back-office processes integral to critical national services.	3	2	National government guidance Financial Report Council and other regulators of financial services	Sept 2023 Sept 2025
R39 MEDIUM	Utilities Sector Panel	Failure of a supplier of CNI Chemicals A supplier of chemicals essential for the operations of one or more UK Critical National Infrastructure (CNI) sectors suffers from operational failure within days or weeks.	4	2	Water Sector running cross-Industry Chemicals Group Cross-government emergency response coordinated within Cabinet Office	Nov 2023 Sept 2025

R45 MEDIUM	London Fire Brigade	Aviation crash An airborne collision between a large airliner over a major urban area killing all passengers and crew on board both aircraft (up to 200). It is likely that a small number of people or the ground are killed (up to ten) and injured (around 50) by falling debris. Debris would also cause damage to buildings and road and/or rail transport in the affected area.	1	4	Stringent controls on aircraft entering UK. Airspace including the mandatory use of Aircraft Collision Avoidance systems on heavy aircraft. Access to UK airspace is heavily regulated. Civil Aviation Authority Maintenance Flight safety standards exceed International Civil Aviation Organisation recommendations. Airline maintenance regimes subject to Civil Aviation Authority scrutiny and regulation. Strict controls over London Approach.	Dec 2024 Dec 2026
	London Ambulance Service	Disruption of space-based services Collision of debris with a satellite in Low Earth Orbit (LEO) leads to a debris field that collides with and disrupts other satellites. This causes a cascade of debris impacting other satellites and creating further debris.	2	3	Monitoring by the International Space Station National Space Operations Centre - tracking data	Sept 2023 Sept 2025
R50b MEDIUM	UK Power Network	Regional Failure of the Electricity Network A significant failure of the electricity network across several regions of Great Britain leading to the loss of electricity power of up to 3.5 million customers for up to 24 hours; up to 350,000 customers still off supply for up to 48 hours; up to 20,000 customers off supply for a week; and 1000 customers off electricity supply for up to 2 weeks.	2	3	Testing and maintenance regime. UK Power Networks System Emergency Plan. UK Power Networks Emergency Communication Plan. London Resilience Partnership Frameworks including: • Power Supply Disruption Framework	Nov 2023 Sept 2025
R53 MEDIUM	London Fire Brigade	Radiation Release from overseas nuclear accident A radioactive substance release that affects the UK as a result of a nuclear accident overseas e.g., at a waste storage facility. UK outcome could include initial food restrictions, potential transport disruptions and impacts to the health system, including the presentation of the worried well.	1	4	Emergency Preparedness and Public Information Regulations (REPPIR) Radiation 2019. Control of Substances Hazardous to Health Regulations 2002. Control of Major Accident Hazard 1999 (COMAH) Regulations. The Dangerous Substances and Explosive Atmosphere Regulations 2002. Regulatory Reform (Fire Safety) Order 2005. Site Operators on-site contingency plans. Emergency Services specialist resources	Nov 2022 Nov 2025

R63 MEDIUM	Thames Water	Water Supply Infrastructure Failure of water infrastructure or loss of drinking water caused by the complete and relatively sudden loss of piped water supply or the degradation of the piped supply such that it is unfit for human consumption even after boiling. The reasonable worst-case scenario assumes up to 350,000 people affected for between 24 hours and two weeks.	1	3	Water Industry Act 1991. Security and Emergency Measures Direction 2022. Water companies mutual aid arrangements in place. London Resilience Partnership Frameworks including: Humanitarian Assistance Framework London Water Supply Disruption Framework	Oct 2024 Oct 2026
R55a MEDIUM	Business Sector Panel	Technology Failure at a systematically important retail Bank A technological failure renders a significant portion of a retail bank's IT inoperable. Immediate effects last for 48- 72 hours, with some customers experiencing disruption for several weeks as backlogs are cleared and potentially also some permanent data loss or data corruption.	4	2	Financial services sector plans to deal with a surge in demand for consumer facing financial services. Communication plans to encourage consumer awareness which can be coordinated between HM Treasury, the Bank of England, and the Financial Conduct Authority. Collective incident response capability under the authorities response framework. Business continuity management plans for financial service sector firms and their regulators.	Sept 2023 Sept 2025
R59 MEDIUM		Accidental fire or explosion at an onshore fuel pipeline An accidental fire or explosion occurs at an onshore fuel pipeline situated close to a populated (e.g. urban) area. The fire or explosion would affect up to 1km around site, causing between 10-100 fatalities and between 50-500 casualties.	1	4	The Pipeline Safety Regulations (PSR) 1996. Fuel pipelines are operated under a mature regulatory regime (Pipeline Safety Regulations). Regulatory and industry measures including provision of maps for excavation. Emergency Services and other responder specialist resources.	Dec 2024 Dec 2026

R66 MEDIUM	London Fire Brigade	Radioactive incident caused by mishandling of radioactive material. A radioactive substance released in London because of an accident at a site or during transportation of radioactive material.	1	4	Radiation Monitoring Equipment deployed in affected areas London Fire Brigade Mass Decontamination Procedures Scientific Technical Advice Cell (STAC) Scientific Advice to Government in Emergencies (SAGE) Radiation Protection Advisors London Resilience Partnership Frameworks including CBRN(e) Framework	Dec 2024 Dec 2026
R38 LOW	Local Authorities	Insolvency affecting fuel supply Significant disruption to fuel supplies because of insolvency at a key refinery or terminals. Primary impacts are disruption to the production and/or supply of refined fuel products. Shortages can cause elevated short-term demand.	1	2	Reserve fleet of road tankers. Temporary financial assistance to some organisations to maintain fuel supplies while market responds. Central government arrangements for emergency fuel deliveries from downstream oil industry to maintain deliveries to key sites. London Resilience Partnership Frameworks including Fuel Disruption Framework	Sept 2021 Sept 2025
R41 LOW	Maritime Coastguard Agency	Larger Passenger Vessel Accident An incident involving a passenger vessel in or close to UK waters leading to the ship's evacuation (or partial evacuation). A major incident involving a passenger vessel operating on the tidal Thames within the London Resilience area may result in a major loss of life by drowning.	3	1	Port of London Act 1968 (as amended) General Directions for Navigating in the Port of London Port of London Thames Byelaws 2012 International and national regulation of shipping aimed at preventing accidents by the safe construction, equipment, and operation of ships by competent crews and shipping operators. These regulations are enforced by Flag States and subject to rigorous Port State Control checks, coordinated in European waters MCA (Class V legislation and High-Speed Craft Code) Port Marine Safety Code Port of London Authority Emergency Plans	Dec 2024 Dec 2026
R54 LOW	London Fire Brigade	Radiation exposure from transported, stolen or lost goods Incorrect handling of a stolen radioactive source leads to accidental exposure to radioactive material. Three deaths after a month and eight people requiring long term medical supervision. Up to 500 'worried well'.	1	1	Environmental Permitting Regulations 2016. Emergency Preparedness (REPPIR) and Public Information Radiation Regulations 2019 Radiations Regulations 2017 Radiation detectors at high-risk sites Environment Agency inspections of all major sources. National Arrangements for Incidents involving Radioactivity (NAIR) RADSAFE transport emergency arrangement for radioactive material London Resilience Partnership Frameworks including CBRN(e) Framework	Oct 2024 Oct 2026

R61 LOW	UK Health Security Agency	Accidental work related (laboratory) release of a hazardous pathogen Inadvertent release of a biological agent caused by an unrelated work activity (e.g., Legionella release due to improperly maintained building environmental control systems) that causes up to 7 fatalities and up to 500 people requiring hospital admissions.	1	2	Health & Safety at Work Act etc 1974 Control of Substances Hazardous to Health Regulations 2002 The Notification of Cooling Towers and Evaporative Condenser Regulations 1992 require the notification of wet cooling towers and evaporative condensers to local authorities. Management of Health & Safety at Work Regulations 1999 Reporting of Injuries Diseases and Dangerous Occurrences Regulations	Nov 2023 Sept 2026
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9.2 Human and Animal Diseases

Risk ID Rating	Lead	Outcome Description	Likelihood	Impact	Controls in Place	Last Review Next Review
R78 VERY HIGH	UK Health Security Agency	Pandemic An unmitigated respiratory pandemic with an unassumed transmission route and a high attack rate, with 4% of symptomatic infections requiring hospital care and a case fatality ratio of 2.5%. From start to finish the emergency stage of the pandemic in the UK will last at least 9 months and potentially significantly longer. Approximately 1.34 million people requiring hospital treatment, possibly resulting in up to 840,000 deaths.	4	5	 Public Health (Infectious Disease) Regulations. UK Health Security Agency (UKHSA) Communicable Disease Outbreak Management Guidance (2023). Health and Social Care Act (2012). Health and Care Act (2022). Specific National Health Service (NHS) capacity and response planning. Comprehensive surveillance systems. Procedures related to disease surveillance and early detection. Rapid scientific and clinical advice (e.g., Health Protection Teams (Scientific Advisory Group for Emergencies (SAGE), Scientific & Technical Advice Cell (STAC). International Health Regulations. Public Health (Infectious Disease) Regulations. World Health Organisation (WHO), Department for Health and Social Care (DHSC) and UK Health Security Agency (UKHSA) international and national plans. London Resilience Partnership Frameworks including: London Pandemic Response Framework Tactical Coordinating Protocol London Resilience Communications Framework Excess Deaths Framework 	Dec 2024 Dec 2025

R79 VERY HIGH	UK Health Security Agency	Outbreak of an Emerging infectious disease Based on a contained outbreak of an emerging infectious disease in the UK. The scenario is based on a novel respiratory transmitted virus that emerges zoonotically in another country and causes a regional epidemic in that country. It implicitly assumes an effective public health response is undertaken and the outbreak is ultimately contained. Failure to contain the outbreak would result in a large epidemic in the UK or a pandemic, which is covered under a separate risk (R78). The crucial difference between the two risks is scale. The emerging infectious disease risk presented here assumes at the most 2000 cases because containment measures successfully limit transmission; whereas the pandemic risk assumes the outbreak is not successfully contained, with up to 33.55 million cases and a likely shift in the focus of response measures from containment to management.	4	4	Multi agency High Consequence Infectious Diseases (HCID) networks. Imported Fever Service. Rare and Imported Pathogens Laboratory. Multi-agency pathways for case and contact management and interventions. Health Protection Teams. National Health Service (NHS) and Local Authority Public Health teams. Communicable Disease Outbreak Control management guidance (2023). Multi-agency and organisational command, control and coordination arrangements Incident Management Team. Effective surveillance (international, national and Local) systems and reporting. Organisational learning from Covid-19 and previous outbreaks of High Consequence Infectious Disease, all contributes to the continued preparedness for all future outbreaks.	Dec 2024 Dec 2025
R80b HIGH	Local Authority	Major Outbreak of Animal Disease – Avian Influenza Highly pathogenic avian influenza (HPAI) is a severe, highly infectious influenza causing significant morbidity and mortality in susceptible avian species. Avian influenza is primarily a disease of birds but can be transmissible to humans. Viral spread leading to an outbreak with a 6–8-month duration, resulting in up to 8 million poultry and captive birds either killed by the virus or culled for disease control and export restrictions on trade.	3	3	Notifiable under Public Health legislation. Surveillance Zones. Temporary control zones. Restriction zones. Captive bird (monitoring controlled zone Biosecurity regulations.	Oct 2024 Oct 2025
R80a HIGH	Local Authority	Major outbreak of foot and mouth disease A severe, highly infectious viral disease with significant economic impact, affecting several types of animals including cattle, pigs, sheep, deer and goats. The culling and disposal of approximately 1.9 million animals on over 2,900 premises	2	4	Notifiable under Public Health legislation. Zoonoses Order (1989). European Union (EU) Legislation. Council Directive 2003/85/EC. Movement Controls.	Oct 2024 Oct 2025

R80 LOV	Auto	-	Major Outbreak of Animal Disease – African Swine Fever The disease will be spread by wild boar or feral pigs before transferring to nearby pig farms. Approximately 60 large commercial pig farms would be infected.	1	1	Disease control strategy for African and Classical Swine Fever (2020). DEFRA Contingency Plan for Exotic Animal Disease. Animal Health Act (1981). Current control strategies in place include implementing practices to prevent the illnesses entry in the UK and detection measures.	Oct 2024 Oct 2026
R80 LOV	I Autho		Major Outbreak of Animal Disease – African Horse Sickness The maximum period of viraemia in horses is 18 days. The maximum period in donkeys and mules is 28 days. There is some evidence that the viraemic period in zebras is 40-48 days. a 150km zone of movement ban will be triggered. There is a 99% animal fatality rate. Fatality would occur within a couple of days.	1	1	African Horse Sickness (England) Regulations (2012). African Horse Sickness Control Strategy for Great Britain (2012). Movement of Animals (Restrictions) (England) Order (2002). Implement protection zones (150km radius) and surveillance zones (50km) radius of countries/ with known AHS cases.	Oct 2024 Oct 2026
R80 HIGH	b Local Autho		Major Outbreak of Animal Disease – Avian Influenza Highly pathogenic avian influenza (HPAI) is a severe, highly infectious influenza causing significant morbidity and mortality in susceptible avian species. Avian influenza is primarily a disease of birds but can be transmissible to humans. Viral spread leading to an outbreak with a 6–8-month duration, resulting in up to 8 million poultry and captive birds either killed by the virus or culled for disease control and export restrictions on trade.	3	3	Notifiable under Public Health legislation. Surveillance Zones. Temporary control zones. Restriction zones. Captive bird (monitoring controlled zone Biosecurity regulations.	Oct 2024 Oct 2025

9.3 Societal Risks

Risk ID Rating	Sub-category Lead	Outcome Description	Likelihood	Impact	Controls in place	Last Review Next review
R82 HIGH	Metropolitan Police Service	Public Disorder Disorder on a large scale significantly affecting the emergency services and Government causing criminal damage to public and private property, increased acquisitive crime, arson, rioting, looting and reduced community cohesion	5	3	Intelligence led policing plans Riot and public order legislation National protocols for mutual aid from other UK police forces.	Oct 2024 Oct 2025
R84 HIGH	London Fire Brigade	Industrial action (firefighters) A national fire strike in England for a continuous eight-day period with a loss of life directly attributable to a weakened response by individual fire and rescue services, and reputational impact on government.		3	Police Act (1996) RCN Code on Industrial Action Alternative emergency cover protocols for the Fire Brigade Organisational Business Continuity Arrangements Recall to active duty	Dec 2024 Dec 2025
R87 HIGH	Local Authority	Reception and Integration of British Nationals Arriving from Overseas Reception and integration of up to 10,000 destitute/vulnerable British Nationals (BNs) arriving for 3-4 weeks from overseas. who are not normally resident in the United Kingdom (UK) and are unable to be accommodated.	5	3	Local Authority Social care and emergency housing arrangements. Existing mutual aid agreements in place across London. Heathrow Travel Care (social workers). Full time officer located at Heathrow (alongside Heathrow TravelCare) to consider the issue of repatriation at ports. Position funded by the Foreign & Commonwealth Development Office (FCDO). Red Cross and FCDO agreement on repatriation.	Dec 2024 Dec 2025

R83 MEDIUM	Transport for London	Industrial action (public transport) Strike action by key rail or London Underground staff (e.g., signallers) resulting in the total shutdown of very significant amounts of the national rail network or about ³ / ₄ of the London Underground network. In both cases, severe disruption could last for a week as part of a three-month campaign.	3	2	Health and Safety at Work Act 1974. Employment Act 1980. Employment Act 1988. Public Order Act 1986. Trade Union and Labour Relations (Consolidation) Act 1992. Anti-Social Behaviour Act 2003. Organisational Business Continuity Arrangements	Sept 2023 Sept 2025
R86 MEDIUM	Local Authorities	Industrial action (fuel supply) Actual or threatened significant disruption to the distribution of fuel by road, including as a result of industrial action by fuel tanker drivers. Retail filling stations, depending on the extent of the disruption and their locations and assuming no panic-buying would likely run out of fuel within 4-5 days.	2	2	Legal requirements re: conduct of industrial disputes Stocks of contingency fuel to varying degrees National Emergency Plan for Fuel	Sept 2021 Sept 2024

9.4 Natural Hazards

Risk ID Rating	Lead	Outcome Description	Likelihood	Impact	Controls in Place	Last Review Next Review
R71 VERY HIGH	Met Office	Severe Space Weather Different solar phenomena which drive a sequence of physically realistic events, including coronal mass ejections, solar flares, solar radiation storms and solar radio bursts. Each phenomenon would likely occur several times over a two-week period, with each varying in magnitude, temporal and spatial extent. Estimate of overall cost to the UK is ~£9bn	4	4	Electricity Industry monitoring and analysis of GIC Space Weather is assessed as part of the Daily Hazards Assessment National Grid design standards and response arrangements Alternative positioning, navigation, and timing signal systems Forecasting through Met Office Space Weather Operations Centre	Oct 2024 Oct 2025
R73 VERY HIGH	UK Health Security Agency	High Temperatures and heatwaves Daily maximum temperatures greater than 32C over most of a region for around 2 weeks including at least 5 consecutive days. Up to 1,000 fatalities and 5,000 casualties, mainly amongst the elderly. There could be disruption to power supply, telecommunications, and transport infrastructure within the 2 weeks.	3	4	Health & Safety at Work Act 1974 Public Health Act Climate Change Adaption Strategy for London (Heat Risk) UK Health Security Agency (UKHSA) Adverse Weather and Health Plan (AWHP) UK Health Security Agency (UKHSA) Hot Weather Comms Toolkit Heat-Health Alerts via the Weather- Health Alert System Extreme Heat Warnings via the Met Office. National Severe Weather Warning Service (NSWWS) (Heat –Severe Weather Emergency Protocol (H-SWEP) Guidance London Local Cool Spaces London Resilience Partnership Frameworks including Severe Weather and Natural Hazards Framework	Dec 2024 Dec 2025

L54e VERY HIGH	London Fire Brigade	Major fire in care homes and hospitals Fire causing up to 20 fatalities of vulnerable people in residence causing the closure of an entire hospital or care home.	3	4	 Regulatory Reform (Fire Safety) Order 2005. Fire Safety Approved Document B. Fire & Rescue Services Act 2004. London Fire Brigade Guidance Note 29. London Fire Brigade Operational tactical and building plans. London Fire Brigade Urban Search & Rescue Teams (USAR) Fire Service National Resilience Assets. London Ambulance Service Hazardous Area Response Team (HART). Local Authority Dangerous Structures Engineer. Casualty Bureau. London Resilience Partnership Frameworks including: Mass Fatalities Framework Mass Casualties Framework Humanitarian Assistance Framework 	Dec 2024 Dec 2025
R75c VERY HIGH	Local Authority South West Sub Region	Surface Water Flooding Surface water flooding in a large metropolitan area caused by a warm, unstable atmosphere, most likely to occur in summer due to the warmer atmosphere having a greater water holding capacity, causes a pattern of convective rainfall events.	3	4	Flood and Water Management Act 2010. The Flood Risk Regulations 2009. Land Drainage Act 1991. Water Resources Act 1991. Flood Forecasting Centre – Flood Guidance Statements. New building developments controlled through planning guidelines. Multi Agency Flood Plans. National Flood Emergency Plan. Environment Agency Flood line. Met Office Forecasts and National Severe Weather Warning Service. London Resilience Partnership Frameworks including: • Severe Weather and Natural Hazards Framework • Flood Response Framework	Sept 2023 Sept 2025

R74 VERY HIGH	UK Health Security Agency	Low temperatures and snow Low temperatures and snow (falling and lying) over substantial areas of low-lying land, (below 300m) for at least one week. After an initial fall of snow, there is further snowfall on and off for at least 7 days. Most lowland areas experience some snow fall greater than 10cm at a time, with overall snow depth greater than 30cm. This would coincide with a period of at least 7 consecutive days with a daily mean temperature below -3C. Overnight temperatures would fall below -10C in many areas affected by snow	4	4	Health & Safety at Work Act 1974 Public Health Act UKHSA Adverse Weather and Health Plan (AWHP) Snow and Ice Warnings via the Met Office National Severe Weather Warning Service (NSWWS) Met Office WeatherReady winter preparedness campaign Severe Weather Emergency Protocol (SWEP) Guidance London Local Warm Spaces. London Resilience Partnership Frameworks including Severe Weather and Natural Hazards Framework	Dec 2024 Dec 2025
R76 VERY HIGH	Environment Agency	Drought Following three consecutive and unprecedented dry winters, London is in a severe drought (level 4) situation. Emergency drought orders are in place with millions of properties with severe water supply restrictions and low water pressure (impacting supply to properties at high levels and tower blocks). Increase of illnesses due to reduced use of water impacting on hygiene levels, increased casualties and potentially fatalities. Mental wellbeing impacts communities, and public outrage leads to some disorder issues.	2	5	Water Resources Act 1991 Department for Environment, Food & Rural Affairs (DEFRA) Planning for Major Water and Wastewater Incidents in England and Wales. Drought Plan direction document. Individual water company Drought Plans. Code of Practice and Guidance on Water Restrictions 2011. Floods & Water Management Act 2010. London Resilience Partnership Frameworks including Drought Framework	Oct 2024 Oct 2025

L19 MEDIUM	Environment Agency	Groundwater Flooding Following unprecedented amounts of extended above-average rainfall throughout three winter months, groundwater levels are exceptionally high throughout London. The main areas of concern are in the South East of London, where the geology is predominately chalk.	3	3	Flood and Water Management Act 2010. The Flood Risk Regulations 2009. Land Drainage Act 1991. Water Resources Act 1991. Environment Agency Flood line. Flood Forecasting Centre – Flood Guidance Statements. New building developments controlled through planning guidelines. Multi Agency Flood Plans. National flood emergency plan. London Resilience Partnership Frameworks including: • Severe Weather and Natural Hazards Framework • Flood Response Framework	Oct 2024 Oct 2025
R67 HIGH	Local Authority	Volcanic eruption Volcanic ash incursions for up to 25 days (assumed not to be sulphur-rich) resulting in sporadic and temporary closures of significant parts of UK airspace for up to a total of 15 days (possibly non-consecutive) during a three month eruption period	4	3	Met Office Volcanic Ash Advisory Centre Forecasting CAA Volcanic Ash Safety Regime Airline response plans	Oct 2024 Oct 2025
R72 HIGH	Met Office	Storms Storm force winds affect multiple regions for at least 6 hours during a working day. Most inland and lowland areas experience mean speeds in excess of 55mph and gusts in excess of 85mph.	4	3	Met Office Hazard Manager service. Warning & Informing. Category 1 & 2 responders' emergency response. Business Continuity Management (BCM) and severe weather plans. Highways Agency, Transport for London (TfL) and local authorities' winter road maintenance plans. Met Office forecasts & National Severe Weather Warning Service. London Resilience Partnership Frameworks including: • Severe Weather and Natural Hazards Framework	Oct 2024 Oct 2025

R75a HIGH	Environment Agency	Coastal/Tidal Flooding Localised tidal flooding resulting from sudden breach of a section of the Thames tidal wall or embankment caused by a vehicle collision or construction incident or a failure of a tidal flood gate coinciding with high tides on the River Thames.	3	3	 Thames Barrier and Flood Prevention Act 1972. Flood and Water Management Act 2010. Metropolis Management (Thames River Prevention of Floods) Amendment Act 1879. The Flood Risk Regulations 2009. Land Drainage Act 1991. Water Resources Act 1991. Civil Contingencies Act 2004. Met Office/Environment Agency/ Flood Forecasting Centre forecasts, weather warnings and flood guidance statements. Flood warning service to public and professional partners for flood warning areas. Thames Estuary 2100 (TE2100) Plan. Multi-agency flood plans London Climate Resilience Review 2024 London Resilience Partnership Frameworks including: Severe Weather and Natural Hazards Framework Flood Framework 	Oct 2024 Oct 2025
R77 HIGH	Environment Agency	Poor Air Quality A 30-day period of elevated levels of either ozone or PM2.5 causing increases in death rates among vulnerable populations due to poor air exacerbating respiratory and cardiovascular conditions.	3	3	Air Quality Standards Regulations 2010 European directive on ambient air quality and cleaner air for Europe (2008/50/EC) The UK Air Quality Strategy Environmental Permitting Regulations 2010 Clean Air Act & Environmental Protection Act Local authority air quality management areas and action plans London Mayor's Air Quality Strategy, which encompasses Ultra Low Emissions Zones and Low Emission Neighbourhoods AirTEXT warning system Local Air Quality Action Plans Local Air Quality Monitoring Network GLA Air Quality Action Plan	Oct 2024 Oct 2025

L54c MEDIUM	London Fire Brigade	Fires involving landfill and waste processing sites Major fire lasting several days/weeks with significant environmental and local impacts.	5	2	Regulatory Reform (Fire Safety) Order 2005. Fire Safety Approved Document B. Fire & Rescue Services Act 2004. London Fire Brigade Guidance Note 29. London Fire Brigade Operational tactical and building plans. London Fire Brigade Urban Search & Rescue Teams (USAR). Fire Service National Resilience Assets. London Ambulance Service Hazardous Area Response Team (HART). Local Authority Dangerous Structures Engineer. Casualty Bureau. London Resilience Partnership Frameworks including: Mass Fatalities Framework Mass Casualties Framework Humanitarian Assistance Framework	Dec 2024 Dec 2025
HL21 LOW	London Fire Brigade	Land Movement Roads and access routes are impassable for a time. Emergency access into/out of large, populated areas is difficult or impossible, severe congestion over a wide geographical area. Loss of power and other essential services over a wide geographical area. Potential for a number of persons to be trapped or missing either in landslide itself and/or in collapsed structures.	3	1	Land use planning restrictions Building Control regulations enforced by Local Authorities. Construction, renovation, maintenance, and demolition standards	Nov 2023 Sept 2026
R68 LOW	Local Authorities	Earthquake An earthquake that results in the ground shaking with an intensity of six on the European Macroseismic Scale (EMS), is classed as 'strong'. Many houses and buildings suffer slight non-structural damage like hair-line cracks and the falling of small pieces of plaster.	1	1	London and national generic response plans Mutual aid arrangements. Specialist fire and rescue assets. London Resilience Partnership Frameworks including: • Structural Collapse • Humanitarian Assistance Framework	Sept 2023 Sept 2025

9.5 Hostile State Activity

Risk ID Rating	Lead	Outcome Description	Likelihood	Impact	Controls in Place	Last Review Next Review
R89 VERY HIGH	London Ambulance Service	 High-Altitude Electromagnetic Pulse (HEMP) Detonation of a nuclear device in the atmosphere, triggering a high- altitude electromagnetic pulse near the UK. Electrical and communications infrastructure nationwide would be degraded. Public services would be degraded for an extended period and economic cost to the nation would be significant. 		5	Contingency planning for a large-scale incident of this type would remain with central government	Dec 2024 Dec 2025
R95 VERY HIGH	Metropolitan Police Service	Nuclear attack by a state on the UK mainland or UK overseas interests A nuclear attack by a hostile state actor generating a high number of casualties and extensive, long lasting damage to the area surrounding the strike location. The UK's ability to deliver basic services and governance is degraded for months or years, depending on the severity of the attack.	2	5	 Continuous review of intelligence. London Resilience Partnership Frameworks including: Chemical, Biological, Radiation, Nuclear (explosive) ((CBRN(e)) Framework London Emergency Services Liaison Panel (LESLP) Mass Fatalities Framework, Mass Casualties Framework, Humanitarian Assistance Framework 	Oct 2024 Oct 2025
R32 LOW	Local Authorities	Major interference in UK democratic process A cyber-attack conducted by a hostile state actor on a UK Electoral system during an election period. The attack could disrupt the electoral processes, resulting in data loss or manipulation and impact the result or public confidence in the result.	3	1	Election Cell to respond to emerging issues and ensure integrity in the process DSIT-led National Security & Online Information Team (NSOIT) Joint Election Security and Preparedness Unit Defending Democracy Taskforce	Nov 2023 Nov 2025

9.6 Threats

In this public version of the Borough Risk Register threats and cyber risks are grouped and summarised by the target. Further detail on the types of threats is available in the <u>National Risk Register</u>. Threats are assessed nationally, so reassessment dates are not included.

Risk ID Rating	Outcome Description	Likelihood	Impact	Controls in Place
T1 VERY HIGH	 Larger Scale CBRN Attacks Malicious actors remain interested in chemical, biological, radiological, and nuclear (CBRN) attack methods. In the UK, it is assessed that terrorists are more likely to use knives, vehicles or improvised explosive devices, but the threats of CBRN attacks cannot be ruled out. CBRN attacks have the potential to kill, injure and cause wide-ranging harm. Depending on the method used there is potential for catastrophic blast damage, widespread infection, or contamination of people, the environment, buildings, water supplies and food. A larger-scale CBRN attack has never happened in the UK but would be more challenging to respond to than other malicious attacks, due to the potential health impacts and widespread environmental contamination. CBRN events can also present responders and those affected with significant levels of uncertainty about what has happened, and the scientific evidence may evolve as the incident unfolds. This leads to widespread psychological impacts including anxiety. 		5	Improving methods to detect and monitor CBRN materials, including through the border. Regulating access to hazardous materials and their precursors. Improving and maintaining capabilities to enable emergency responders to respond effectively, rapidly, and safely. Provision of guidance in incidents and increasing public access to information on what to do during general and hazardous materials emergencies. Local and organisational CBRN response plans. Well-developed specialist response capabilities. Access to medical countermeasures and adaptability of other consequence-based plans to respond to unconventional attacks. Decontamination process of people and place regularly trained and tested. Continuity plans to ensure effective civil government can continue throughout and after an incident.
T4 MEDIUM	 Attacks on Publicly Accessible Locations There has been an increase in the frequency of terrorist attacks in the UK since 2017. Nearly all attacks have occurred in public ally accessible locations. A defining feature of such attacks is the targeting of people. This may be random or aimed at a specific group. Impacts may include fatalities and physical and/or psychological casualties, significant damage to 	5	2	Continued warning and informing of crowded places through heightened security alerts and Physical security measures where appropriate. Emergency services response plans & specialist resources Work of Counter Terrorism Security Advisors to raise awareness and provide training. Op Servator hostile reconnaissance disruption operations Targeted

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	and disruption to essential services.			Public awareness campaigns provide advice to the public, including digital tools and e-learning
T2 HIGH	Attacks on Infrastructure Critical National Infrastructure is the facilities, systems, sites, information, people, networks, and processes that keep the UK running and provide the essential services we all rely on. This includes electricity and water services and telecommunications. Attacks could be carried out with a variety of methods, including explosives or cyber-attacks. Consequences of attacks of this nature could include disruption to essential services, possible evacuation of residents or employees, economic impacts.	4	3	UK Government's counter-terrorism strategy (CONTEST) (summarised above) Business continuity plans for loss of essential services helps to minimise disruption to users Well established programme of work to protect infrastructure from terrorism, including protective security advice from the Centre for the Protection of National Infrastructure and local Police services National Cyber Security Centre advises the government and industry on how to secure cyberinfrastructure and respond to incidents Consequence based planning by the authorities ensures that responses to a variety of emergencies are already planned for
T3 HIGH	Attacks on Transport In the UK, conventional terrorist attacks on land and air- based transport are more likely than against maritime transport. Physical attacks could take a variety of forms including explosives, noxious substances or attackers wielding blades. Consequences of an attack on a transport system could include fatalities and physical and/or psychological casualties, disruption to the transport system and negative impacts to the national economy.	4	3	Regulation and monitoring of services by the Department for Transport require certain organisations to deliver a range of security measures. Department for Transport also provides advice and best practise to other sectors "See it. Say it. Sorted." campaign British Transport Police work with industry and Department for Transport on security and provide tailored policing of the railway network Contingency plans developed by operators in conjunction with responders Op Servator hostile reconnaissance disruption operations run by Metropolitan Police Service Protective Security Operations and British Transport Police
T6 HIGH	Medium Scale CBRN Attacks Malicious actors remain interested in chemical, biological, radiological, and nuclear (CBRN) attack methods. In the UK, it is assessed that terrorists are more likely to use knives, vehicles or improvised explosive devices, but the threats of CBRN attacks cannot be ruled out. CBRN attacks have the potential to kill, injure and cause wide-ranging harm. Depending on the method used there is potential for catastrophic blast damage, widespread infection, or contamination of people, the environment, buildings, water supplies and food. Attacks could range from a small target incident, to large	4	3	Improving methods to detect and monitor CBRN materials, including through the border. Regulating access to hazardous materials and their precursors. Improving and maintaining capabilities to enable emergency responders to respond effectively, rapidly, and safely. Provision of guidance in incidents and increasing public access to information on what to do during general and hazardous materials emergencies. Local and organisational CBRN response plans. Well-developed specialist response capabilities. Access to medical countermeasures and adaptability of other consequence-based plans to respond to unconventional attacks. Decontamination process of people and place regularly trained and tested. Continuity plans to ensure effective civil government can continue

	catastrophic events at the highest end of the spectrum, such as the widespread dispersal of a biological agent or the detonation of an improvised nuclear device.			throughout and after an incident.
T6 MEDIUM	Cyber attacks Cyber criminals engage in criminal activity to exploit weaknesses in online systems, usually for financial gain. As well as using technology to commit a crime (such as hacking to steal data), offenders can also increase the scale and reach of a crime (such as cyber-enabled non- fiscal fraud). States and state-sponsored threats tend to be politically motivated and may attempt to access and cause disruption to strategic systems across government and other key sectors.	3	2	National Cyber Security Strategy sets out the government response to ensuring that government, Critical National Infrastructure, business, and citizens are as resilient as possible to cyber threats. The National Cyber Security Centre, part of GCHQ, supports the most critical organisations in the UK to improve their cyber resilience. The National Cyber Security Centre also responds to cyber incidents to minimise harm to the UK, help with recovery and learn lessons for the future. Additional outreach to businesses and the public regarding cyber threats and security Centre for Protection of National Infrastructure providing security and cyber security advice
T7 MEDIUM	Smaller Scale CBRN Attacks Malicious actors remain interested in chemical, biological, radiological, and nuclear (CBRN) attack methods. In the UK, it is assessed that terrorists are more likely to use knives, vehicles or improvised explosive devices, but the threats of CBRN attacks cannot be ruled out. CBRN attacks have the potential to kill, injure and cause wide-ranging harm. Depending on the method used, there is potential for catastrophic blast damage, widespread infection, or contamination of people, the environment, buildings, water supplies and food. Attacks could range from a small target incident to large catastrophic events at the highest end of the spectrum, such as the widespread dispersal of a biological agent or the detonation of an improvised nuclear device.	4	2	Improving methods to detect and monitor CBRN materials, including through the border. Regulating access to hazardous materials and their precursors Improving and maintaining capabilities to enable emergency responders to respond effectively, rapidly, and safely. Provision of guidance in incidents and increasing public access to information on what to do during general and hazardous materials emergencies. Local and organisational CBRN response plans Well-developed specialist response capabilities. Access to medical countermeasures and adaptability of other consequence-based plans to respond to unconventional attacks. Decontamination process of people and place regularly trained and tested. Continuity plans to ensure effective civil government can continue throughout and after an incident.

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10. Risks Removed from the Kensington and Chelsea Risk Register

10.1 Risks removed as not applicable to the Royal Borough

Risk ID	Risk	Rationale		
R42	Major Maritime Pollution Incident	A large oil super tanker would not be able to access the portion of the Thames River that borders the Borough.		
R46	Malicious Drone Incident	There are no major airports within vicinity of borough area.		
R52	Civil Nuclear Accident	Considering reasonable worst-case scenario, there are no nuclear sites within the vicinity of the borough.		
R56	Accidental Fire or explosion at an onshore major hazard (COMAH) site	There are no COMAH sites within vicinity of borough area.		
R57	Accidental large toxic chemical release from a COMAH site	There are no onshore major hazard sites that manufacture, use, or store dangerous substances within vicinity of borough area.		
R58	Accidental fire or explosion on an offshore gas or oil installation	There are no offshore gas or oil installations within vicinity of the borough area.		
R60	Localised industrial accident involving small toxic release (risk to align with 2022 NSRA following risk review in 2024- 25)	There are no heavily industrial areas within RBKC, small scale chemical incidents have previously been reported, examples including swimming pool chemicals, cleaning products and air conditioning refrigerants		
R62	Reservoir/Dam Collapse	No reservoir/ dam within borough.		
R66	Wildfire	There is no urban-rural interface large enough in the borough as the largest green space is only 54 hectares		
L71a	Large aircraft incident in proximity to airport	There is no airport within the vicinity of the borough/ its boarders.		
L71b	Small aircraft incident in proximity to airport	There is no airport within the vicinity of the borough/ its boarders.		
R75b	Fluvial Flooding	There are no ordinary watercourses in the borough		
R85	Industrial action - Prison staff	No prisons within the borough.		

Appendix 1 – LRR 6 Stage Risk Assessment Process

Contextualisation

A range of factors influences the assessment of both likelihood and impact of risks. Demographics, transportation, and environmental factors all exert an influence on how a risk would manifest in a particular area. Each of the 33 Borough Resilience Forums in London uses this local context to develop its own risk assessments.

Hazard identification and allocation for assessment

London Risk Advisory Group identifies the threats and hazards that, in their view, could give rise to an emergency within London in the next two years.

Lead risk assessors agreed by the group then undertake to assess the likelihood of each risk occurring and to make a judgement of how impactful the reasonable worst-case scenarios of that risk would be. Risks included in the London Risk Register are subject to a scheduled review programme to ensure that each risk is revisited and updated periodically.

Risk analysis

Drawing on guidance from Government, other research and local knowledge, lead assessors consider the likelihood of the risk over the next year. Individual Risk Assessments are then provided to the London Risk Advisory Group for discussion and approval.

Risk evaluation

Individual Risk Assessments are confirmed, and summary information is collated into the Borough Risk Register.

Risk treatment

Gaps in capability against the reasonable worst-case scenarios are assessed periodically by the London Resilience Forum, where additional risk management options are agreed upon as necessary.

Monitoring and review

Risk assessment is not a static process and is subject to constant review. At a minimum, each Individual Risk Assessment is formally reviewed on a 2-year cycle. An annual update of the London Risk Register is published in the spring.

Appendix 2 – Likelihood and Impact Scoring Scales

Further detail on the scoring measures is provided in Annex 4D of "Emergency Preparedness" (HM Government, 2005) or Local Risk Management Guidance (available via Resilience Direct).

Likelihood scale

Score	Likelihood Descriptor	Probability of the Reasonable Worst-Case Scenario occurring within a 12 month period			
1	Low	Less than 0.2% chance of occurring per year			
2	Medium Low	Between 0.2% and 1%			
3	Medium	Between 1% and 5%			
4	Medium High	Between 5% and 25%			
5	High	More than 25%			

Impacts Categories

Each impact category is split into several "indicators" which are scored out of five. Indicator scores are amalgamated to reach a score for that category, and the category scores are amalgamated to reach an overall impact score.

Impact Category	Explanation	
Human Welfare	Includes numbers of fatalities and casualties resulting from the reasonable worst-case scenarios, needs for mass evacuation, and short- and long-term accommodation.	
Behavioural Impacts	Psychological impacts of the risk, including how people's perceptions and behaviour might change because of the risk.	
Economic	An approximate net economic cost, including both direct (<i>e.g.</i> , loss of goods, buildings, infrastructure) and indirect (<i>e.g.</i> , loss of business, increased demand for public services) costs.	
Essential Services	How the reasonable worst-case scenarios might impact the emergency services, critical infrastructure, transport, education and other service and infrastructure providers	
Environment	Encompassing long-term impact of contamination or pollution of land, water or air with harmful biological/chemical/radioactive matter or oil, flooding, or disruption or destruction of plant or animal life.	
Security	Includes impacts to law enforcement and intelligence services and disruptions to criminal justice and border security.	

Appendix 3 – Overall Risk Rating Definitions

Very High (VH)	These are classed as primary or critical risks requiring immediate attention. They may have a high or medium likelihood of occurrence, but their potential consequences are such that they must be treated as a high priority. This may mean that strategies should be developed to reduce or eliminate the risks, but also that mitigation in the form of (multi-agency) planning, exercising, and training for these hazards should be put in place and the risk monitored on a regular frequency. Consideration should be given to planning being specific to the risk rather than generic.
High (H)	These risks are classed as significant. They may have a high or low likelihood of occurrence, but their potential consequences are sufficiently serious to warrant appropriate consideration after those risks are classed as 'very high'. Consideration should be given to the development of strategies to reduce or eliminate the risks, but also that mitigation in the form of at least (multi-agency) generic planning, exercising, and training should be put in place and monitored on a regular frequency.
Medium (M)	These risks are less significant but may cause upset and inconvenience in the short term. These risks should be monitored to ensure that they are being appropriately managed, and consideration is given to their being managed under generic emergency planning arrangements.
Low (L)	These risks are both unlikely to occur and not significant in their impact. They should be managed using normal or generic planning arrangements and require minimal monitoring and control unless subsequent risk assessments show a substantial change, prompting a move to another risk category.

Royal Borough of Kensington and Chelsea

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THE ROYAL BOROUGH OF KENSINGTON AND CHELSEA