

Warwickshire's Community Risk Register for 2008

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Risk Assessment in Warwickshire

What is the Community Risk Register?

The purpose of risk assessment is to identify the range of risks present in the community, assess the likelihood of their occurrence, assess the health, social, economic and environmental impacts that would occur in the event of the risk happening, and prioritising the risks identified. This is always based on a worst-case scenario approach. The product of the risk assessment process is called the Community Risk Register (CRR).

What happens after risks have been assessed?

The results of the risk assessment process are used to identify the planning priorities and areas of focus for all resilience work by organisations that have a duty to plan for and respond to emergency situations (Category 1 organisations). Risk 'treatments' and 'controls' are identified, created and developed to mitigate the effect of the risks and inform planning.

Who assess the risk?

Risk is assessed by a sub group of the Local Resilience Forum (LRF), called the Risk Assessment Working Group. All Category 1 organisations have an appropriate representative on the group who provides the 'expert knowledge' for the different types of risks assessed. These risks have been recognised by the Civil Contingencies Secretariat at the Cabinet Office – therefore we follow nationally recognised best practice and guidance. Risk is also assessed at the Regional and National levels. The National Risk Register can be found by accessing the Cabinet Office website: http://www.cabinetoffice.gov.uk/reports/national_risk_register.aspx or by telephoning them on **020 7276 1234**.

When is risk assessed?

Each risk is assessed once a year, after guidance from the Cabinet Office is issued to each LRF area. Some risks are re-assessed more frequently if the need arises.

How is risk assessed?

Risk is assessed by following a particular method laid down in government guidance:

Risk Assessment Methodology

Risks are broken down into categories. These categories are:

- Industrial Accidents and Environmental Pollution
- Transport Accidents

- Severe Weather
- Structural
- Human Health
- Animal Health
- Industrial Action
- International Events
- Industrial Technical Failure

Within each category the individual risks are identified, with a worst-case scenario outcome description of the effect each would have if it occurred. This information is provided by the Cabinet Office, which forms best practice guidance.

Each risk is then assessed for the potential **impact**. The impact on health, social, economic and the environment is assessed:

Impact Category Explanation:

- **Health** Encompassing direct health impacts (numbers of people affected, fatalities, injuries, human illness or injury, health damage) and indirect health impacts that arise because of strain on the health service.
- **Social** Encompassing the social consequences of an event, including availability of social welfare provision; disruption of facilities for transport; damage to property; disruption of a supply of money, food, water, energy or fuel; disruption of an electronic or other system of communication; homelessness, evacuation and avoidance behaviour; and public disorder due to anger, fear, and/or lack of trust in the authorities.
- **Economic** Encompassing the net economic cost, including both direct (e.g. loss of goods, buildings, infrastructure) and indirect (eg loss of business, increased demand for public services) costs.
- **Environment** Encompassing 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.

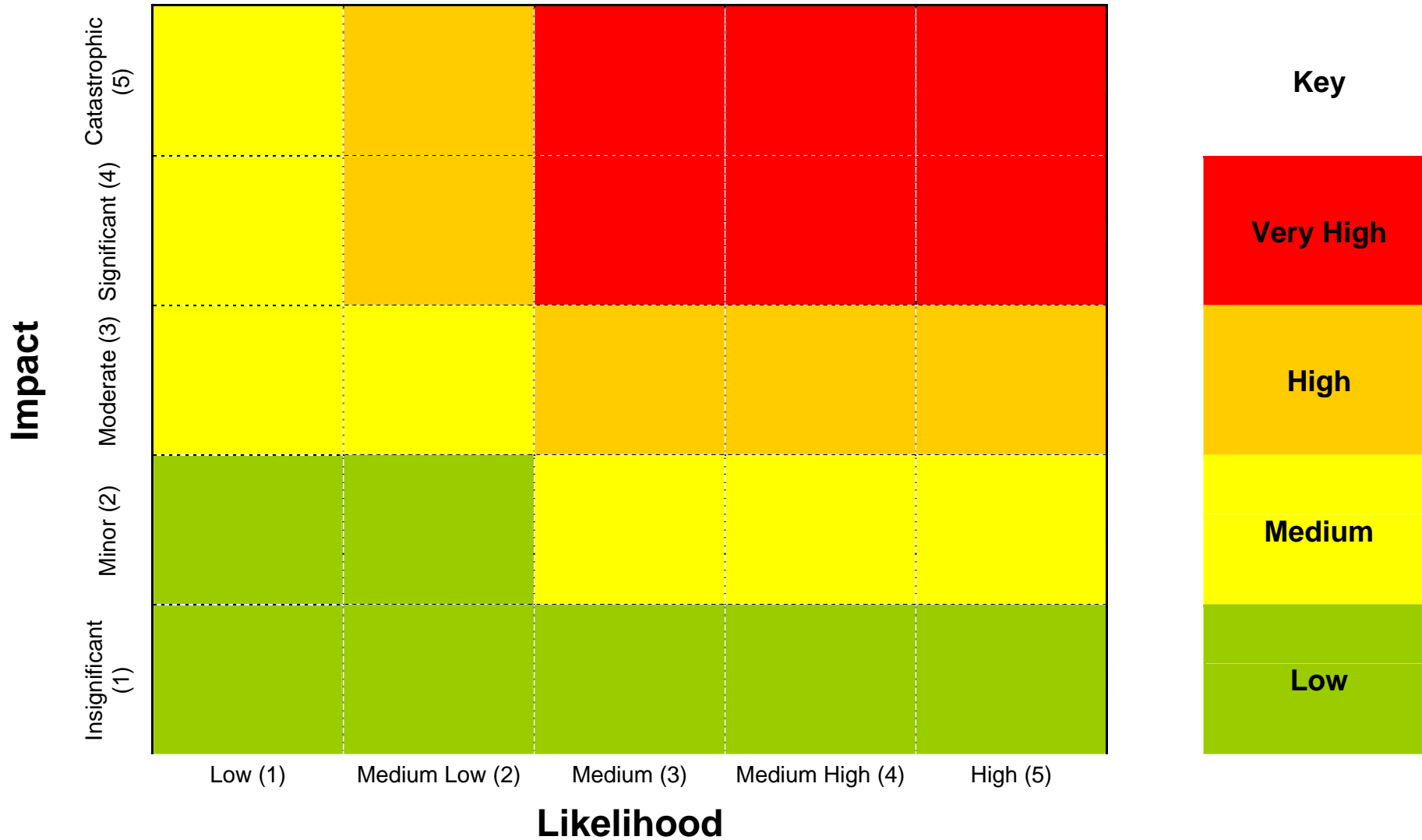
The impact for each category is measured on a score from 1 (minimal impact) to 5 (catastrophic impact). The average score from the 4 categories then becomes the overall impact score for each individual risk. Along with the assessment of impact, the **likelihood** of the risks occurrence in Warwickshire is then assessed:

Likelihood scoring scale:

Level	Descriptor	Likelihood over 5 years	Likelihood over 5 years
1	Low	>0.005%	>1 in 20,000 chance
2	Medium Low	>0.05%	>1 in 2,000 chance
3	Medium	>0.5%	>1 in 200 chance
4	Medium High	>5%	>1 in 20 chance
5	High	>50%	>1 in 2 chance

Once the **impact** and **likelihood** scores have been assessed, they are plotted onto a matrix, which gives the **overall risk rating**:

Risk Rating Matrix:



Definitions of Risk Ratings:

- **Very High (VH) risk** – these are classed as primary or critical risks requiring immediate attention. They may have a high or low 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) risk** – 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 classed as ‘very high’. Consideration should be given to the development of strategies to reduce or eliminate the risks, but also mitigation in the form of at least (multi-agency) generic planning, exercising and training should be put in place and the risk monitored on a regular frequency.
- **Medium (M) risk** – 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 given to their being managed under generic emergency planning arrangements.
- **Low (L) risk** – 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.

Risk Prioritisation:

Once all the risks have been ‘rated’ they are then numerically prioritised by the level of their rating so the focus of resilience work and planning is undertaken based on order of priority. The highest rated risks will be addressed before the lower rated risks.

This document displays the risk assessment results for non-malicious events rather than for those caused deliberately (malicious threats). These threats are being addressed but remain a confidential aspect to the risk register.

Below is the Community Risk Register for Warwickshire:

Warwickshire's Community Risk Register 2008

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
INDUSTRIAL ACCIDENTS AND ENVIRONMENTAL POLLUTION								
H1	Fire or explosion at a gas terminal as well as LPG, LNG, and other gas onshore feedstock pipeline and flammable gas storage sites	Up to 3km around the site causing up to 500 fatalities and up to 1500 casualties. Gas terminal event likely to be of short duration once feed lines are isolated; event at a storage site could last for days if the explosion damaged control equipment.	Moderate	Medium Low	MEDIUM	7	Fire & Rescue	March 2009
HL1	Fire or explosion at a gas terminal or involving a gas pipeline	Up to 3km around the site causing up to 10 fatalities and 100 casualties.	Minor	Low	LOW	12	Fire & Rescue	March 2009
HL25	Fire or explosion at a gas terminal as well as LPG, LNG, and other gas onshore feedstock pipeline and flammable gas storage sites	Up to 1km around site, causing up to 50 fatalities and 150 casualties	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
H2	Fire or explosion at an onshore ethylene gas pipeline	Up to 3km around site causing up to 500 fatalities and 1500 casualties.	NO ethylene gas pipelines in Warwickshire area		N/A			
HL26	Localised fire or explosion at an onshore ethylene gas pipeline	Up to 1km around site causing up to 150 fatalities and 450 casualties	NO ethylene gas pipelines in Warwickshire area		N/A			
H3	Fire or explosion at an oil refinery	Up to 3km around site causing up to 500 fatalities and 1500 casualties. Depending on the location and size of the release, the fire could burn for several days.	NO Oil refinery in Warwickshire		N/A			
HL27	Localised fire or explosion at an oil refinery.	Up to 1km around site, causing up to 150 fatalities and 500 casualties	NO Oil refinery in Warwickshire		N/A			

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL7	Industrial explosions and major fires	Up to 1km around site causing up to 20 casualties, some of a serious nature. Explosions would cause primarily crush / cuts and bruise-type injuries, as well as burns.	Moderate	Medium Low	MEDIUM	7	Fire & Rescue	March 2009
H4	Fire or explosion at a fuel distribution site or a site storing flammable and/or toxic liquids in atmospheric pressure storage tanks.	Up to 3km around the site causing up to 150 fatalities and up to 2000 casualties.	Significant	Medium Low	HIGH	4	Fire & Rescue	March 2009
HL28	Localised fire or explosion at a fuel distribution site or a tank storage of flammable and or/toxic liquids.	Up to 1km around the site, causing up to 15 fatalities and 200 casualties	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
H5	Fire or explosion at an onshore fuel pipeline	Up to 1km around site causing up to 100 fatalities and up to 500 casualties.	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
H6	Fire or explosion at an offshore oil / gas platform	Local to site causing up to 200 fatalities and up to 200 casualties.	NO coastline		N/A			
H7	Explosion at a natural gas pipeline	Local to site causing up to 200 fatalities and up to 200 casualties.	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
HL30	Localised explosion at a natural gas pipeline	Causing up to 100 fatalities and up to 100 casualties.	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
H8	Very large toxic chemical release	Up to 10km from site causing up to 2000 fatalities and up to 10,000 casualties. Toxic release could be due to loss of containment of chlorine – or of a number of other chemicals e.g. anhydrous hydrofluoric acid, refrigerated ammonia, sulphur di-oxide (or tri-oxide) gas.	Significant	Low	MEDIUM	9	Emergency Planning Unit	March 2009
H9	Large toxic chemical release	Up to 3km from site causing up to 50 fatalities and up to 2000 casualties.	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL2	Localised industrial accident involving large toxic release (e.g. from a site storing large quantities of chlorine)	Up to 3km from site causing up to 30 fatalities and up to 250 casualties.	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009
HL3	Localised industrial accident involving small toxic release	Up to 1km from site causing up to 10 fatalities and up to 100 casualties.	Moderate	Medium	HIGH	3	Emergency Planning Unit	March 2009
H10	Radioactive substance release from nuclear reactor accident	Up to 4km from site causing up to 150 fatalities and 1500 casualties	NO reactors within / close to Warwickshire		N/A			
HL31	Limited radioactive substance release from a nuclear accident	Up to 1km from site causing up to 50 fatalities and 500 casualties	AWAITING SCORE					
H11	Accidental release of radioactive material from incorrectly handled or disposed of sources.	Up to 5 fatalities and 100 contaminated people requiring medical monitoring. Many worried people may present at hospitals. Radiation may be spread over several kilometres but most concentration where source is opened.	Moderate	Low	MEDIUM	10	Health Protection Agency	March 2009
H12	Biological substance release from facility where pathogens are handled (e.g. pathogen release from containment laboratory)	Up to 10 fatalities and serious injuries or offsite impact causing up to 1000 casualties.	Moderate	Medium Low	MEDIUM	7	Health Protection Agency	March 2009
H46	Biological substance release during an unrelated work activity or industrial process (e.g. Legionella release due to improperly maintained building environmental control systems)	Up to 10 fatalities and serious injuries or offsite impact requiring up to 1000 casualties.	Moderate	Medium High	HIGH	2	Health Protection Agency	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
H14	Major contamination incident widespread implications for the food chain arising from: (a) Industrial accident (chemical, microbiological, nuclear) affecting food production areas e.g. Chernobyl, Sea Empress oil spill, animal disease. (b) Contamination of animal feed e.g. dioxins BSE (c) Incidents arising from production processes e.g. adulteration of chilli powder with Sudan 1 dye.	Food production / marketing implications depending on scale and area affected e.g. major shellfisheries, dairy, livestock production areas. Potential direct animal and consumer health affects. Consumer confidence affected leading to lost markets or panic buying.	Moderate	Medium High	HIGH	2	Emergency Planning Unit	March 2009
H15	Maritime Pollution	Release of 100,000 tonnes of crude oil into the sea, polluting up to 200km of coastline	NO Coastline		N/A			
HL4	Major pollution of controlled waters	Pollution incident impacting upon controlled waters, (for example, could be caused by chemical spillage or release of untreated sewage) leading to persistent and / or extensive effect on water quality, major damage to aquatic ecosystems, closure of potable abstraction point(s), major impact on amenity (i.e. tourism) value, serious impact on human health.	Moderate	Medium	HIGH	3	Environment Agency	March 2009
HL5	Major land contamination incident	Pollution incident (for example chemical spillage) leading to persistent and/or extensive effect on land quality, major damage to terrestrial ecosystems, property and amenity (i.e. tourism) value and major damage to agriculture/commerce, serious impact on human health.	Moderate	Medium Low	MEDIUM	7	Environment Agency	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL33	Forest or moorland fire	Forest or moorland fire across up to 50 hectares. Evacuation of up to 100 residential homes required. Up to 5 fatalities and 20 casualties.	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
TRANSPORT ACCIDENTS								
H42	Rapid accidental sinking of a passenger vessel in or close to UK waters.	500 fatalities and 1000 casualties, potentially with blockage of major sea-lane or port.	NO Vessels of this size operating in Warwickshire		N/A			
HL34	Fire, flooding stranding or collision involving a passenger vessel in or close to UK waters leading to ship's evacuation or partial evacuation at sea.	Up to 250 fatalities and 500 casualties.	NO Coastline		N/A			
HL8	Fire, flooding or stranding or collision involving a passenger vessel in or close to UK waters or on inland waterways, leading to ship's evacuation.	Up to 50 fatalities and up to 300 casualties.	Moderate	Low	MEDIUM	10	Police	March 2009
HL37	Release of significant quantities of hazardous chemicals / materials as a result of a major shipping accident.	Up to 50 fatalities and up to 250 casualties. Significant environmental / ecological damage.	NO Vessels of this size operating in Warwickshire		N/A			
H16	Aviation accident over major conurbation	Loss of up to two aircraft and passengers, with debris over a semi-urban area. Up to 600 fatalities and up to 300 casualties.	Catastrophic	Low	MEDIUM	8	Police	March 2009
HL9	Aviation accident	Causing up to 50 fatalities and up to 250 casualties.	Moderate	Low	MEDIUM	10	Police	March 2009
HL10	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 carriageways causing major disruption and delays.	Moderate	Medium High	HIGH	2	Police	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL11	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.	Moderate	Low	MEDIUM	10	Police	March 2009
HL12	Local accident involving transport of hazardous chemicals	Up to 50 fatalities and up to 500 casualties (direct injuries from the accident would be similar to road or rail accidents; indirect casualties are possible if substance covers a wide area). The extent of the impact would depend on substance involved, quantity, nature and location of accident. The assumption is based on phosgene / chlorine.	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009
HL13	Maritime accident or deliberate blockage resulting in blockage of access to key port, estuary, maritime route for more than one month	Fatalities / injuries minor. Loss of port is likely to have an initial wider impact, but will quickly reduce as shippers seek alternative ports or methods of shipping. Economic impact on local dependent business.	NO Ports, estuaries, maritime routes		N/A			
HL14	Local (road) accident involving transport of fuel / explosives	Up to 30 fatalities and up to 20 casualties within vicinity of accident / explosion. Area would require evacuating up to 1km radius depending on substances involved. Potential release of up to 30 tonnes of liquid fuel into local environment, watercourses etc. Large quantities or fire fighting media (foam) would impact on environment. Roads	Moderate	Low	MEDIUM	10	Fire & Rescue	March 2009

and access routes impassable for time. Emergency access into/out of large populated areas difficult or impossible.

SEVERE WEATHER

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
H17	Storms and gales	Storm force winds affecting most of the county for at least 6 hours. Most inland, lowland areas experience mean speeds in excess of 55 mph with gusts in excess of 85 mph. Consequent damage to infrastructure (e.g. telecommunications, power and transport).	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009
H18	Low temperatures and heavy snow	Snow falling and lying over most of the area for at least one week.	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009
H48	Heat wave	Daily maximum temperatures above 30°C and minimum temperatures above 15°C over most of the area for at least 5 consecutive days.	Minor	Medium Low	LOW	11	Emergency Planning Unit	March 2009
H50	Drought	Periodic water supply interruptions affecting businesses for up to 10 months. Emergency Drought orders in place authorising rota cuts in supply according to needs of priority users as directed by SofS.	Likelihood of Drought occurring to this scale is so unlikely it is deemed not necessary to assess.		N/A			

<p>H19</p>	<p>Major coastal and tidal flooding affecting more than two UK regions</p>	<p>Many coastal regional and tidal reaches of rivers affected. Major sea surge, tides, gale force winds and potentially heavy rain fall. Excessive tide levels and many coastal and/or estuary defences overtopped or failing. Drains 'back-up'. Inundation from and beaches of defences would be rapid and dynamic with minimal warning and no time to evacuate. Inundation from overtopping of defences would allow as little as 1 hour to evacuate. Widespread structural damage. Flooding of up to 300,000 properties for up to 14 days. Up to 150 fatalities, 2000 casualties and up to 2000 missing persons. Up to 0.4m people (incl. tourists) in coastal villages and towns evacuated from flooding sites. People stranded over a large area and up to 40,000 people in need of rescue. Up to 75,000 people needing assistance with sheltering for up to 12 months.</p>	<p>NO coastline</p>	<p>N/A</p>	
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<p>HL16</p>	<p>Local coastal / tidal flooding (affecting more than one UK region).</p>	<p>Sea surge, spring tides, gale force winds and/or heavy rainfall affecting more than one Region, some defences overtopped or failing at multiple locations. Flooding of 1000 to 10,000 properties for up to 14 days. Up to 20 fatalities, 300 casualties and up to 200 missing persons. Up to 50,000 people (including tourists) in coastal villages and towns evacuated from flooded sites. People stranded over a large area and up to 5,000 people in need of rescue. Up to 10,000 people needing assistance with sheltering for up to 12 months. Multi-agency response invoked, possible large-scale evacuation required. Suddenness of failure of defences would not be possible to predict. Tidal inundation would be rapid and wave impact would cause structural damage to properties. Impact on infrastructure includes: widespread disruption for 7-14 days, salt damage, road and bridge damage, debris and contaminated water supplies and pollutants from affected businesses. Rural impacts include: widespread livestock carcasses, waterborne disease. Sewage treatment works flooded. Numerous properties destroyed. Many more uninhabitable for 12 months.</p>	<p>NO Coastline</p>	<p>N/A</p>	
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<p>HL17</p>	<p>Local coastal / tidal flooding</p>	<p>Sea surge, spring tides, and/or gale force winds affecting the coastline and one region, some defences overtopped or failing at a single location. Localised impact with infrastructure affected and up to 1000 properties flooded for up to 14 days. Up to 10 fatalities, 150 casualties and up to 100 missing persons. Up to 20,000 people (including tourists) in coastal villages and towns evacuated from flooded sites. People stranded over a large area and up to 2,000 people in need of rescue. Up to 3,000 people needing assistance with sheltering for up to 12 months. Multi-agency response invoked with some local evacuation and cordoning off of affected areas. Tidal inundation would be rapid and wave impact would cause structural damage to properties. Impact on infrastructure includes: localised disruption for up to 7 days, salt damage, road damage, debris and contaminated local water supplies and pollutants from affected businesses. Rural impacts include: livestock carcasses, water-borne disease. Some properties destroyed and others inhabitable for 12 months.</p>	<p>NO coastal / tidal flooding</p>	<p>N/A</p>	
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<p>H21</p>	<p>Flooding: Major fluvial flooding affecting parts of more than two UK regions.</p>	<p>A single massive fluvial event or multiple concurrent regional events following a sustained period of heavy rainfall extending over two weeks (perhaps combined with snow melt). The event would incur major fluvial flooding affecting a large, single urban area. Closure of primary transport routes. Some infrastructure collapse. Sediment movement and contamination of water supplies. Loss of essential services (gas, electricity and telecoms) to 0.2m homes for up to 14 days. Up to 12500 people needing assistance with sheltering for up to 12 months. Significant economic damage. Urban area dimensions: flooding of up to 40,000 properties for up to 7 days. Up to 50 fatalities and 500 casualties. Up to 100,000 evacuated. Up to 2000 people in need of rescue. Rural area dimension: flooding of up to 10,000 properties for up to 2 days. Up to 20 fatalities and 300 casualties. Up to 50,000 people in rural villages and towns evacuated. People stranded over a large area and up to 2,500 in need of rescue.</p>	<p>NO coastline</p>	<p>N/A</p>	
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RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL18	Local fluvial flooding (rivers and streams or surface run-off)	<p>A sustained period of heavy rainfall extending over two weeks, perhaps combined with snow melt, resulting in steadily rising river levels across entire counties and could threaten a large urban town. Localised flooding of 1000 to 10,000 properties for 2 - 7 days. Up to 15 fatalities and 150 casualties. Up to 15,000 people evacuated. Up to 500 people stranded over a large area and in need of rescue. There would be a major impact on roads and rail links, making them impassable for up to 5 days. Impact on Infrastructure includes: some buildings collapse, water damage, road and bridge damage. Sediment movement and contamination of water supplies. Loss of essential services (gas, electric & telecoms) to up to 20,000 homes for up to 14 days. Widespread disruption for 7-14 days, significant debris and pollutants from affected businesses. Up to 1000 people needing assistance with sheltering for up to 12 months. Rural impacts include: widespread livestock carcasses, waterborne disease. Sewage treatment works flooded. Up to 50 properties destroyed and more uninhabitable. Up to 2000 people needing assistance with sheltering for up to 12 months.</p>	Moderate	Medium	HIGH	3	Environment Agency	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL19	Local fluvial flooding (rivers & streams)	<p>A sustained period of heavy rainfall extending over two week, perhaps combined with snow melt, resulting in steadily rising river levels within a region.</p> <p>Localised flooding of 100 to 1000 properties for 2 - 7 days. Up to 5 fatalities and 50 casualties. Up to 5000 people evacuated. Up to 200 people stranded over a large area and in need of rescue. There would be some impact on minor roads and some A roads and trunk roads impassable for a time. Some main rail lines may need to be closed for a week (for repairs etc) Most water-ways would be closed to traffic because of strong currents and high water levels. Impact on infrastructure includes, water damage, road and bridge damage. Sediment movement and contamination of local water supplies. Localised loss of essential services (gas, electric & telecoms) to 5000 for up to 14 days. Up to 250 people needing assistance with sheltering for up to 12 months. Substantial disruption within a country for 7-14 days. Significant debris and pollutants clear up needed.</p>	Moderate	Medium High	HIGH	2	Environment Agency	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL20	Localised, extremely hazardous flash flooding.	Heavy localised rainfall in steep valley catchments leading to extremely hazardous flash flooding (e.g. high velocities and depths). Likely that no flood defences in place. Probably no flood warning service available / or suddenness of event means timely flood warnings are not possible. Flooding of up to 200 properties. (NB: the outcome is essentially the same as H44 - dam or reservoir failure)	Moderate	Medium High	HIGH	2	Environment Agency	March 2009
STRUCTURAL								
HL21	Land movement (i.e. caused by tremors and landslides)	Roads and access routes impassable for a time. Emergency access into / out of large populated areas difficult or impossible; severe congestion over wide geographical area. Loss of power and other essential services over wide geographical area. Potential for a number of persons to be trapped or missing either in landslide itself and / or in collapsed structures. Up to 5 fatalities depending on the size and location of land movement.	Moderate	Low	MEDIUM	10	Emergency Planning Unit	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HL22	Building collapse	Potential for a number of persons to be trapped or missing. Localised loss of power and other essential services. Local access routes affected due to road closures. Up to 5 fatalities depending on the size and construction of the building, occupation rates.	Moderate	Medium Low	MEDIUM	7	Fire & Rescue	March 2009
HL23	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 a number of persons to be trapped or missing.	Minor	Low	LOW	12	Emergency Planning Unit	March 2009
H44	Major reservoir dam failure / collapse	Collapse without warning resulting in almost instantaneous flooding. Significant movement of debris (including vehicles) and sediment. Complete destruction of some residential and commercial properties and serious damage of up to 500 properties. Several thousand other properties could be flooded. Up to 200 fatalities. Up to 1000 casualties. Up to 50 missing persons and people stranded. Hazardous recovery amongst collapsed infrastructure and debris. Water supply to home and business is lost. Up to 200 people need temporary accommodation for 2-18 months.	Moderate	Low	MEDIUM	10	Emergency Planning Unit	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
HUMAN HEALTH								
H22	Influenza type disease (epidemic)	A serious epidemic of much greater severity than the usual seasonal flu. Weekly GP consultations for new episodes of flu-like illnesses likely to exceed 400 per 100,000 of population at peak (compared with peak of around 200 per 100,000 population per week in an average year).	Significant	Medium High	VERY HIGH	1	Health Protection Agency	March 2008
H23	Influenza type disease (pandemic)	Each pandemic is different and the nature of the virus and its impacts cannot be known in advance. Previous pandemics have led to different outcomes. Based on understanding of previous pandemics a pandemic is likely to occur in one or more waves, possibly weeks or months apart. Each wave may last up to 15 weeks. Up to half the population could be affected. High number of cases could overwhelm health and other critical services and adversely affect business and the economy. The advice is "business as usual wherever practicable" and "stay at home and phone the national flu line if you feel unwell". All ages may be affected, but until the virus emerges we cannot know which groups will be most at risk.	Significant	Medium High	VERY HIGH	1	Health Protection Agency	March 2009

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
H24	Emerging infectious diseases	Based on a SAR's outbreak resulting in up to 100 fatalities and 2000 casualties.	Moderate	Medium Low	MEDIUM	7	Health Protection Agency	March 2009
HL24	Legionella / meningitis outbreak	Localised outbreak of a disease, which could cause up to 10 fatalities and up to 50 casualties.	Moderate	Medium	HIGH	3	Health Protection Agency	March 2009
ANIMAL HEALTH								
H25	Non-zoonotic notifiable animal diseases (e.g. foot and mouth disease (FMD), Classical Swine fever, Blue Tongue, and Newcastle disease of birds).	Slaughter of up to 2 million affected and exposed livestock plus the possibility of a significant number of animals culled for welfare reasons.	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009
H26	Zoonotic notifiable animal diseases (e.g. Highly Pathogenic Avian Influenza (HPAI), Rabies and West Nile Virus)	Culling of up to 30 million poultry.	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009
INDUSTRIAL ACTION								
HL42	Loss of cover due to industrial action by workers providing a service critical to the preservation of life (such as emergency service workers). Relates to health sector only.	A number of three day strikes with significant support over a two-month period affecting a single emergency service.	Significant	Medium Low	HIGH	4	Primary Care Trust	March 2009
H30	Emergency services: loss of emergency fire and rescue cover because of industrial action.	A series of strikes by fire fighters takes place, spread over a period of two months, perhaps lasting up to 24 hours each.	Minor	Medium High	MEDIUM	5	Fire & Rescue	March 2009
H31	Significant or perceived significant constraint on the supply of fuel e.g. industrial action by contract drivers for	Filling stations, depending on their locations, would start to run dry between 24 - 48 hours. Panic buying would exacerbate the	Minor	Medium High	MEDIUM	5	Police	March 2009

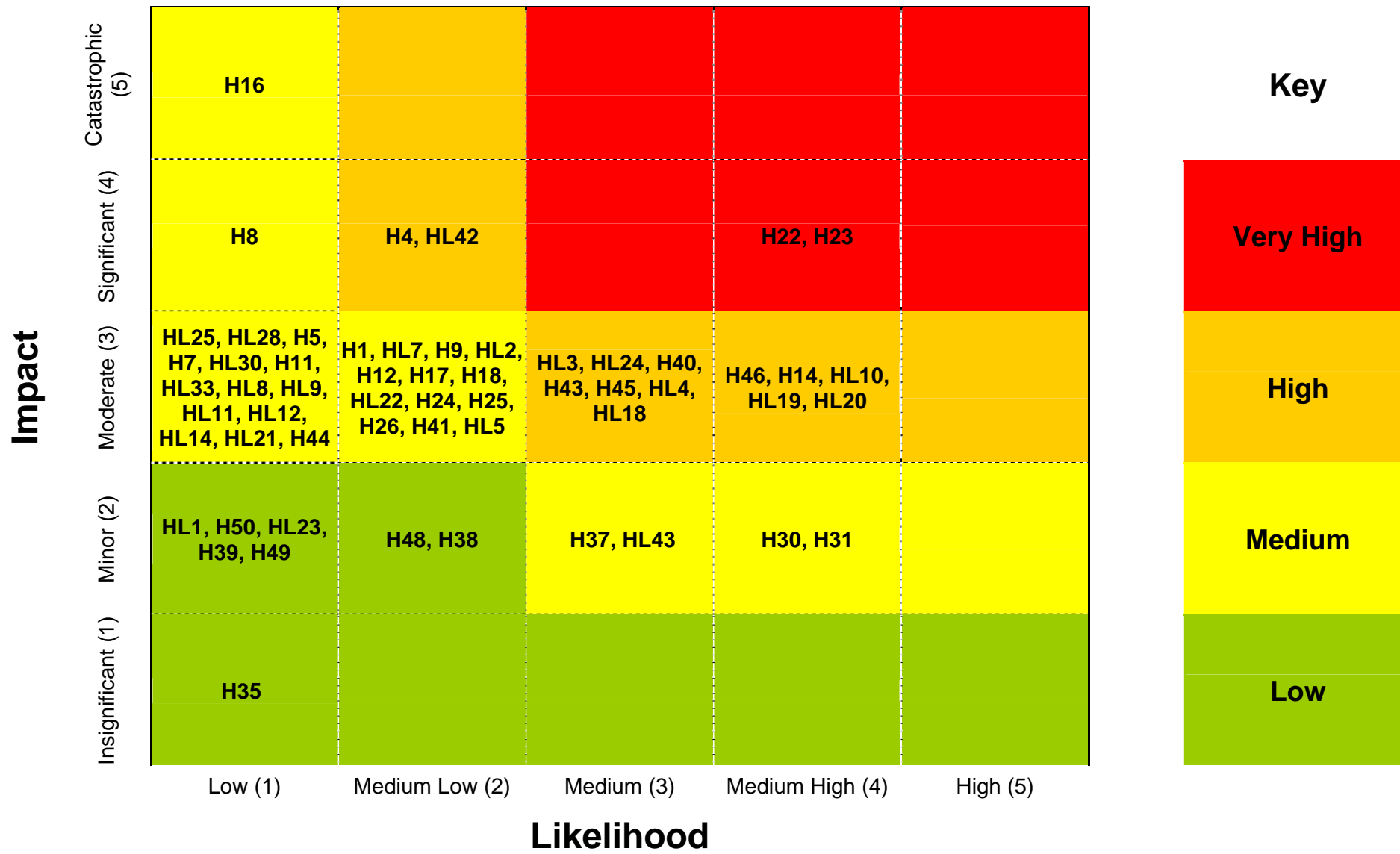
RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
	fuel.	situation. Replenishment of sites would take between 3 - 10 days depending on location.						
H33	Prison Officer Strike	Prisoner Officer Strike action, for up to 48 hours in 80% of prisons.	Pending Cabinet Office Guidance					
H35	Industrial action by key rail workers	Strike action in the total shut down of (either London Underground or) the rail network on a national scale (e.g. action by key rail workers, e.g. infrastructure workers such as signallers) for greater than 3 days. Greater impact if action occurs in a co-ordinated manner.	Insignificant	Low	LOW	13	Emergency Planning Unit	March 2009
INTERNATIONAL EVENTS								
H37	International security incident resulting in influx of British Nationals.	Up to 50,000 British Nationals returning to UK within a 4-6 week period following serious regional conflict, a sustained terrorism campaign against UK and other Western nationals, or an uncontrolled outbreak of pandemic flu.	Minor	Medium	MEDIUM	6	Emergency Planning Unit	March 2009
HL43	International security or pandemic health situation resulting in influx of British Nationals.	Within the figure of H37, up to 10,000 British Nationals deciding to return to UK to a single region within a 4-6 week period following serious regional conflict, a sustained terrorism campaign against UK and other Western nationals or an uncontrolled outbreak of pandemic flu.	Minor	Medium	MEDIUM	6	Emergency Planning Unit	March 2009

INDUSTRIAL TECHNICAL FAILURE

RISK REF	RISK CATEGORIES (AND SUB CATEGORIES)	OUTCOME DESCRIPTION	IMPACT	LIKELIHOOD	RISK RATING	RISK PRIORITY	LEAD ASSESSOR	REVIEW DATE
H38	Technical failure of upstream (offshore) oil/gas network leading to a disruption in upstream oil and gas production.	Catastrophic accident destroying all parts of a critical upstream facility and, in the worst case, taking months or more to restore normal levels of service. This could potentially result in up to 15% loss of gas supply to UK, which could impact on power generation if demand were high. As 40% of power is generated by gas fired stations then a reduction in generation might be felt. Downstream oil would not be so adversely affected given alternative means of supply.	Minor	Medium Low	LOW	11	Emergency Planning Unit	March 2009
H39	Failure of water infrastructure or accidental contamination with a non-toxic contaminant.	Loss of or non-availability for drinking, of the piped water supply, for up to 50,000 people, for more than 24 hours and up to three days.	Minor	Low	LOW	12	Emergency Planning Unit	March 2009
H49	Loss of drinking water supplies due to a major accident, affecting infrastructure.	Loss of or non-availability for drinking, of the piped water supply, for a population of up to 200,000 for more than 24 hours and up to one week.	Minor	Low	LOW	12	Emergency Planning Unit	March 2009
H40	No notice loss of significant telecommunications infrastructure in a localised fire, flood or gas incident.	Loss of telecommunications for up to 100,000 people for up to 72 hours.	Moderate	Medium	HIGH	3	Emergency Planning Unit	March 2009
H41	Technical failure of electricity network	Partial or total blackout for up to 3 days. Destabilisation of the National Grid. Possible loss of life support machines, civil unrest, no alarms, street lighting etc... Back up generators available for limited time in some instances.	Moderate	Medium Low	MEDIUM	7	Emergency Planning Unit	March 2009

H43	Telecommunication infrastructure – human error	Widespread loss of telecommunications (including public land line and mobile networks) at a regional level for up to 5 days.	Moderate	Medium	HIGH	3	Emergency Planning Unit	March 2009
H45	Technical failure of electricity network	Total shutdown of the electricity supply over an entire region (or devolved administration), occurring during working hours and lasting 24 hours.	Moderate	Medium	HIGH	3	Emergency Planning Unit	March 2009

Warwickshire's Risk Matrix



Risk Priority List

PRIORITY 1 - VERY HIGH (Significant / Medium High)	
H22	Influenza type disease (epidemic)
H23	Influenza type disease (pandemic)
PRIORITY 2 – HIGH (Moderate / Medium High)	
H46	Biological substance release during an unrelated work activity or industrial process
H14	Major contamination incident, widespread implications for the food chain
HL19	Local fluvial flooding (rivers & streams)
HL20	Localised, extremely hazardous flash flooding.
HL10	Local accident on motorways and major trunk roads
PRIORITY 3 – HIGH (Moderate / Medium)	
HL3	Localised industrial accident involving small toxic release
HL24	Legionella / meningitis outbreak
H40	No notice loss of significant telecommunications infrastructure in a localised fire, flood or gas incident
H43	Telecommunications infrastructure – human error
HL4	Major Pollution of Controlled Waters
HL18	Local fluvial flooding (rivers and streams or surface run-off)
H45	Technical failure of the electricity network
PRIORITY 4 – HIGH (Significant / Medium Low)	
HL42	Loss of cover due to industrial action by workers providing a service critical to the preservation of life
H4	Fire or explosion at a fuel distribution site or a site storing flammable and/or toxic liquids
PRIORITY 5 – MEDIUM (Minor / Medium High)	
H30	Emergency Services: loss of emergency fire & rescue cover because of industrial action
H31	Significant or perceived significant constraint on the supply of fuel
PRIORITY 6 – MEDIUM (Moderate / Medium)	
H37	International security incident resulting in influx of British Nationals (up to 50,000)
HL43	International security or pandemic health situation resulting in influx of British Nationals (up to 10,000)
PRIORITY 7 – MEDIUM (Moderate / Medium Low)	
H1	Fire or explosion at a gas terminal as well as LPG, LNG and other gas pipeline / storage sites – up to 3km around site

HL7	Industrial explosions and major fires
H9	Large toxic chemical release
HL2	Localised industrial accident involving large toxic release
H12	Biological substance release from facility where pathogens are handled deliberately
H17	Storms and gales
H18	Low temperatures and heavy snow
HL22	Building collapse
H24	Emerging infectious diseases
H25	Non-zoonotic notifiable animal diseases
HL5	Major land contamination incident
H26	Zoonotic notifiable animal diseases
H41	Technical failure of electricity network
PRIORITY 8 – MEDIUM (Catastrophic / Low)	
H16	Aviation accident over a semi-urban area
PRIORITY 9 – MEDIUM (Significant / Low)	
H8	Very large toxic chemical release
PRIORITY 10 – MEDIUM (Moderate / Low)	
HL25	Fire or explosion at a gas terminal as well as LPG, LNG and other gas pipeline / storage site – up to 1km around site
HL28	Localised fire or explosion at a fuel distribution site or tank storage of flammable and/or toxic liquids
H5	Fire or explosion at an onshore fuel pipeline
H7	Explosion at a natural gas pipeline
HL30	Localised explosion at a natural gas pipeline
H11	Accidental release of radioactive material from incorrectly handled or disposed of sources.
HL33	Forest and moorland fire
HL8	Fire, flooding, stranding or collision involving a passenger vessel in inland waterways leading to ship's evacuation.
HL9	Aviation accident
HL11	Railway accident
HL12	Local accident involving transport of hazardous chemicals
HL14	Local (road) accident involving transport of fuel/explosives
HL21	Land movement (caused by tremors and landslides)
H44	Major reservoir dam failure / collapse
PRIORITY 11 – LOW (Minor / Medium Low)	
H48	Heatwave
H38	Technical failure of upstream oil/gas network leading to a disruption in oil/gas
PRIORITY 12 – LOW (Minor / Low)	

HL1	Fire or explosion at a gas terminal or involving a gas pipeline – up to 3km around site
H50	Drought
HL23	Bridge Collapse
H39	Failure of water infrastructure or accidental contamination
H49	Loss of drinking water supplies due to a major accident affecting infrastructure
PRIORITY 13 – LOW (Insignificant / Low)	
H35	Industrial action by key rail workers

Further Information

For further information about the risk assessment process or the community risk register, please contact:

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CV34 4RR

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