

Kent Community Risk Register

September 2016



All requests for further information should be addressed in writing to: Kent Resilience Team, Kent Fire and Rescue Service, The Godlands, Straw Mill Hill, Tovil, Maidstone, Kent ME15 6XB

Version 2.0

Introduction

The Kent Community Risk Register has been published by the Kent Resilience Forum (KRF), having been prepared by the Kent Category 1 Responders in accordance with the Civil Contingencies Act 2004 and associated regulations and guidance, all of which can be accessed through the Gov.uk website (<https://www.gov.uk/guidance/risk-assessment>)

Its purpose is to assure the people of Kent that an assessment of potential risks has taken place and is informing the approach to joined up Emergency Planning at the local level, sub-national and national levels.



Risk Levels and Summary

The inclusion of a hazard / threat in the Kent Community Risk Register does not mean that the Kent Resilience Forum believes the risk will materialise, or that if it were to do so, it would be at the scale described. The risk scenarios are reasonable worst case assumptions upon which risk assessments are based.

The likelihood assessments relate to the risk occurring over a five year period at the magnitude reflected within the outcome description. The likelihood ratings used are defined on page 3 of this register. The overall impact assessments relate to the average of the health, social, economic and environmental impact ratings which are defined on pages 4 - 8 of this register.

The risk assessments included in this register only cover non-malicious events (i.e. hazards) rather than threats (i.e. terrorist incidents). This does not mean that we are not considering threats within our risk assessment work, but given the sensitivity of the information supporting these risk assessments and the potential for use by adversaries, specific details [beyond that included] will not be made available via the risk register.

Risk Assessment is not a static process and is subject to constant review. The information contained in the risk register will, as a result, be updated regularly.

Very High risks – 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 risks, but also that 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. Consideration should be given to planning being specific to the risk rather than generic.

High risks – 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 risks – 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 risks – 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 No.	Very High	Page	Risk No.	High	Page	Risk No.	Medium	Page
			50	Outbreak of plant disease	30	29	Infectious Diseases	21
17a	Severe inland flooding	14		Medium		31	Zoonotic notifiable animal diseases	22
18	Local / urban flooding	15	1	Localised fire or explosion at a fuel distribution site	1	33	failure of a critical upstream oil/gas facility	23
28	Influenza-type disease (Pandemic)	21	2	Onshore fuel pipeline Incident	1	34	Industrial action by critical workers	23
Risk No.	High	Page	3	Explosion at a gas pipeline	1	34a	Fire Service industrial action.	24
4	Toxic chemical release	7	3a	Fire or explosion at a gas terminal	1	35a	Strike action by prison officers	24
5	Radioactive substance release	8	6	Accidental release of radioactive material	8	35b	Civil disturbance in a prison	25
10	Major Pollution of Controlled Waters	10	7	Biological substance release (Pathogens)	8	36	Influx of British Nationals from abroad	25
13	Transport of fuel/explosives accident	11	8	Biological substance release	9	40	Incident in Road Tunnel	27
16	Storms & Gales	13	9	Major food contamination incident	9	42	Attacks on Critical Infrastructure	28
17	Local fluvial flooding	13	11	Wildfire	10	43	Major Incident in Complex Built Environments	28
21	Low Temperatures & Heavy Snow	16	12	Maritime accident and blockade of a port	11	45	Railway incident – Channel Tunnel	28
22	Heat wave	17	14	Road or rail tanker incident	12	47	Major Shipping Incident	29
24	Major coastal and tidal flooding	19	15	Aviation accident	12	Low Currently No Low Risks		
32	Constraint on the supply of fuel	23	19	Extremely hazardous flash flooding	15			
37	Failure of water infrastructure	25	20	Major reservoir dam failure/collapse	16			
38	Loss of telecommunications	26	23	Drought	18			
39	Failure of electricity network	26	25	Land movement	20			
41	Attacks on Crowded Places	27	26	Building collapse	20			
44	Major Incident at a large scale event	28	27	Bridge collapse	20			

Summary Risk Rating Matrix

40	Major Maritime Pollution Incident	29	50	Non- Zoonotic notifiable animal diseases	22	
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Impact	Catastrophic (5)	4, 5		17a			<div style="background-color: red; padding: 5px; text-align: center; margin-bottom: 5px;">Very High</div> <div style="background-color: orange; padding: 5px; text-align: center; margin-bottom: 5px;">High</div> <div style="background-color: yellow; padding: 5px; text-align: center; margin-bottom: 5px;">Medium</div> <div style="background-color: green; padding: 5px; text-align: center;">Low</div>
	Significant (4)	3, 3a, 6, 15, 20	24, 39, 46	18	28		
	Moderate (3)	2,7,14,25,43,48,49	1,40,42,45,47	16,21,29,32,41,44	13,17,22,37,38	10	
	Minor (2)		11,12,26,30,31	19,23,33	34,34a,36,50	8,9,35	
	Limited (1)						
		Low (1)	Medium low (2)	Medium (3)	Medium High (4)	High (5)	
		Likelihood					

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Kent Community Risk Register

Kent Risk No.	Hazard/Threat Category	Risk	Description	Likelihood	Impact	Risk Rating	Date
1	Industrial Accidents and Environmental Pollution	Localised fire or explosion at a fuel distribution site or tank storage of flammable and /or toxic liquids	Up to 1km around the site, causing up to 15 fatalities and 200 casualties	2	3	M	2015
2	Industrial Accidents and Environmental Pollution	Fire or explosion at an onshore fuel pipeline	Up to 1km around site causing up to 100 fatalities and 500 casualties	1	3	M	2015
3	Industrial Accidents and Environmental Pollution	Localised explosion at a natural gas pipeline	Local to site, causing up to 100 fatalities and up to 100 casualties	1	4	M	2014
	Industrial Accidents and Environmental Pollution	Fire or explosion at a gas terminal or involving a gas pipeline	Up to 3km around site, causing up to 10 fatalities and up to 100 casualties				
3a	Industrial Accidents and Environmental Pollution	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	1	4	M	2015

4	Industrial Accidents and Environmental Pollution	Very large toxic chemical release	Up to 10 km from site causing up to 2000 fatalities and 10000 casualties. Toxic release could be due to loss of containment of chlorine – or a number of other chemicals, e.g. anhydrous hydrofluoric acid, refrigerated ammonia, sulphur di-oxide (or tri-oxide) gas. This risk could result in environmental contamination with associated environmental impacts. Depending on the nature and extent of the contamination there could be impacts on air, land, water, animal welfare, agriculture and waste management. This risk may require remediation and/or decontamination	1	5	H	2015
	Industrial Accidents and Environmental Pollution	Very large toxic chemical release	Up to 3km from site causing up to 50 fatalities and up to 2000 casualties. This risk could result in environmental contamination with associated environmental impacts. Depending on the nature and extent of the contamination there could be impacts on air, land, water, animal welfare, agriculture and waste management. This risk may require remediation and/or decontamination				
	Industrial Accidents and Environmental Pollution	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.				
	Industrial Accidents and Environmental Pollution	Localised industrial accident involving small toxic release	Up to 1km from site, causing up to 10 fatalities and up to 100 casualties.				

5	Industrial Accidents and Environmental Pollution	Radioactive substance release from a nuclear reactor	<p>Up to 4km from site causing up to 150 fatalities and 1500 casualties.</p> <p>This risk would result in environmental contamination with associated environmental impacts. Depending on the nature and extent of the contamination there could be impacts on air, land, water, animal welfare, agriculture and waste management. This risk may require remediation and/or decontamination</p>	1	5	H	2015
	Industrial Accidents and Environmental Pollution	Limited radioactive substance release from a nuclear accident	<p>Up to 1 km from site causing up to 50 fatalities and 500 casualties</p>				
6	Industrial Accidents and Environmental Pollution	Accidental release of radioactive material from incorrectly handled or disposed of sources	<p>Up to 5 deaths and 100 contaminated people requiring medical monitoring. Many worried people may present at hospitals. Radiation may be spread over several kilometres, but concentration where source opened.</p> <p>This risk could result in environmental contamination with associated environmental impacts. Depending on the nature and extent of the contamination there could be impacts on air, land, water, animal welfare, agriculture and waste management. This risk may require remediation and/or decontamination</p>	1	4	M	2015
7	Industrial Accidents and Environmental Pollution	Biological substance release from facility where pathogens are handled deliberately (e.g. pathogen release from containment laboratory)	<p>Up to 10 fatalities and serious injuries or off-site impact resulting in up to 1000 casualties</p>	1	3	M	2015

8	Industrial Technical Failure	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 resulting in up to 1000 casualties	5	2	M	2015
9	Industrial Accidents and Environmental Pollution	Major contamination incident with widespread implications for the food chain	<p>There may be direct animal and consumer health effects arising from this incident. We assume a small number of fatalities (5) and casualties (50), although the public health implications of food incidents vary widely. It should be noted that events such as these, can cause an increase in exposure to human carcinogens, raise the risk of fatality even though the casualties cannot be easily identified.</p> <p>Additionally, there may be food production/marketing implications, depending on the scale and area affected (e.g. major shellfisheries, dairy, livestock production areas). Consumer confidence may also be affected leading to lost markets and, where staple products (e.g. bread or milk) are affected, potential panic buying.</p>	5	2	M	2015

10	Industrial Accidents and Environmental Pollution	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	5	3	H	2015
11	Natural Hazard	Severe Wildfire	Severe wildfire spreading over an area of 1500 hectares at an urban-rural interface and lasting 7 to 10 days.	2	2	M	2015
	Industrial Accidents and Environmental Pollution	Forest or moorland fire	Forest or moorland fire up to 50 hectares. Evacuation of up to 100 residential homes required. Up to 5 fatalities and 20 casualties				

12	Transport Accident	Maritime accident or deliberate blockade resulting in blockage of access to key port, estuary, maritime route for more than one month	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 businesses	2	2	M	2015
	Transport Accident	Local (road) accident involving transport of fuel/explosives	Up to 30 fatalities and up to 20 casualties within vicinity of accident/explosion. Area could require evacuating up to 1 km radius depending on substances involved. Potential release of up to 30 tonnes of liquid fuel into local environment, watercourses etc. Large quantities of fire fighting media (foam) could impact on environment. Roads and access routes impassable for a time. Emergency access into/out of large populated areas becomes difficult or impossible	4	3	H	2015
13 road	Transport Accident	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				
	Transport Accident						

14 rail	Major Transport Accident	Road or rail tanker containing dangerous goods and/or “high consequence” dangerous goods – accident involving fire and explosion.	Up to 250 fatalities and up to 5,000 requiring medical treatment for an incident involving high consequence dangerous goods. 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 evacuation of the immediate area.	1	3	M	2015
	Transport Accident	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				
15	Transport Accident	Aviation accident over a semi-urban area	Loss of up to two aircraft and passengers, with debris over a semi-urban area	1	4	M	2015
	Transport Accident	Aviation accident	Causing up to 50 fatalities and up to 250 casualties				

16	Severe Weather	Storms & Gales	Storm force winds affecting most of a region for at least 6 hours. Extensive inland, lowland areas experience mean speeds in excess of 55 mph with gusts in excess of 85 mph. Up to 50 fatalities and 500 casualties	3	3	H	2015
17	Severe Weather	Local fluvial flooding	<p>A sustained period of heavy rainfall extending over two weeks, perhaps combined with snow melts, resulting in flash flooding and steadily rising river levels within a region. Localised flooding of 100 to 1,000 properties for 2-7 days. Up to 5 fatalities and 50 casualties.</p> <p>Up to 5,000 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 truck roads impassable for a time. Some main rail lines may need to be closed for a week (for repairs etc). Most waterways 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, electricity & telecoms) to 5,000 for up to 14 days. Up to 250 people needing assistance with sheltering for up to 12 months. Substantial disruption within a county for 7-14 days. Significant debris and pollutants clear-up needed.</p>	4	3	H	2015

<p>17 a</p>	<p>Severe Weather</p>	<p>Flooding: Severe inland flooding affecting more than two UK regions. (This is the national picture to provide context for local risk assessment).</p>	<p>A single massive inland event or multiple concurrent regional events following a sustained period of heavy rainfall extending over two weeks (perhaps combined with snow melt or intense summer rainfall leading to widespread surface water flooding). The event would include major fluvial flooding affecting a large, single urban area. Closure of primary transport routes. Infrastructure failure. Loss of essential services (water, gas, electricity & telecoms) to 250,000 homes and businesses for up to 14 days. Sediment movement and disruption to water supplies. Significant regional economic damage. Across urban and rural areas (with a greater proportion occurring in urban areas) flooding of up to 50,000 properties (homes and businesses) for up to 10 days. Up to 10 fatalities and 500 casualties and 20 'missing persons' (missing' means: not accounted for during the first 48 hours, before Police can reunite with family or friends). Up to 55,000 people needing assistance with evacuation. Up to 6000 people in need of rescue or assistance in-situ.</p>	<p>3</p>	<p>5</p>	<p>VH</p>	<p>2015</p>
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18	Severe Weather	Local / urban flooding (fluvial or surface run-off)	<p>A sustained period of heavy rainfall extending over two weeks, perhaps combined with snow melt, resulting in flash flooding and steadily rising river levels across entire counties and could threaten a large urban town.</p> <p>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 major impact on road 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, electricity & telecoms) to 20,000 homes for up to 14 days. Widespread disruption for 7-14 days, significant debris and pollutants from affected businesses. Up to 1,000 people needing assistance with sheltering for up to 12 months.</p> <p>Rural impacts include: widespread livestock carcasses, waterborne disease. Sewage treatment works flooded. Up to 50 Properties destroyed and many more uninhabitable. Up to 2,000 people needing assistance with sheltering for up to 12mths.</p>	3	4	VH	2015
19	Severe Weather	Localised, extremely hazardous flash flooding	<p>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.</p> <p>Flooding of up to 200 properties.</p>	3	2	M	2015

20	Structural	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 homes and business is lost. Up to 200 people need temporary accommodation for 2-18 months	1	4	M	2015
21	Severe Weather	Low Temperatures & Heavy Snow	Snow falling and lying over most of the area for at least one week. After the initial event there is further snowfall on and off for at least 7 days. Most lowland areas experience some falls in excess of 10cm, a depth of snow in excess of 30cm and a period of at least 7 consecutive days with daily mean temperature below -3°C	3	3	H	2015

22	Severe Weather	Heat wave	Daily maximum temperatures in excess of 32°C and minimum temperatures in excess of 15°C over most of a region for at least 5 consecutive days. Up to 1000 fatalities and 5000 casualties, mainly amongst the elderly	4	3	H	2015
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23	Severe Weather	Drought	<p>Periodic water supply interruptions affecting businesses in Kent for up to 10 months. Emergency Drought Orders in place authorising rota cuts in supply according to needs of priority users as directed by Secretary of State (SofS). The majority of households in Kent would not be subjected to supply interruptions.</p>	3	2	M	2015
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24	Severe Weather	Flooding: Major coastal and tidal flooding affecting more than two UK regions (This is the national picture to provide context for local risk assessment)	Major sea surge, tides, gale force winds and potentially heavy rainfall. Many coastal regions and tidal reaches of rivers affected. Excessive tide levels and many coastal and/or estuary defences overtopped or failing (breaches). Drains 'back-up'. Inundation from breaches in defences would be mostly unpredictable, rapid and dynamic with minimal warning and no time to evacuate. Inundation from over-topping of defences would allow as little as 1 hour to evacuate. There would be widespread structural damage. Flooding of up to 300,000 properties (homes and businesses) for up to 14 days. People stranded over a large area.				
	Severe Weather	Local coastal / tidal flooding (affecting more than one Region)	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..	2	4	H	2015
	Severe Weather	Local coastal / tidal flooding (in one Region)	Sea surge, high tides and/or gale force winds affecting the coastline and one Region, a defence system 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.				

25	Structural	Land movement (i.e. caused by tremors or 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.	1	3	M	2015
26	Structural	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 building, and occupation rates.	2	2	M	2015
27	Structural	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.	1	4	M	2015

28	Human Health	Influenza-type disease (pandemic)	Pandemics arise when a new virus emerges which is capable of spreading in the worldwide population. Unlike seasonal influenza that occurs every winter in the UK, pandemic flu can occur at any time of the year. Every pandemic is different and the nature of the virus and its impacts cannot be predicted. 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 around 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.	4	4	VH	2015
	Human Health	Emerging Infectious Diseases	Based on a SARS outbreak resulting in up to 100 fatalities and 2000 casualties.	3	3	H	2015
29	Human Health	Localised Legionella / Meningitis Outbreak	Localised outbreak of a disease, which could cause up to 10 fatalities and up to 50 casualties.				

30	Animal Health	<p>Non-zoonotic notifiable animal diseases (e.g. Foot and Mouth Disease (FMD), Classical Swine Fever (CSF), Bluetongue and Newcastle Disease (of birds))</p>	<p>The most serious disease in this category is FMD which drives the impact assessments. Assessment based on the need to cull and dispose up to 4 million animals across GB. For FMD whole of Great Britain is likely to be declared a 'controlled area', prohibiting the movement of all susceptible livestock unless licensed. Loss of disease free status resulting in EU and third country import bans on livestock and livestock products from susceptible animals. Disruption to rural communities, local economies, tourism and the environment. Significant impact on farm incomes and allied industries. For a major outbreak many rural industries, including tourism will be affected. This scenario is of a much greater scale than that seen in the outbreak in 2007.</p>	2	2	M	2015
31	Animal Health	<p>Zoonotic notifiable animal diseases (e.g. Highly Pathogenic Avian Influenza (HPAI), Rabies and West Nile Virus)</p>	<p>The most serious disease in this category is Highly Pathogenic Avian Influenza, which drives the impact assessments. Potential human health threat (203 deaths worldwide since December 2003), Assessment based on the need to cull and dispose up to 30 million across UK. Loss of disease free status resulting in EU and third country import bans on live birds and poultry products. Local and regional control zones will be imposed prohibiting the movement of all poultry and captive birds unless licensed. Main impacts will be on the poultry sector and in particular on the welfare of birds and ability to move poultry to slaughter. There could be some disruption to rural communities, local economies, tourism and the environment.</p>	2	2	M	2015

32	Industrial Action	Significant or perceived significant constraint on the supply of fuel at filling stations e.g. industrial action by contract drivers for fuel, or effective fuel blockades at key refineries / terminals by protesters, due to the price of fuel.	Filling stations, depending on their locations, would start to run dry between 24 - 48 hours. Panic buying would exacerbate the situation. Replenishment of sites would take between 3 - 10 days depending on location. Much would depend on whether drivers from other companies would be prepared to cross picket lines, whether companies judged that they were able to maintain safe operations in the presence of picket lines or protests, and the extent of the supply of fuel from other locations.	3	3	H	2015
33	Industrial Technical Failure	Technical failure of a critical upstream oil/gas facility, gas import pipeline terminal, or Liquefied Natural Gas (LNG) import reception facility 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 immediately so adversely affected given alternative means of supply.	3	2	M	2015
34	Industrial Action	Loss of cover due to industrial action by workers providing a service critical to the preservation of life (such as emergency service workers).	A number of three day strikes with significant support over a two month period affecting one or more Category 1 Responders.	4	2	M	2015

<p>34 a</p>	<p>Industrial Action</p>	<p>Emergency services: loss of emergency fire and rescue cover because of industrial action.</p>	<p>A series of strikes by fire fighters takes place, spread over a period of two months, perhaps lasting up to 24 hours each.</p>	<p>2</p>	<p>2</p>	<p>M</p>	<p>2015</p>
<p>35 a</p>	<p>Industrial Action</p>	<p>Unofficial strike action by prison officers leading to a serious shortfall in the number of personnel available to operate and maintain control of prisons.</p>	<p>A single unofficial strike by around half prison officers lasting 24 hours</p>	<p>5</p>	<p>2</p>	<p>M</p>	<p>2015</p>
<p>35 b</p>	<p>Civil Disturbance</p>	<p>Serious Disturbance or Disorder in a Prison (including immigration removal centres and secure training centres).</p>	<p>Likely to involve significant numbers of people resulting in extensive damage requiring a number of prisoners to be relocated, deployment of emergency services or additional resources into a prison. Fatalities or large number of injuries resulting in hospitalization are a possibility.</p>	<p>5</p>	<p>2</p>	<p>M</p>	<p>2015</p>

36	International Events	Disruption to aviation as a consequence of volcanic ash	Volcanic ash incursions for up to 25 days resulting in sporadic and temporary closures of significant parts of UK airspace for up to a total of 15 days during a three month eruption period. The entire UK mainland and potentially other parts of Europe could be affected for up to 10 of these days. A single period of closure within the 3 month eruptive episode may last up to 12 consecutive days, depending on meteorological conditions.	4	2	M	2015
	International Events	Influx of British Nationals from abroad following an outbreak of an infectious disease	Up to 200,000 British Nationals (BNs) returning to UK within a 4-6 week period following a following serious outbreak of an infectious disease overseas				
37	Industrial Technical Failure	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 3 days.	4	3	H	2015

38	Industrial Technical Failure	No notice loss of significant telecommunications infrastructure in a localised incident such as a fire, flood or gas incident.	Loss of telecommunications for up to 100,000 people for up to 72 hours	4	3	H	2015
39	Industrial Technical Failure	Technical failure of national electricity network (Blackstart)	Total blackout for up to 3-5 days due to loss of the National Grid. 3 days is best time. If there is damage to the network (say from storms) this timescale could be extended up to 5 days. Possible loss of life support machines, civil unrest, no alarms, street lighting, gas heating, rail transport, water supplies and mobile (PMT) telecommunications etc. Back up generators available for limited time for individual business and emergency services in some instances.	2	4	H	2015
	Industrial Technical Failure	Technical failure of regional electricity network	Total shutdown of the electricity supply over an entire region of the UK occurring during the working week and lasting for 24 hours				

40	Transport Accident	Incident in Road Tunnel	Single or multiple vehicle incident resulting in damage to tunnel infrastructure causing casualties (internal injuries, fractures, possible burns) and / or fatalities. Will include closure of lanes or carriageways causing major disruption to road network and long delays with serious economic impact.	2	3	M	2015
41	Threats	Attacks on Crowded Places & Transport System	A malicious attack by conventional means on a crowded public place or transport system.	3	3	H	2015

42	Threats	Attacks on Critical Infrastructure	A malicious attack on critical infrastructure leading to the disruption of essential services	2	3	H	2015
43	Mass Gatherings	Major Incident in Complex Built Environments	Major incident likely to involve significant numbers of people. Incidents in these facilities have the potential to trigger a complex chain of events that lead to serious consequences for the public.	1	3	M	2015
44	Mass Gatherings	Major Incident at a large scale event – e.g. festival, sporting or leisure event	Major incident likely to involve significant numbers of people Major incidents at these events have the potential to trigger a complex chain of events that lead to serious consequences for the public	3	3	H	2015
45	Transport Accident	Railway incident – Channel Tunnel	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.	2	3	M	2015

46	Transport Accidents	Major Maritime Pollution Incident	Tier 3 Spill as described by the MCA National Contingency Plan (NCP) e.g. risk of spillage of up to 100,000 Tonnes of any type of oil into the sea polluting up to 200km of coastline. Also considered are the releases of significant quantities of hazardous chemical materials & cargo.	2	4	H	2015
47	Transport Accidents	Major Shipping Incident	Sinking, capsizing, fire, flooding, stranding or collision of vessels in or close to UK waters (including inland waters). Assuming a large passenger vessel with approximately 5000 passengers & crew on board, of which approximately 500 fatalities and 1000 injured	2	3	M	2015

50	Natural Hazard	Outbreak of plant disease	Major outbreak of plant disease. Damage to native plants & ecosystems, or agricultural / horticultural crops (with knock on effects to rural economy should diseases become widespread within the tree population). Controls likely to be imposed on industry with particular impact on the forestry and nursery stock sectors or the agricultural / horticultural sectors. Controls may also be necessary at amenity sites and/or individual Housholds.	4	3	H	2015
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Glossary of Terms

Hazard

An accidental or naturally occurring event or situation with the potential to cause physical (or psychological) harm to members of the community (including loss of life), damage or losses to property, and/or disruption to the environment or to structures (economic, social, political) upon which a community's way of life depends.

Hazard Assessment

A component of the risk assessment process in which identified hazards are assessed for future action.

Hazard Identification

A process by which potential hazards are identified.

Humanitarian Assistance

This includes the need for Humanitarian Assistance Centres, Survivor Reception Centres Family and Friends Reception Centres (and information centres).

Impact

The scale of the consequences of a hazard or threat expressed in terms of a reduction in human welfare, damage to the environment and loss of security.

Inner Cordon

Surrounds and protects the immediate scene of an incident.

Integrated Emergency Management (IEM)

An approach to preventing and managing emergencies which entails six key activities – anticipation, assessment, prevention, preparation, response and recovery. IEM is geared to the idea of building greater overall resilience in the face of a broad range of disruptive challenges. It requires a coherent multi-agency effort.

Lead Organisation

Organisation appointed by a group of organisations to speak or act on their behalf or to take the lead in a given situation, with the other organisations' support. The exact role of the lead organisation depends on the circumstances in which the lead role is being operated.

Lead Responder

A Category 1 Responder charged with carrying out a duty under the Act on behalf of a number of responder organisations, so as to co-ordinate its delivery and to avoid unnecessary duplication.

Local Resilience Forum Area

The Civil Contingencies Act requires Category 1 and 2 responders to co-operate with other Category 1 and 2 responders in their local resilience area. Each local resilience area (with the exception of London) is based on a police area. The principal mechanism for multi-agency co-operation is the Local Resilience Forum.

Local Resilience Forum (LRF)

A process for bringing together all the Category 1 and 2 responders within a local police area for the purpose of facilitating co-operation in fulfilment of their duties under the Act. KRF is the Kent Local Resilience Forum

Local Responder

Organisation which responds to emergencies at the local level. These may include Category 1 and 2 responders under the Civil Contingencies Act and other organisations not covered by the Act.

Local Risk Assessment Guidance (LRAG)

A document provided by central government with information on generic hazards and threats that should assist Category 1 responders in performing their local risk assessment duty under the Civil Contingencies Act.

Major Incident

This term is commonly used by emergency services personnel operationally to describe an emergency as defined in the Civil Contingencies Act.

Multi-Agency Plan

A plan, usually prepared and maintained by a lead responder, on behalf of a number of organisations who need to co-ordinate and integrate their preparations for an emergency.

Outer Cordon

Seals off a controlled area around an incident to which unauthorised persons are not allowed access.

Pipelines Safety Regulations 1996

Legislation on the management of pipeline safety, using an integrated, goal-setting, risk-based approach encompassing both onshore and offshore pipelines; includes the major accident prevention document, the arrangements for emergency plans and the transitional arrangements.

Public Awareness

A level of knowledge within the community about risk and preparedness for emergencies, including actions the public authorities will take and actions the public should take.

The Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPIR)

Implemented in GB the articles on intervention in cases of radiation (radiological) emergency in Council Directive 96/29/Euratom, also known as the BS596 Directive. The Directive lays down the basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation. The REPPIR also partly implement the Public Information Directive by subsuming the Public Information for Radiation Emergencies Regulations 1992 (PIRER) on informing the general public about health protection measures to be applied and steps to be taken in the event of an emergency.

Recovery

The process of rebuilding, restoring and rehabilitating the community following an emergency.

Resilience

The ability of the community, services, area or infrastructure to withstand the consequences of an incident.

Rest Centre

Premises used for temporary accommodation of evacuees from an incident.

Risk

Risk measures the significance of a potential event in terms of likelihood and impact. In the context of the Civil Contingencies Act, the events in question are emergencies.

Risk Assessment

A structured and auditable process of identifying potentially significant events, assessing their likelihood and impacts, and then combining these to provide an overall assessment of risk, as a basis for further decisions and action.

Risk Rating Matrix

Matrix of impact and likelihood for an event, to ascertain the risk.

Risk Treatment

A systematic process of deciding which risks can be eliminated or reduced by remedial action and which must be tolerated.

Sensitive Information

Information that is not reasonably accessible to the public because its disclosure to the public would, or would be likely to (a) adversely affect national security, (b) adversely affect public safety, (c) prejudice the commercial interests of any person; or information that is personal data, within the meaning of section 1(1) of the Data Protection Act 1998, disclosure of which would breach that Act.

Threat

The intent and capacity to cause loss of life or create adverse consequences to human welfare (including property and the supply of essential services and commodities), the environment or security.

Utilities

Companies providing essential services, eg water, energy, telecommunications.

Warning and informing the public

Establishing arrangements to warn the public when an emergency is likely to occur or has occurred and to provide them with information and advice subsequently.