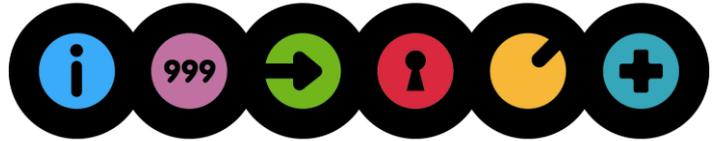


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# Kent Community Risk Register

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**Kent Resilience Forum**



PREPARING FOR EMERGENCIES IN KENT AND MEDWAY

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September 2016

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# What is the Kent Community Risk Register (CRR)?

Under the **Civil Contingencies Act 2004** Kent Resilience Forum partners are required to assess the risks in their area. KRF partners achieve this by working together to develop the 'Kent Community Risk Register'.

The risk register is informed by national guidance and developed locally with partners and subject matter experts. The final register is endorsed by the strategic representatives of all KRF partners.

The register has **two key purposes**:

1. To ensure that partners have a common perception and understanding of risks. The register ensures that all partners fully understand the likelihood of risks occurring and the impacts that will happen if they do.
2. To assure the people of Kent that risks are being researched and multi-agency plans are put in place to deal with them. The register also advises the public what they can do to protect themselves.

The register places risks into **four categories**. These categories are determined by assessing the 'likelihood' of a risk occurring and the various 'impacts' that the risk would cause. The categories are below:

**Very High**– 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** – 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** – 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

**Low** – 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.

How likelihood is determined: The likelihood of a risk occurring is based on historical evidence, subject matter expert opinion and local expertise. The KRF constantly carries out a process called 'Horizon Scanning', in which we monitor various channels to forecast what may occur in the short, medium and long term (e.g. Weather forecasting).

How impact is determined: The impact is again based on subject matter expert opinion, historical evidence and local expertise. The impact is measured across four areas; economic impacts, health impacts, societal impacts and infrastructure impacts.

# Very High Risks

## Severe Inland Flooding

Inland flooding can occur as a result of rivers overflowing their banks, groundwater becoming saturated, or surface water being unable to drain.

Consequences of flooding include:

- Risk to life and health.
- Damage to homes, businesses, communities, agricultural land and infrastructure.
- Evacuation of residents in short, medium and long-term phases.
- Disruption to utilities (electricity and water supply).
- Pollution and contamination of the environment.
- Impact on the local economy and businesses.

## Local / urban flooding

This assessment considers a 'regional' event in which water flows create a danger to life. The depth and velocity of water flows can be variable depending on location and weather. Mutual aid is highly likely to be required from other regions. Due to the scale of the event it is likely that national resources would need to be prioritised.

Infrastructure and economic recovery could take between 6 and 18 months.

BE PREPARED	DURING THE INCIDENT	AFTER THE INCIDENT
<p>Where could you go in an emergency?</p> <ul style="list-style-type: none"> <li>• Are you <b>insured</b>?</li> <li>• Assess your <b>risk</b> - sign up to the <a href="#">Environment Agency Floodline</a></li> <li>• Keep an track of the <b>weather</b> - <a href="#">BBC weather</a> or <a href="#">Met Office</a>.</li> <li>• Does your community have a <b>Flood Warden</b>?</li> </ul>	<ul style="list-style-type: none"> <li>• Follow advice and guidance of the emergency services.</li> <li>• Tune in to your local radio station or Floodline for updates.</li> <li>• Put plugs in sinks and baths and weigh them down.</li> <li>• If safe to do so, turn off gas, electricity and water mains before water enters your home. (Don't touch sources of electricity when standing in water.)</li> <li>• Never drive through flood water (80% of flood deaths occur in vehicles).</li> <li>• If you cannot leave for any reason move your family and pets to a higher position with a means of emergency escape.</li> <li>• If raw sewage enters your property <b>keep out</b> and stay elsewhere until it has been decontaminated.</li> <li>• Report property flooding or river blockages to the Environment Agency on 0800 80 70 60 or follow the flood destroy link below.</li> </ul>	<ul style="list-style-type: none"> <li>• Find out if it is safe to return to your property by checking various media sources and the Local Authority website.</li> <li>• Check falling river levels via the Floodline and the Environment Agency website.</li> <li>• Contact your insurance company as soon as possible and follow their advice.</li> <li>• If safe to do so, take photographs of your property for evidence of damage.</li> <li>• Have your electricity, gas and water supply checked by a certified professional before using them.</li> <li>• Be aware of consumables within the property, such as food which may have been contaminated and therefore not safe to use.</li> <li>• Wear appropriate clothing, such as wellington boots and gloves to protect yourself against contamination.</li> </ul>

## Influenza-type disease

Infectious diseases can have a significant health impact, particularly on those with existing health conditions and can cause a strain on the health sector.

Pandemic influenza is caused by a new influenza virus that spreads rapidly causing widespread epidemics in countries around the world. It generally occurs when a new strain emerges for which there is no current vaccination.

It is unlikely that a pandemic would originate in the UK, however due to the nature of international travel the UK will be at risk. The World Health Organisation maintains constant international surveillance to monitor and track any emerging outbreaks.

Symptoms will vary depending on the nature of the strain, however commonly include headache, fever, cough, sore throat and aching muscles and joints. The most common secondary complications from influenza are bronchitis and secondary bacterial pneumonia. More details can be located on the NHS website.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<p>Maintain good hygiene by:</p> <ul style="list-style-type: none"><li>• Covering your nose and mouth when you sneeze.</li><li>• Dispose of dirty tissues promptly and carefully (Catch it, Bin it, Kill it).</li><li>• Wash your hands frequently with soap and water (or antibacterial gel).</li><li>• Be aware that viruses can live on surfaces. Clean hard surfaces such as worktops, door handles and hand rails frequently.</li><li>• Make sure you and your family are up to date with recommended vaccinations.</li></ul>	<ul style="list-style-type: none"><li>• Try not to go to your GP (as this could spread the virus). If you are concerned contact 111 or visit the below websites for more information.</li><li>• Take note of public information and advice.</li><li>• Continue to observe good hygiene.</li></ul>	<ul style="list-style-type: none"><li>• Be aware that viruses can live on surfaces, so make sure to keep areas clean.</li></ul>

# High Risks

## Severe Weather

"Severe weather" encompasses events including heavy snow, high winds, extreme temperatures, and heavy rain. These events can cause significant disruption as well as very serious health impacts. The nature of the UK as an island, and Kent as a coastal region, mean that the weather can be very changeable and difficult to forecast.

### Storm and Gales

The planning for this risk is based upon a reasonable worst case scenario of storm force winds affecting the county for at least 6 hours. Historical records suggest a reasonable forecast of wind speeds in excess of 55mph with gusts over 85mph. This has the potential to cause significant damage to buildings and infrastructure. This can often be accompanied by periods of extremely heavy rainfall, with surface water having the potential to cause flash flooding or dangerous driving conditions. The risk is more prevalent in exposed areas, particularly coastal communities.

BE PREPARED	DURING THE INCIDENT	AFTER THE INCIDENT
<ul style="list-style-type: none"><li>• Where possible secure any loose objects that you have outside.</li><li>• Close and fasten windows and doors securely.</li><li>• Try and park vehicles away from trees, walls and fences.</li><li>• Keep an track of the weather - BBC Weather or Met Office.</li></ul>	<ul style="list-style-type: none"><li>• Do not attempt to go outside and make any repairs during storms and gales.</li><li>• Avoid unnecessary journeys but if you must drive, slow down and avoid exposed routes such as bridges. Take particular care of side winds affecting your vehicle.</li><li>• Tune into your local radio station - Go in, Stay in, Tune in.</li></ul>	<ul style="list-style-type: none"><li>• If you locate any blown down or hanging loose electrical or phone cables, <b>do not touch them</b>. Report them to the emergency services or utility supplier. <a href="#">Click here for contact details</a>.</li></ul>

## Low Temperatures and Heavy Snow

The planning for this risk is based upon the reasonable worst case scenario of snow falling and lying over most of the county for at least 7 days, with most lowland areas experiencing cover in excess of 30cm with daily mean temperatures below 3°C. Such a scenario may result in 'excess deaths' and cold weather related illness and injury (predominantly in vulnerable groups such as older people and those with chronic health problems). There is also likely to be substantial disruption to transport networks, schools and businesses. This hazard would also be accompanied by icy conditions including the risk of road traffic collisions and hospital admissions due to slips, trips and falls.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Make sure your house has sufficient insulation, particular around your water tank, loft and water pipes.</li> <li>• Check that you have de-icer or salt/grit and the tools necessary to keep your home safe and clear of snow.</li> <li>• Prepare your car - make sure the vehicle is prepared for the journey (ie petrol/diesel, screenwash, suitable tyres, high visibility jacket, blankets and a spade etc).</li> <li>• Prepare a grab bag - extra warm clothes, blankets, a torch, food, water, a fully charged phone and a spade.</li> <li>• Keep an track of the weather - <a href="#">BBC Weather</a> or <a href="#">Met Office</a>.</li> </ul>	<ul style="list-style-type: none"> <li>• Keep warm - make sure you wear appropriate clothing blankets and warm drinks and food.</li> <li>• Keep moving your arms and legs to help blood circulate.</li> <li>• Keep in contact with family and friends, especially elderly and vulnerable people.</li> <li>• Keep an eye out for neighbours who may need help.</li> <li>• Keep your heating at a regular temperature.</li> <li>• Tune into your local radio station - Go in, Stay in, Tune in.</li> </ul> <p>Avoid making any unnecessary journeys, This includes:</p> <ul style="list-style-type: none"> <li>• Make sure you know the best routes to take (try to use main routes which have been treated and well lit).</li> <li>• Make sure you have told somebody about your journey and when your expect to arrive.</li> <li>• Wear practical footwear that is warm and has a good grip. Consider using a walking stick to help you balance.</li> <li>• Take your grab bag with a fully charged phone and torch.</li> </ul> <p>Check the Highway Code for further advice on driving.</p> <ul style="list-style-type: none"> <li>• Slow down and allow extra room for stopping.</li> <li>• If you start to skid, ease off the accelerator and avoid braking.</li> </ul>	<ul style="list-style-type: none"> <li>• Be ready for the snow to melt and be aware of the risk of flooding.</li> <li>• Check your property for damage (pipes and gutters particularly may have been damaged by the low temperatures and snow).</li> <li>• Replenish your stocks of de-icer and grit/salt.</li> </ul>

	<ul style="list-style-type: none"> <li>If you do need to brake, pump the brakes rather than pressing hard on them.</li> </ul>	
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## Heat wave

A heatwave is an extended period of hot weather relative to the expected conditions of the area at that time of year. The UK does not have a formal definition of what constitutes a heatwave, however the World Meteorological Organisation defines it as when the maximum temperature is more than five consecutive days exceeds the normal maximum average temperature by 5°C. The event will typically be triggered from air coming from the Mediterranean and North Africa (with the potential including of Saharan Dust). The air will be very warm and humid with the threat of thunderstorms. The high humidity makes conditions uncomfortable and prevents temperatures from lowering overnight. During these conditions pollution may also be trapped close to the ground causing additional issues for those with respiratory conditions such as Asthma. The extreme heats can cause secondary impacts such as damage to infrastructure through the melting of tarmac or buckling of rails, increased risks of heathland fires, and additional pressure on the power network through higher demand for climate control systems.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>Make sure you have plenty of sun cream and water in your house.</li> <li>Try to make sure you have cooling devices, such as fans available.</li> <li>Keep an track of the weather - <a href="#">BBC weather</a> or <a href="#">Met Office</a>.</li> </ul>	<ul style="list-style-type: none"> <li>Try to keep your house cool and well ventilated (closing blinds and curtains, opening a window can help).</li> <li>Wear lightweight loose fitting clothing.</li> <li>Apply appropriate factor sun cream regularly and ensure you drink plenty of fluids to stay hydrated.</li> <li>Try to avoid exposure to the the sun in the warmest part of the day (1100-1500) and avoid being in the heat for long periods.</li> <li>Avoid strenuous physical activity, particularly during the hottest parts of the day.</li> <li>Check on vulnerable neighbours (the elderly and very young are most at risk).</li> <li>Make sure babies, children, elderly people and animals are not left alone in stationary vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>Replenish your stocks of sun cream and fluids,</li> </ul>

# Flooding

## Local fluvial flooding

This assessment considers a 'sub-regional' event in which flows create a danger to life. Infrastructure and economic recovery could take between 6 and 18 months. The depth and velocity of water flows can be variable dependent on location and weather. Mutual aid may be required from other counties depending on the scale of the event.

## Major coastal and tidal flooding

This risk is based on the reasonable worst case scenario of a tidal flood affecting multiple counties along the East Coast. National resources would need to be share across counties. It is anticipated that there would be up to 4 days advanced warning of a potential event, with confidence in forecasts becoming greater closer to the event. Confirmation of anticipated flooding would be between 24-8 hours before the event occurring. Emergency services operations may be impacted if they are within the inundation zone and rescues would be required by specialist vehicles. Immediate evacuation may be required and infrastructure and utilities may suffer significant damage.

It is assumed that a significant proportion of those who are required to evacuate would choose to stay with friends and relatives. Planning assumptions suggest up to 142,000 people in Kent may need assistance with shelter for up to 5 days, with some of those requiring ongoing support for up to 12 months. Historically, East Coast flood events initiate in the north and work down the coast, with Kent being the last county affected. In historical events the Thames Estuary has also served to mitigate some of the impacts of the surges.

BE PREPARED	DURING THE INCIDENT	AFTER THE INCIDENT
<ul style="list-style-type: none"> <li>• Think about where you and your pets would go if flooding happens.</li> <li>• Ensure you have appropriate insurance.</li> <li>• Prepare a grab bag - see "<a href="#">What should I do in an emergency</a>" booklet for list.</li> <li>• Assess your risk - Sign up to the <a href="#">Environment agency flood line</a> or call 0345 988 1188, or follow the flood destroy link below.</li> <li>• Keep on track of the weather - <a href="#">BBC Weather</a> or <a href="#">Met Office</a>.</li> <li>• If your community is at risk of flooding find out if you have a Flood Warden by contacting your local <a href="#">Borough or District Council</a>.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow advice and guidance of the emergency services.</li> <li>• Tune in to your local radio station or floodline for updates.</li> <li>• Put plugs in sinks and baths and weigh them down.</li> <li>• If safe to do so, turn off gas, electricity and water mains before water enters your home. (Don't touch sources of electricity when standing in water.).</li> <li>• Never drive through flood water (80% of flood deaths occur in vehicles).</li> <li>• If you can not leave for any reason, move your family and pets to a higher position with a means of emergency escape.</li> <li>• If raw sewage enters your property keep out and stay elsewhere until it has been decontaminated.</li> </ul>	<ul style="list-style-type: none"> <li>• Find out if it is safe to return to your property by checking the media and the Local Authority website.</li> <li>• Contact your insurance company as soon as possible and follow their advice.</li> <li>• If safe to do so, take photographs of your property for evidence of damage.</li> <li>• Have your electricity, gas and water supply checked by a certified profesional before using them.</li> <li>• Be aware that consumables within the property, such as food, may have been contaminated and are therefore not safe to use.</li> <li>• Wear appropriate clothing to protect yourself against contamination, such as wellington boots and gloves.</li> </ul>

	<ul style="list-style-type: none"> <li>Report property flooding or river blockages to the Environment Agency on 0800 80 70 60 or follow the flood destroy link below</li> </ul>	<p>For further advise on what to do before, during and after a flood visit the <a href="#">Environment Agency Website</a>.</p>
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## Environmental

### Toxic chemical release

This threat includes a fire or explosion at a site near to a populated area where either fuel, flammable liquids, or toxic liquids are stored in bulk. Toxic chemicals are stored in bulk form throughout the county and the larger facilities are covered by COMAH (Control of Major Accident Hazards) Regulations, and therefore have bespoke plans in place. There are a large number of these sites in Kent, ranging from large scale storage to small scale. Incidents at these sites could have an impact on their local communities as well as disruption to the wider community. As part of the regulations the sites and Local Authority carry out planning and awareness raising in the areas that could potentially be affected. This risk also covers incidents occurring during the transit of chemicals (which is also covered by HSE guidance).

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>Be aware of the risks in your local area.</li> <li>Engage with any warning and informing material you are given by site operators.</li> <li>Prepare a home emergency grab pack in case you need to evacuate. (details of what to place in your grab pack can be located in the "what should I do in an emergency" booklet.</li> </ul>	<ul style="list-style-type: none"> <li>Follow the instructions of the emergency services, local authority and site operators.</li> <li>Tune in to the local radio station for information.</li> <li>Go in, stay in, Tune in</li> </ul>	<ul style="list-style-type: none"> <li>Take advice from emergency services, local authority and site operators.</li> </ul>

## Radioactive substance release

There are no nuclear reactors bordering Kent within the risk range, however Kent does have two nuclear reactors at Dungeness, one of which is still generating and one of which is being decommissioned. There is a potential for hazardous releases at both sites, and as such both have emergency plans in place and close monitoring procedures. The type of reactor used at Dungeness means that there is no risk of nuclear explosion and therefore no risk to the public or animal life outside the boundary fence due to the conventional hazards associated with electricity generation. The hazard that does exist is the risk of a release of radioactive products into the environment, albeit this risk is very low, and any release is unlikely to go beyond the boundary of the site. There are, however, plans in place should a larger release occur, with those in the risk area being regularly engaged with information and protective measures (such as potassium iodate tablets).

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Be aware of the risks in your local area.</li> <li>• Engage with any warning and informing material you are given by site operators</li> <li>• Prepare a home emergency grab pack in case you need to evacuate. (details of what to place in your grab pack can be located in the <a href="#">"what should I do in an emergency"</a> booklet.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow the instructions of the emergency services and local authority</li> <li>• Tune in to the local radio station for information.</li> <li>• Go in, stay in, Tune in</li> </ul>	<ul style="list-style-type: none"> <li>• Take advice from your local authority.</li> </ul>

## Major Maritime Pollution Incident

This risk assessment considers incidents occurring from ships at sea, at anchor, or alongside discharging any form of heavy oil, fuel or petroleum that will potentially have a significant impact on the aquatic ecosystem, marine life, coastline, agricultural produce, commerce, tourism, and potentially displacement of local communities (due to risk of explosion or fire from fumes). The effects of such a discharge could be long term. Depending on the nature of the environmental contamination there could be impacts on air, land water, animal welfare, agriculture, and waste management. There may be a need for extensive clear up operations on shore and at sea, and there may potentially be long term restrictions put in place, e.g. for fishing.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• If you live by the shoreline prepare a grab bag in case you need to evacuate - see <a href="#">"What should I do in an emergency"</a> booklet for list</li> </ul>	<ul style="list-style-type: none"> <li>• Follow the instructions of the emergency services and Local Authority.</li> <li>• Keep pets away from the shoreline.</li> <li>• Contact the <a href="#">Maritime and Coastguard Agency</a></li> </ul>	<ul style="list-style-type: none"> <li>• Be aware that you may not be able to return to the shoreline for a substantial period of time.</li> </ul>

## Major Pollution of Controlled Waters

The pollution of controlled waters, including surface and groundwater, is a significant threat to the numerous and extensive river systems and underground aquifers in Kent. The supply and demand of water is an important resource to the day to day activities of the county. All drinking water in Kent is supplied from either a river or groundwater source and it is therefore important to safeguard these. The Kent Resilience Forum works together to maintain a high quality of protection to minimise and mitigate potential environmental damage from pollution incidents. The most likely source of such a pollution incident would be industrial or commercial accidents. In addition to its value as a resource the river networks support a rich and diverse ecology which would be impacted by any pollution.

## Loss of Utilities

### Constraint on the supply of fuel

This risk is based on a scenario where filling stations, depending on their locations, start to 'run dry' within a period of 24-48 hours. Panic buying would exacerbate the situation, and replenishment of sites could take between 3-10 days (depending on location). The situation would depend largely on whether drivers from other companies would be prepared to cross picket lines or protests, 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 sources. The impact of a restriction in fuel will have business continuity consequences for businesses and individuals. The UK has ample fuel within the system to manage normal demand levels during a disruption in supply, but 'panic buying' places an unusual pressure that would outstrip even normal supply levels.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>Maintain your vehicle so that it is as fuel efficient as possible.</li></ul>	<ul style="list-style-type: none"><li>Plan ahead - Do not make unnecessary journeys.</li><li>DO NOT 'panic buy' fuel. The fuel economy has ample stock to cover supply disruptions for normal demand conditions. Fuel shortages are caused when people buy fuel when they do not need to!</li><li>Do not use plastic 'jerry cans' or other unapproved storage devices. These can be extremely dangerous.</li><li>Consider other means of travelling, such as car sharing, walking, or cycling.</li><li>Consider vulnerable neighbours who may not be receiving their normal support.</li><li>Be aware that filling stations may operate differently to usual, for example their may be limits on which stations you can use and how much fuel you can purchase.</li></ul>	<ul style="list-style-type: none"><li>Be aware that the return to normal supply will be staggered. Some filling stations will take longer to restock than others, particularly in rural locations.</li></ul>

### Failure of water infrastructure

This assessment relates to a complete loss of water supplies. This would mean domestic, industrial, and agricultural premises would have no piped water and fire tenders would not be able to use fire hydrants within the affected area. Water companies have an obligation to provide domestic customers with at least 10 litres of drinking water per person per day until supply is restored. This is done by a variety of means such as water bowzers or bottled water. Priority is given to vulnerable customers and those with special needs. Water companies are also required to give priority to hospitals and schools and have due regard for livestock and essential food industries. It may not, however, be possible to maintain a full service at hospitals, schools, and other businesses. Water companies have well established plans in place to ensure that they can fulfil their obligations.

The reasonable worst case scenario considers a loss of water for up to 3 days over a wide area affecting up to 50,000 people, with schools, hospitals, businesses, and domestic residences affected. This would cause public health and sanitation issues.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Keep bottled water available.</li> <li>• Make sure you know the emergency supply number for your water company.</li> <li>• If you identify an issue with the water supply alert your water company to ensure they are aware.</li> </ul>	<ul style="list-style-type: none"> <li>• Check on the website of your water supplier for information and updates</li> <li>• Follow the instructions of the emergency services and Local Authority.</li> <li>• Make yourself known to the Local Authority if you are vulnerable or have additional needs for water,</li> </ul>	<ul style="list-style-type: none"> <li>• Follow advise from the water company.</li> <li>• You may need to run taps for several minutes to remove contamination.</li> </ul>

### Loss of telecommunications

This scenario involves a full loss of the telecommunications infrastructure with no notice. The disruption could have wide ranging impacts, such as disruption to traffic lights, ATM machines, retail systems, , e-mail and internet, and the ability to contact the emergency services. Mobile phones are also reliant on the landline phone infrastructure, so it is likely that this service would be disrupted as well. This could be caused by a variety of sources, such as fires in key infrastructure, flooding, or human error. The emergency services have plans in place to ensure that they can continue to communicate via a variety of means.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Consider having multiple means of contact (i.e intranet, telephone and mobile)</li> <li>• Have an emergency supply of cash available (you may not be able to withdraw money from ATMs)</li> </ul>	<ul style="list-style-type: none"> <li>• Tune in to local radio stations (some television services may not work)</li> <li>• Check on neighbours who may be vulnerable.</li> </ul>	<ul style="list-style-type: none"> <li>• Check your bank account.</li> </ul>

### Failure of electricity network

This scenario involves a total failure of the national electricity transmission network lasting up to 5 days, with potential for some areas to remain without power for up to 14 days. Power stations require an amount of power to carry out the generation process. In the event of a full loss of power it would be necessary to manually restart many power stations using an external input of power. This is a well rehearsed process, however it would take some time to implement and restore full power generation to the UK. Demand for power is highest during the winter so this is considered within the assessment. Whilst this risk is technically feasible, it has never previously occurred and numerous control measures are in place to prevent it from happening. In this scenario and smaller scale disruptions, it may be necessary to implement 'rota disconnections' to ration the power that it available. In this case customers would have scheduled periods without power. Emergency services have arrangements in place to ensure they can continue to operate without power for extended periods of time.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Make sure your home is well insulated to maintain heat.</li> <li>• Make sure elderly and vulnerable friends and relative are registered with there utility provider.</li> <li>• Prepare a grab bag - a wind up torch, food, water and a fully charged phone.</li> <li>• Make yourself aware of your utility supplier contact numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Report the issue to your supplier to ensure they are aware.</li> <li>• Check on elderly and vulnerable neighbours.</li> <li>• Tune in to local radio for updates.</li> <li>• Don't open fridge and freezers for any longer than necessary. They can stay cold for many hours if left closed.</li> <li>• Be wary of using candles or naked flames. Never leave naked flames unattended or with unsupervised children or animals.</li> <li>• Be careful using generators, which can give off Carbon monoxide.</li> </ul>	<ul style="list-style-type: none"> <li>• Be aware that you may need to reprogramme many of your electronic devices.</li> </ul>

## Mass Gathering

### Attacks on Crowded Places

Crowded places are regarded as locations or environments to which members of the public have access that could be potentially liable to terrorist attack by virtue of the crowd density. These include bars, pubs, nightclubs, restaurants, hotels, shopping centres, sports and entertainment stadia, cinemas, theatres, visitor attractions, major events, commercial centres, health establishments, education establishments, and places of worship. The UK has a variety of transport systems, including overground rail, underground rail, air, and maritime.

This assessment covers 'conventional' means of attack. That is to say that it does not assess the risk from Chemical, Biological, Radiological or Nuclear (CBRN) elements. Conventional attacks may result in traumatic injuries such as burns, breaks, bleeding, etc. This assessment considers a scenario larger than any that has previously occurred within the UK, with multiple seats of attack. The incident would involve large numbers of fatalities, alongside high numbers of traumatic injuries requiring specialist care.

## Major incident at a large scale event

This risk carries many of the same issues as the one above, but considers large scale events within those environments. As with the risk above the large numbers of people involved in an unfamiliar environment creates the potential for minor incidents to escalate. Most well organised events will be organised in consultation with the emergency services and local authority, giving organisers access to a wide range of safety expertise, however In some cases they will not, meaning that safety measures could be lacking.

Many of these types of event take place outside, and so can easily be impacted by extreme weather conditions .

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Familiarise yourself with the site and alternative routes to get home if necessary.</li><li>• Ensure you are aware of the safety arrangements in whatever environment you are in.</li><li>• Ensure you have appropriate clothing should the weather change or become extreme</li></ul>	<ul style="list-style-type: none"><li>• If you are the first to recognise an incident taking place alert site staff promptly.</li><li>• Stay calm and avoid taking any rash actions.</li><li>• Take notice of any alarms or procedures and follow them unless otherwise directed.</li><li>• Follow instruction given to you by site staff and emergency services.</li></ul>	<ul style="list-style-type: none"><li>• Be aware that in some circumstances you may be required to give evidence about the event at a later date.</li></ul>

# **Medium Risks**

## **Industrial Accidents**

### **Localised fire or explosion at a fuel distribution site**

This threat includes a fire or explosion at a site where either fuel, flammable liquids, or toxic liquids are stored in bulk. Dependent on what is being stored a fire may or may not lead to an explosion, however in most circumstances the incident would lead to a plume of gases or toxic smoke. Toxic chemicals are stored in bulk form throughout the county and the larger facilities are covered by COMAH (Control of Major Accident Hazards). Regulations, and therefore have bespoke plans in place. There are a large number of these sites in Kent, ranging from large scale storage to small scale. Incidents at these sites could have an impact on their local communities as well as disruption to the wider community. As part of the regulations the sites and Local Authority carry out planning and awareness raising in the areas that could potentially be affected.

### **Onshore fuel pipeline incident**

This threat includes a fire or explosion with a footprint of up to 1km around the site of the pipeline resulting in the potential for casualties and fatalities. There is likely to be a significant demand on emergency responders in the short term. There is a potential for a release of toxic gases and environmental damage, as well as the risk of contamination. In addition to the risk to life the failure of a strategically important fuel pipeline could lead to fuel shortages. The most likely causes of pipeline failure are:

- A physical fault in the pipeline leading to an unexpected failure (e.g through corrosion)
- Exceeding the safe operating limits of the pipeline (e.g through over pressure)
- Accidental third party damage to the pipeline, e.g struck by machinery during ditch clearance or excavation work.

Emergency responders are aware of the location of all pipework within Kent and have plans in place to respond to any incidents that do occur, as well as plans to mitigate any disruption to the fuel supply.

### **Explosion at a gas pipeline**

This risk regards the potential for a fire or explosion at a natural gas pipeline or gas terminal. Such an incident would require an exclusion zone for safety reasons and would substantial safety concerns.

### **Explosion at a gas terminal or flammable gas storage sites**

This threat includes a fire or explosion at a gas terminal or sites where flammable gas is stored. Events at terminals are likely to be of short duration as the feed lines will be isolated, however events at storage sties could last for extended periods if the explosion damage control equipment. There will be impacts on the environment, particularly a widespread effect on air quality. The emergency services are aware of all the sites in Kent that act as gas terminals or store flammable gas and have plans to manage any issues that occur.

### **Accidental release of radioactive material**

This risk is most likely to occur when radioactive sources or other material is disposed of incorrectly and the material is destroyed or broken in the process, e.g if a source is melted down or crushed along with scrap metal, however the majority of smelters have portal monitors to detect radioactive materials and set off an alarm to stop material being processed. Sites undertaking processes other than smelting who bring in this material unwittingly or illegal pose a significant risk. The most likely source of this radioactive material is from medical sources such as radiotherapy machines. The impact of this risk could be environmental damage to water, air, land, animal welfare, agriculture and waste management. This may require decontamination and could result in fatalities and long term health impacts.

## Biological substance release

This risk assessment relates to an accidental release of pathogens into an urban environment. Pathogens are tightly controlled and so the risk of such an incident occurring is extremely low. The assessment looks at a worst case scenario where pathogens capable of creating a human disease are released into an urban area. Such a release would be similar to the release of SARS in China, in which a small number of people died and a large number were quarantined. This type of release could lead to human and animal health risks within the Risk Register. Sites that handle these pathogens include hospitals, biotechnology factories, universities, veterinary laboratories, military research facilities, pharmaceutical research facilities and biomedical research establishments. There are rigorous control measures in place at all these sites to ensure the risk is kept to a minimum.

## Biological substances release (pathogens)

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<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Be aware of the risks in your local area.</li><li>• Engage with any warning and informing material you are given by site operators.</li><li>• Prepare a grab bag - see <a href="#">"What should I do in an emergency"</a> booklet for list.</li></ul>	<ul style="list-style-type: none"><li>• Follow the instructions of the Emergency Service, Local Authority and site operators.</li><li>• Tune into the local radio for information - "Go in, Stay in, Tune in".</li></ul>	<ul style="list-style-type: none"><li>• Take advice from the site operators..</li></ul>

## Major food contamination incidents

This includes:

- Industrial accident (chemical, microbiological, nuclear) affecting food production areas. e.g Chernobyl, Sea Empress Oil Spill and animal disease.
- Contamination of animal feed, e.g dioxins, BSE.
- Incidents arising production processes, e.g adulteration of chilli powder with Sudan I dye.

This risk assessment covers the various risk associated with contamination of the food chain, resulting in potential implications for human health. There are a number of distribution and storage centres within Kent food production and preparation businesses, and a significant number of arable farms and livestock holding areas. Contamination of human or animal feeding stuffs could have far reaching implications for human and disposal of contaminated products and animals. Contamination could occur through various means on a local, regional, national or international scale. Such a contamination, however, is unlikely to result in an immediate risk to human health, although it may create longer term health risks. The assessment covers both accidental and deliberate contamination.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Be aware of the risks in your local area.</li> <li>• Engage with any warning and informing material you are given by site operators.</li> <li>• Prepare a grab bag - see "<a href="#">What should I do in an emergency</a>" booklet for list.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow the instructions of <a href="#">Food Standards Agency</a> and Local Authority.</li> <li>• Tune into the local radio and news channels for information</li> </ul>	<ul style="list-style-type: none"> <li>• Take advise from the Food Standards Agency.</li> </ul>

# Transport accident

## Maritime accident and blockage of a port

Kent has significant ports with the sea ports of Dover, Ramsgate, Thamesport, Sheerness, Dartford and the unique Channel Tunnel. These ports handle exclusively, or combinations, of freight and passengers. This risk considers the potential for a cumulative delay of 30 days as well as a continuous delay. Loss of a key port is likely to have an **initial** wider impact, this assessment considers the risks and threats from this initial impact as well as the longer term impacts although the planning assumptions expect the impacts to reduce over time as shippers seek alternative ports or methods of shipping.

## Incident in Road Tunnel

There are five significant road tunnels within the Kent Strategic Road Network which are covered by European Tunnel Regulations. Incidents in these tunnels have the potential to cause fatalities and casualties, as well as significant disruption to the strategic road network. Such incidents could potentially involve complex rescues for the emergency services. The five tunnels within Kent are the Dartford Crossing, Medway Tunnel, Ramsgate New Harbour Approach, Round Hill Tunnel and Chestfield Tunnel.

## Railway incident - Channel Tunnel

The Channel Tunnel Fixed Link is a transport system providing a fixed and permanent link between the road and rail networks of the United Kingdom and France. The system comprises rail and road systems at the terminals situated in Cheriton near Folkestone and Coquelle in Nord Pas de Calais, France. The tunnel is currently operated by 'Eurotunnel' under licences issued by the governments of the UK and France. The system is effectively made up of two single track rail tunnels running in opposite directions underneath the English Channel, which link the two terminals.

The tunnel allows for four categories of traffic to travel between the UK and France:

- Private cars and coaches, normally transported on Tourist Shuttles
- Commercial vehicles, lorries, and HGV's, normally transported by Freight Shuttles
- International passenger trains operated by private train operating companies
- Goods trains operated by Eurotunnel and private train operating companies.

Due to the nature of the unique tunnel environment any incident or technical failure can result in people being confined or trapped in the tunnel for long periods of time. Any incident that does occur is likely to remain within the boundaries of the terminals and tunnel, however the disruption can cause significant wider traffic issues. The safety of the Channel Tunnel is closely monitored and overseen by the Channel Tunnel Safety Authority. This is a bi-national working group that closely assesses safety and ensures appropriate safety measures are implemented and maintained. The Channel Tunnel is regularly inspected and emergency services carry out specialist training and exercising to ensure that they can respond to any incidents that do occur.

## Railway Accident

This risk looks at the potential for a collision or incident occurring on the railway network. There are a number of variables that could cause accidents to occur with past incidents coming about from a variety of sources. This assessment assumes that the incident is confined within the working boundaries of the railway network and has not significantly impacted on other premises. Such incidents can result in casualties, which will generally be confined to passengers and crew.

## Aviation Accident

The risk considers a worst case scenario of the collision of two commercial planes in Kent airspace. Such an incident is likely to lead to fatalities of crew and passengers, with complex casualties on the

ground. Such incidents are most likely to occur during take off and landing, with damage likely to occur within the airport or airfield complex.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Check before you travel.</li> <li>• Ensure you and your vehicle are prepared for your journey and potential delays. Take food and water in case you do get stuck.</li> <li>• Store an ICE (in case of emergency) contact on your mobile phone.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow guidance from matrix signs if a road incident.</li> <li>• Follow guidance from the emergency services.</li> <li>• Tune into the local radio for updates.</li> </ul>	<ul style="list-style-type: none"> <li>• Be aware that incidents may cause damage to the tunnel, so roads may be closed for protracted periods of time.</li> </ul>

### Major shipping incident

This risk assessment considers the sinking of a passenger vessel in, or close to UK waters (including inland waterways), leading to the ships full or partial evacuation or abandonment at sea. Passenger vessels have well rehearsed evacuation and safety procedures to ensure the safety of all on board. There is a potential for casualties amongst the crew and passengers, as well as the need for a complex rescue and disruption to shipping routes.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Ensure you engage with all safety briefings and familiarise yourself with emergency arrangements.</li> <li>• Store an ICE (in case of emergency) contact on your mobile phone.</li> </ul>	<ul style="list-style-type: none"> <li>• Follow the instructions of the emergency service crew on board the vessel.</li> <li>• Store an ICE (in case of emergency) contact on your mobile phone.</li> </ul>	<ul style="list-style-type: none"> <li>• Be aware that there may be a disruption to shipping routes so check before you travel.</li> </ul>

# Industrial Accidents and Environmental

## Wildfire

Kent has a number of areas of forest and moorland which could result in large fires, particularly during hot and dry conditions. Kent Fire and Rescue Service has specialist equipment to deal with these types of fire, however it would still cause a significant strain on the service, as well as environmental damage and destruction.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Report any suspicious activity to the police.</li><li>• Do not dispose of cigarettes or other flammable items irresponsibly</li></ul>	<ul style="list-style-type: none"><li>• Follow the instructions of the Emergency Service, Local Authority.</li><li>• Tune into the local radio for information - "Go in, Stay in, Tune in"</li></ul>	<ul style="list-style-type: none"><li>• Take advice from the emergency services.</li></ul>

## Major incident at DSTL Fort Halstead

DSTL Fort Halstead is a restricted site under the Official Secrets Act and is guarded by MOD civilian guards and MOD police with control room being operational at all times. The site is regulated by the MOD Major Accident Control Regulations (MACR) which are similar to COMAH, and the site has on site emergency services available. The site carries out research and investigative activity, which at times involve explosives. Operations on the site are fires, explosions, hazardous substance release (including radiation) and projected debris. The site proactively engages with the Kent Resilience Forum to ensure appropriate plans and strategies are in place.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Report any suspicious activity to the Police.</li><li>• Prepare a grab bag - see <a href="#">"What should I do in an emergency"</a> booklet for list.</li><li>• Engage with any warning and informing material you are given by site operators.</li></ul>	<ul style="list-style-type: none"><li>• Follow the instructions of the emergency services and local authority.</li><li>• Tune into the local radio for information - GO IN, STAY IN, TUNE IN.</li></ul>	<ul style="list-style-type: none"><li>• Take advice from the emergency services and MOD.</li></ul>

# Inland Flooding

## Localised, extremely hazardous, flash flooding

The assessment considers an incident in which rivers respond rapidly to rainfall and cause flooding. The Bourne and the Pent are categorised nationally as being at 'medium' risk from flash flooding. The Shuttle, which is within the Kent County boundary is considered to be within the administrative area of London Boroughs. The rivers are monitored constantly in order to alert residents of any potential for flooding, however due to the nature of the rainfall and rapid response it is possible that a flooding event could occur with no prior warning, giving as little as 15 minutes warning time. Whilst the flooding would be likely to last less than 24 hours it would pose a significant risk to life and could cause significant damage to infrastructure.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Think about where you and your pets would go if flooding happens.</li><li>• Prepare a grab bag - see "<a href="#">What should I do in an emergency</a>" booklet for list.</li><li>• Assess your risk - Sign up to the <a href="#">Environment agency flood line</a> or call 0345 988 1188, or follow the flood destroy link below.</li><li>• Keep an track of the weather - <a href="#">BBC Weather</a> or <a href="#">Met Office</a>.</li><li>• If your community is at risk of flooding find out if you have a Flood Warden by contacting your local <a href="#">Borough or District Council</a>.</li><li>• Ensure you have appropriate insurance.</li></ul>	<ul style="list-style-type: none"><li>• Follow the instructions of the Emergency Service, Local Authority.</li><li>• Tune into the local radio stations or floodline for updates - "Go in, Stay in, Tune in".</li><li>• If safe to do so, turn off gas, electricity and water mains before water enters your home. (Don't touch sources of electricity when standing in water).</li><li>• If you can not leave for any reason move your family and pets to a higher position with a means of emergency escape.</li><li>• If raw sewage enters your property keep out and stay elsewhere until it has been decontaminated.</li><li>• Report property flooding to the Environment Agency on 0800 80 70 60 or follow the flood destroy link under useful links.</li></ul>	<ul style="list-style-type: none"><li>• Take advise from the emergency services.</li><li>• Find out if it is safe to return to your property by checking the media and the Local Authority website.</li><li>• Contact your insurance company as soon as possible and follow their advice.</li><li>• If safe to do so take photographs of your property for evidence of damage.</li><li>• Have your electricity, gas and water supply checked by a certified professional before using them.</li><li>• Wear appropriate clothing to protect yourself against contamination, such as wellington boots and gloves.</li></ul>

# Severe Weather

## Drought

The planning for this risk is based on an unprecedented scenario if 3 consecutive dry winters. In general terms water supplies fall during the summer and are replenished over the winter. If there is insufficient rainfall during the winter then there may be shortages during the following summer. UK water stocks are sufficient to manage one dry winter with minimal intervention, albeit with publicity campaigns to save water would likely be implemented towards the end of summer. Following a second dry winter reservoir stocks would be anticipated to be very low and high level publicity campaigns would be implemented during spring. Hosepipe bans would be introduced and additional leakage control teams would be deployed. Due to the low water levels there would be issues with fish deaths and algal blooms. At this point water companies may consider apply for a 'non-essential use ban'. This would make it illegal to wash buildings and windows. Water companies may also apply for 'drought permits' which would allow them to abstract water from different areas and reduce flow rates through pipes. Following a third consecutive dry winter there would be substantial shortages. Further 'drought permits' may be issued allowing abstraction from protected areas, farmers may be prevented from abstracting water on their sites, and rota cuts may be introduced. Enforcement of non-essential use would be stepped up. Rota cuts would be implemented for 'non essential' customers to priorities supplies for the public. The use of de-salinization plants (a process which removes the salt from sea water) may also be considered to provide additional supplies. All water companies have robust emergency plans in place to ensure they can continue to provide water to the public.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Try to keep bottles of water available.</li></ul>	<ul style="list-style-type: none"><li>• Be aware of public information, do not use hose pipes during a ban and conserve where possible.</li><li>• Make sure you still drink the fluids you need.</li><li>• Check on vulnerable and elderly neighbours and relatives.</li></ul>	<ul style="list-style-type: none"><li>• Be aware that it will take some time for stocks to get back to normal.</li></ul>

# Structural

## Land Movement

This risk refers to land movements caused by earth tremors and landslides. The geological nature of the KRF area means that significant events of these kind are extremely rare, however minor earth tremors have been known to occur. Damage could include collapsed structures and unsafe buildings, as well as severe impact on the transport system and infrastructure in the affected area.

## Building collapse

This risk includes the collapse of buildings (including domestic, commercial etc) and may be realised for a variety of reasons. People may be trapped by the building collapse, as well as damage to local road networks and utilities.

BE PREPARED	DURING THE INCIDENT	AFTER THE INCIDENT
<ul style="list-style-type: none"><li>• Take steps to ensure your property is structurally sound.</li><li>• Have a home or business emergency plan so you are prepared to evacuate quickly if you need to.</li><li>• Take instruction from the emergency services and local authority.</li></ul>	<ul style="list-style-type: none"><li>• Evacuate the building in a safe manner.</li><li>• Do not attempt to make repairs during the incident.</li><li>• Take instruction from the emergency services and local authority.</li><li>• Find shelter in a substantial, permanent, enclosed building where possible.</li></ul>	<ul style="list-style-type: none"><li>• Have your electricity, gas and water supply checked by a certified professional before using them. Do not touch damaged utility cables or pipes.</li></ul>

## Bridge Collapse

Kent has a large number of bridges used for road, rail and pedestrian access. Of particular note are the OEII bridge linking Kent and Essex and the Sheppey Crossing which links the Isle of Sheppey to the mainlands of Kent's major road routes and having bridges at regular intervals, such as M2 bridge crossing the river Medway at Strood, which carries motoway traffic and the CTRL high speed rail link. The collapse of any bridge is likely to impact heavily on the infrastructure of Kent and will lead to transport problems and restrictions.

BE PREPARED	DURING THE INCIDENT	AFTER THE INCIDENT
<ul style="list-style-type: none"><li>• Plan ahead, be aware of road closures before you set off.</li></ul>	<ul style="list-style-type: none"><li>• Follow diversion routes, do not try to go through roads which are closed.</li></ul>	<ul style="list-style-type: none"><li>• Be aware that it may take some time for routes to return to normal.</li></ul>

## Major Reservoir/Dam failure or collapse

The planning for this risk is based upon a reasonable worst case scenario of a no notice failure of a reservoir or dam. Due to the nature of the event there would be no time to evacuate and emergency services would have no pre-warning. Flooding would last less than 24 hours, however water would be flowing and cause significant risk to life and damage to infrastructure. Substantial controls are in place to ensure that the likelihood of this risk occurring is very low.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Be aware if you are in the risk area</li> <li>• Have a home or business emergency plan so you are prepared to evacuate quickly if you need to</li> </ul>	<ul style="list-style-type: none"> <li>• Take instruction from the emergency services and local authority.</li> </ul>	<ul style="list-style-type: none"> <li>• Have your electricity, gas and water supply checked by a certified professional before using them. Do not touch damage utility cables or pipes.</li> </ul>

## Human Health

### Infectious diseases

With the growth of international travel diseases which are unknown or previously eradicated in the UK can be imported from abroad. Often these infections are transmissible to others before obvious symptoms occur, meaning that they can be rapidly spread. Symptoms will vary depending on the nature of the strain. It is not possible to predict which groups will be the most affected as this will depend on this virus, however it is fair to say that potentially the whole population is susceptible.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"> <li>• Wash your hands frequently with soap and water.</li> <li>• Clean hard surfaces such as worktops, door handles, loo seats and handles frequently.</li> <li>• Make sure you and your family are up to date with recommended vaccinations (particularly if travelling abroad).</li> </ul>	<ul style="list-style-type: none"> <li>• If you are concerned contact 111 or visit <a href="#">NHS Choices</a>.</li> <li>• Take notice of public information and advice.</li> <li>• Continue to observe good hygiene.</li> </ul>	<ul style="list-style-type: none"> <li>• Be aware that viruses can live on surfaces, so make sure to keep areas clean.</li> </ul>

# Animal Health

## Non-zoonotic notifiable animal disease

(eg Foot and Mouth Disease (FMD), Classical Swine Fever (CSF), Bluetongue and Newcastle Disease (of birds))

These diseases can be spread by direct and indirect contact (including being windborne) and can lead to devastating impacts for livestock, resulting in infected and exposed animals being culled for welfare reasons. The most serious disease in this category is FMD. The assessment for this risk is based on the need to cull up to 4 million animals across Great Britain, with the whole becoming a 'controlled area', meaning that susceptible livestock will be prohibited from all movements until licensed. Although the impact of the disease will vary between areas the nature of the industry means that infected animals may have been moved to other premises before the disease is detected, resulting in widely dispersed numerous outbreaks. Transmission to humans is very unlikely and would not be expected to be fatal.

## Zoonotic notifiable animal disease

(eg Highly Pathogenic Avian Influenza (HPAI), Rabies and West Nile Virus)

These are diseases which predominantly affect animals, but can also be transmitted to humans. Transmission is through direct contact, most commonly through water, feed, faeces and bites. Although the impact of a disease outbreak will vary between areas, the likelihood of a disease incursion cannot be differentiated between areas. These diseases can be spread by migratory birds as well as other sources. If introduced into a domestic population it is likely that the flock will require culling. Vaccination tends to be ineffective against an outbreak due to the time taken for the immunity to develop. This risk assessment is made against a reasonable worst case scenario of culling up to 30 million poultry, plus the possibility of wildlife being affected (most likely by Rabies). For West Nile virus it is reasonable to assume up to 1000 horses could need to be slaughtered.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Register any livestock you own with DEFRA.</li><li>• Vaccinate livestock where possible.</li><li>• Ensure your livestock receive regular and appropriate veterinary treatment.</li></ul>	<ul style="list-style-type: none"><li>• Follow government guidance to protect your livestock and limit the spread.</li><li>• Take notice of signs if entering fields or infected areas.</li><li>• Make sure you and your family have up to date vaccinations.</li><li>• Seek immediate medical treatment if you are exposed to any infections (e.g through animal bites).</li><li>• Ensure you observe good hygiene measures when interacting with infected animals.</li><li>• Maintain good hygiene, wear protective clothing, wash hands, shoes and boots when entering and leaving an infected area.</li></ul>	<ul style="list-style-type: none"><li>• Follow DEFRA guidance.</li><li>• Take note of signs when entering agricultural area.</li></ul>

# Industrial Action

## Industrial action by critical workers

This risk covers industrial action by emergency services personnel, social care staff, and NHS Medical, nursing and healthcare professionals. However, it must be recognised that industrial action by ancillary staff in those sectors and in unrelated sectors such as education are likely to lead to difficulties in delivering the normal standard of service by statutory agencies. The following key points need to be noted in relation to this risk.

- Police Officers are prevented by law from taking strike actions - however police support staff (such as the 999 control room) are not and action by these support staff can impact front line services.
- Industrial action by the Fire and Rescue Service is covered in a separate risk assessment below. As with the Police some Fire and Rescue staff are not covered by the Fire Brigade Union. These staff are covered within this risk assessment.
- NHS and Social Care staff have historically elected to 'work to rule' rather than withdraw labour in services critical to life. The NHS is particularly vulnerable to the knock on effects of industrial action in other areas, such as education.
- Any action by Maritime & Coastguard Agency will have the potential to compromise coastguard rescue services.
- 'Wild-cat' strikes (where workers withdraw their labour without a lawful ballot) are illegal and can result in disciplinary action and dismissal. These are historically very rare within the UK.
- The activities of Trade Unions are regulated strictly by the Trade Union Act 1992.

Emergency Services have well tested plans in place to ensure critical services are maintained, however the public may experience some reduction in service, particularly for lower priority calls.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>
<ul style="list-style-type: none"><li>• Be aware of the situation. Unions must give 7 days notice of any industrial action</li></ul>	<ul style="list-style-type: none"><li>• Be aware that the emergency services may have reduced personnel to respond to incidents.</li><li>• Think about whether the situation is really an emergency, prior to dialing 999. However, DO call 999 if you need to.</li><li>• Take additional precautions regarding fire safety and personal safety</li></ul>	<ul style="list-style-type: none"><li>• Take advice from the emergency services.</li><li>• Find out if it is safe to return to your property by checking the media and the Local Authority website.</li><li>• Contact your insurance company as soon as possible and follow their advice.</li><li>• If safe to do so take photographs of your property for evidence of damage.</li><li>• Have your electricity, gas and water supply checked by a certified professional before using them.</li><li>• Wear appropriate clothing to protect yourself against contamination, such as wellington boots and gloves.</li></ul>

## Strike action by prison officers

This risk covers the potential for prison officers to take part in illegal strike action. Prisons would become reliant on small number of staff (typically senior level grades) operating the prison on a reduced regime. Plans are in place to parachute additional support via alternative means, albeit it is likely that prisoner movements would be restricted to recued the need for staff. Restrictions put in place on prisoner movements would have an effect on court activity and potentially increase the risk of disturbances and lack of discipline within the prison. In the most extreme cases the Police could be used to maintain order.

Technically industrial action by prison officers is unlawful, meaning that the normal periods for giving notice and balloting members would be necessarily be apparent. The prison sector is made up of public and private sector operations, means that industrial action is unlikely to affect the entire industry.

- Prison officers in public sector are prevented by law from taking strike actions - however they have historically taken illegal 'wild-cat' action on other occasions.
- 'Wild-cat' strikes (where workers withdraw their labour without a lawful ballot) are illegal and can result in disciplinary action and dismissal.
- The activities of Trade Unions are regulated strictly by the Trade Union Act 1992.

There are well tested plans in place to ensure prisons and inmates remain safe and it is unlikely the wider public will notice any difference. There may, however, be disruptions to some services, such as the courts and prison visits.

<b>BE PREPARED</b>	<b>DURING THE INCIDENT</b>	<b>AFTER THE INCIDENT</b>

## Low Risks

## Archived Risks