Planning for Emergencies
MERSEYSIDE RESILIENCE FORUM

PREPARING FOR EMERGENCIES
IN THE NORTH WEST

Merseyside
Community Risk Register
Main Risks & Emergency Preparedness

Produced by MRF Secretariat, July 2024

Merseyside is a multi-cultural and multi-faith community. It is a diverse metropolitan area, with a resident population of just under 1.4 million people. The area consists of 5 local authorities: Knowsley, Liverpool, Sefton, St Helens and Wirral and is a mix of urban and rural areas.

Merseyside spans 249 square miles (645 km2) of land which border Lancashire (to the north-east), Greater Manchester (to the east), and Cheshire (to the south and south-west); the Irish Sea is to the west. North Wales is across the Dee Estuary. There is a mix of high density urban areas, suburbs, semi-rural and rural locations in Merseyside, but overwhelmingly the land use is urban. It has a focused central business district, formed by Liverpool City Centre, but Merseyside is also a polycentric county with five metropolitan districts, each of which has at least one major town centre and outlying suburbs. The Liverpool Urban Area is the fifth most populous conurbation in England, and dominates the geographic centre of the county, while the smaller Birkenhead Urban Area dominates the Wirral Peninsula in the south.

Following significant investment in Liverpool City Centre, the biggest retail development of its kind in Europe – Liverpool One – was officially opened in 2008. The Port of Liverpool, a barometer for the success of the whole of Merseyside, is the largest freeport zone in the UK and the main UK port for container trade with the USA. The cruise terminal opened in 2007 offers berths to several cruise lines bringing in thousands of tourists, whilst Liverpool John Lennon Airport is one of the fastest growing regional airports in Europe.

Despite considerable investment and regeneration within the Merseyside region, there remain pockets of significant deprivation. Merseyside has not been exempt from the recent recession and some regions remain among the most deprived areas within the UK.

SEFTON

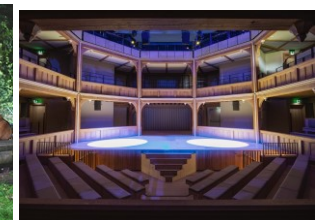**Planning for Emergencies**
MERSEYSIDE RESILIENCE FORUM

ST HELENS

LIVERPOOL

WIRRAL

KNOWSLEY

INTRODUCTION

PURPOSE OF THIS DOCUMENT

This document is designed to inform people about the risks that could occur where they live, so they can think about what they can do to be better prepared in their homes, communities and businesses.

ABOUT US

The **Merseyside Resilience Forum (MRF)** is a multi-agency partnership made up of all the organisations needed to prepare for and respond to any emergency in the county. We started in 2004 after the Government issued a law called the Civil Contingencies Act.

With our partners, we work to ensure that we are prepared and able to provide an effective response to emergency incidents which may affect you.

WHAT DO WE DO?

The MRF's overall purpose is to ensure that there is an appropriate level of preparedness to enable an effective multi-agency response to emergency incidents that may have a significant impact upon the communities of Merseyside.

All services and organisations work together to ensure that the best possible preparations and plans are in place for emergencies. These are regularly tested and updated so that agencies can respond immediately and effectively to any threat.

All responders work to a set of common objectives, which will help to:

- Save lives;

- Prevent the disaster getting worse;

- Relieve suffering;

- Restore normality as soon as possible;

- Protect property;

- Facilitate a criminal investigation and judicial process, if necessary.

During emergencies we work together to focus on the needs of victims, vulnerable people and responders. The partnership has developed a range of capabilities, which we regularly test and exercise, necessary to help us manage most emergencies.

OUR PARTNERS

Category One Responders
British Transport Police
Environment Agency
Knowsley Council
Liverpool City Council
Maritime & Coastguard Agency
Mersey Port Health Authority
Merseyside Fire & Rescue Service
Merseyside Police
NHS Cheshire & Merseyside Integrated Care Board (ICB)
NHS England
North West Ambulance Service
Sefton Council
St Helens Council
UK Health Security Agency
Wirral Council

Category Two Responders
British Telecom
Cadent
Health & Safety Executive
Liverpool John Lennon Airport
Mersey Docks and Harbour Authority (Peel Ports)
Mersey Tunnels Police
Merseyrail Electrics
Merseytravel / Liverpool City Region Combined Authority
Met Office
National Grid Plc
National Highways
Network Rail
SP Energy Networks
The Coal Authority
United Utilities

Others
British Red Cross – Coordinator for Voluntary and Faith sector organisations
Military HQ 42 Brigade
Ministry of Housing, Communities & Local Government (MHCLG)

RISK REGISTERS

The Government issues a document, the National Risk Register, which lists various incidents that could occur in the UK, and provides advice and guidance on how to be prepared should such events occur. Each region has their own register - the Merseyside Community Risk Register (CRR).

WHAT IS THE COMMUNITY RISK REGISTER?
The MRF has a statutory duty to produce a CRR to look at the likelihood and impact of a range of hazards happening.

Nationally, every resilience forum uses its own professional judgement, in accordance with guidance from the national version of this document (National Risk Register), to put together its CRR. The national register is produced by the Government using historical and scientific data, plus the professional judgement of experts to analyse the risks to the UK as a whole.

Merseyside's CRR provides information on the biggest emergencies that could happen in Merseyside, together with an assessment of how likely they are to happen and the impacts if they do. This includes the impacts to people, their homes, communities, the environment and local businesses.

Looking at all of the risks together can also help the MRF agencies plan their joint response. The CRR aims to help these agencies make decisions on emergency planning work, and will help them develop better relationships whilst considering their capabilities and capacity.

Any gaps identified can then be dealt with appropriately, depending on the priority of the risk. The overall aims of this are to identify the generic capabilities, which are required in response to many of the risks, so we can develop a strong capacity to respond to any incident.

Main local risks in Merseyside:

Pandemic Influenza	
	Severe Weather
Surface Water Flooding	
	Loss of Critical Infrastructure
Cyber Attack	
	Emerging Infectious Disease
Severe Space Weather	

PANDEMIC INFLUENZA

A flu pandemic differs from seasonal flu and has more serious implications because significantly more people will be affected. It occurs when a new flu virus emerges in the human population and spreads from person to person around the world. As it is a new virus, the entire population is susceptible as few people have immunity. People in vulnerable groups may be affected by the pandemic, but it is likely that the pandemic will also affect healthy persons. The lack of immunity means the virus has the potential to spread very quickly. In the event of a flu pandemic it is important that the health and social care system, as well as wider society, is ready to minimise the impacts and provide an effective response to a pandemic, which will require the co-operation of a wide range of organisations and the active support of the public.

As there may be very little time to develop or finalise preparations, effective pre-planning is essential. Many important features of a pandemic will not become apparent until after it has started (ie. when person-to-person transmission has become sustained), so plans must be:
- Constructed to deal with a wide range of possibilities;
- Based on an integrated, multi-sector approach;
- Built on effective service and business continuity arrangements;
- Responsive to local challenges (eg. rural issues) and needs;
- Supported by strong local, regional and national leadership;
- In line with national planning guidelines.

WHAT ARE THE RISKS?

The consequences could include:
- Vulnerable people exposed to lower levels of care;
- Longer and more frequent disruptions to essential utilities;
- In some circumstances there may be possible School or Nursery closures;
- Reduced levels of emergency services cover;
- Disruptions to businesses and organisations through staff shortages and supply chain interruptions;
- Impacts on the national and local economy.

WHAT ARE WE DOING IN MERSEYSIDE?

We work together to exercise and plan for:
- Management of the demand on the NHS and social care;
- Distribution of anti-viral medication to the public, if required;
- Vaccinations;
- Public awareness and media management;
- Managing excessive levels of death.

The individual organisations that make up the MRF each have their own Business Continuity Plans in place to cope in times of staff shortage.

PANDEMIC INFLUENZA

WHAT DO YOU NEED TO DO?

BEFORE

- Keep healthy – a healthy lifestyle will be a great defence against flu and other illnesses;
- Identify a flu friend - somebody who would collect your medication, food and other supplies if you become ill;
- The annual flu vaccine can help reduce the risk of flu and is free for those most at risk, for information visit the NHS Choices website;
- Keep personal stocks of 'over the counter' cold and flu medication to help relieve your symptoms;
- Wash your hands regularly and follow basic hygiene practices;
- Know the sickness and closure arrangements for your child's school;
- Know the sickness reporting arrangements of your employer;
- Look out for elderly relatives or neighbours who may need extra help;
- Look out for, and observe, advice and guidance from the NHS.

CATCH IT Germs spread easily. Always carry tissues and use them to catch your cough or sneeze.

BIN IT Germs can live for several hours on tissues. Dispose of your tissue as soon as possible.

KILL IT Hands can transfer germs to every surface you touch. Clean your hands as soon as you can.

DURING

- Stay at home and drink plenty of fluids; minimise close contacts;
- Watch out for and follow advice when issued via a range of media; including the printed press; TV; radio; NHS websites; posters and leaflets;
- To reduce the risk of spreading the virus, cover your mouth and nose with a tissue when coughing or sneezing, dispose of tissues quickly and regularly wash your hands with soap and water or a sanitising gel - **"Catch it, Bin it, Kill it";**
- Further information is available on the UK Health Security Agency and NHS England & NHS Improvement websites.

AFTER

Monitor your health and if any symptoms return consider revisiting the actions above.

WHAT DO BUSINESSES NEED TO DO?

- Plan for the impacts of a pandemic on your business, employees and customers;
- Establish policies to be implemented during a pandemic;
- Allocate resources to protect employees and customers during a pandemic;
- Communicate to and educate your employees;
- Co-ordinate with external organisations and help your community;
- Visit the GOV.UK website and download the Pandemic Flu Checklist for Businesses.

SEVERE WEATHER

There are many types of severe weather that can have a serious local impact in the UK. The main types of severe weather that we need to prepare for include storms and gales, low temperatures, heavy snow, heatwaves and drought.

Merseyside generally has a temperate maritime climate, there is a risk of heavy rainfall, snow and strong winds on occasion. The impacts of severe weather are varied - some common issues include travel disruptions, damage and disruption to basic utilities and damage to property. It also affects individuals, the community, businesses and the ability of agencies to deliver essential services to the community.

We are unable to reduce the likelihood of severe weather, however, by being prepared for such events we can reduce the impact to ourselves and our communities.

WHAT ARE THE RISKS?

The impacts of severe weather are varied, some common issues include travel disruptions, damage and disruption to basic utilities and damage to property.

Severe weather affects individuals, the community, businesses and the ability of agencies to deliver essential services to the community.

WHAT ARE WE DOING IN MERSEYSIDE?

- We have plans in place to manage and co-ordinate the agencies responding to severe weather events;

- When we plan for big events like the Grand National, parades or other public events we take the likely weather conditions into account.

SEVERE WEATHER

WHAT DO YOU NEED TO DO?

Winter Weather
BEFORE
- Listen to weather forecasts and pay attention to any warnings of extreme weather;
- Visit the [Met Office](#) website;
- Visit the [NHS Winter Health](#) webpages for tips on how to stay well in winter;
- Plan any journeys or activities with the weather in mind;
- If you have to travel in severe weather make sure you have adequate clothing and emergency supplies, including water, with you;
- If you intend to use your own vehicle make sure that you have simple equipment like a shovel, torch and battery operated or wind-up radio;
- Make sure your preparations take particular account of older and younger persons.

DURING
- Keep warm, keep well;
- Look after yourself;
- Keep your home warm, efficiently and safely;
- Get financial support;
- Drive safely.

AFTER
- Remove any snow early in the morning to allow the ice to melt during the day;
- Take care when driving or walking on compacted snow as it may have turned to ice. If possible, travel during the day and stay on main roads and avoid back road shortcuts;
- Monitor your health and if you have any symptoms consult your doctor for advice.

Heatwave
BEFORE
- Listen carefully to weather forecasts or visit websites, heed warning and advice;
- Download the latest [Adverse Weather and Health Plan](#) for advice on looking after yourself and others during hot weather.

DURING
- Listen carefully to weather forecasts or visit websites, heed warning and advice;
- When possible stay out of direct heat between 11.30am and 3.00pm;
- If you have to go out in the heat, walk in the shade, apply sunscreen and wear a hat;
- Avoid extreme exertion and wear light, loose fitting cotton clothing;
- Cool yourself down; have plenty of cold drinks; avoid excess alcohol and caffeine;
- If you feel unwell contact your doctor for advice.

AFTER
- Monitor your health and if any symptoms return consider the actions above.

SEVERE WEATHER

Storms and Gales

BEFORE

- Listen carefully to weather forecasts or visit websites, heed warning and advice;
- Check your insurance cover related to storm damage;
- Make sure you have enough insulation in your loft and external water pipes;
- Check the condition of trees/structures near to your home;
- Check you have deicer/grit and tools to keep your home safe and clear of snow or ice;
- Put away/secure anything that can be blown about possibly causing damage to your home or car.

DURING

- Listen carefully to weather forecasts or visit websites, heed warning and advice;
- Stay indoors unless absolutely necessary;
- Do not travel unnecessarily;
- In very cold weather turn off the water supply to external water taps;
- Put away/secure anything that can be blown about possibly causing damage to your home or car;
- Keep warm and safe in winter;
- If leaving your house unoccupied for an extended period when icy conditions are likely, consider setting your central heating to come on automatically for a short period in the morning and in the evening to stop internal pipes freezing;
- Check on neighbours, especially those who are elderly or vulnerable to see if they need help.

AFTER

- Consider any damage caused during the storm or gale, in particular loose cables that have been blown down or are still hanging, if in doubt obtain expert advice and do not touch them;
- Avoid walking near walls, buildings and trees that may have been weakened.

WHAT DO BUSINESSES NEED TO DO?

- Carry out a risk assessment to identify potential at-risk areas to your premises and put preventative measures in place;
- Create an emergency weather plan so that your employees know what to do if your business is affected by severe weather. Test your plan and adjust it where necessary to avoid complications in an emergency and make sure all your staff have copies of your plan and that they know their responsibilities in an emergency;
- Create a contacts list to enable employees to communicate with each other when the office is inaccessible. If your business has clients, determine who will contact them as well;
- Sign up for weather alerts from the Environment Agency;
- Stock up on essentials. Sometimes it's safer to stay at the office after working hours to avoid facing the unpredictable and sometimes dangerous weather outside. Emergency items such as torches, first-aid kits, drinking water, food and external batteries for electronics should be kept on-hand for situations keeping employees indoors;
- Protect your data. In the case that your employees can't get to the office, or if a new temporary workspace may be needed altogether, be sure your files and data are saved to an external source such as a cloud storage system so no data is lost;
- Put together a 'battle box' containing important documents and items to keep your business running, in case you have to relocate with little or no notice;
- Have standby power: having a backup power source such as a generator can not only keep your business functioning but could also be the difference between stumbling in the dark and being able to stay calm and devise a plan;
- Make sure you have suitable insurance and work with your insurer to create a comprehensive business interruption plan so you suffer as little possible.

Produced by MRF Secretariat, July 2024

SURFACE WATER FLOODING

As the events of recent summers have shown, flooding can take different forms and, at its most serious, can affect many different aspects of our daily lives. Over the coming years, rising temperatures and sea levels, and an increase in the frequency and severity of extreme weather events are likely to raise the risk of flooding in the UK.

Excluding coastal flooding, the two main types of flood are river flooding and surface water flooding (caused by excess rainfall). These two types can be grouped under the general description of 'inland' flooding as they can, and do, occur simultaneously.

WHAT ARE THE RISKS?

The consequences could include:
- Disruption to utilities;
- Flooding of properties;
- Evacuation of residents;
- Provision of accommodation of those whose homes are flooded;
- Closure of key and essential transport routes;
- Unrecoverable damage to businesses;
- Long-term psychological and health impacts;
- Long-term restoration and recovery issues for homes and businesses.

WHAT ARE WE DOING IN MERSEYSIDE?

- Identification of what areas could be affected by flood water and who is at risk;
- Production of multi-agency plans to assist with the evacuation of those communities who are at risk;
- Strategic area planning to protect the areas at risk;
- Development of ways and means of alerting the public as early as possible when there is a significant flood risk;
- Continuing to invest in maintaining and improving our sea defences;
- Developing flood rescue and assistance for those who become isolated by flooding.

WHAT DO BUSINESSES NEED TO DO?

- For small and medium sized businesses, download and keep a copy of 'Weathering the Storm', a practical guide for businesses in Merseyside;
- Sign up for Environment Agency flood warnings;
- Create a flood emergency plan and an evacuation route;
- Make sure your staff are trained in flood safety procedures. These will vary depending on your premises, but should focus on getting your people to safety in the event of a flood;
- Create an emergency kit - at a minimum, your kit should include large containers for clean water, plastic sheeting, tools, several days supply of non-perishable food, a first aid kit, a battery-powered radio, water purifying supplies, and personal hygiene supplies;
- Ready your building - consider what you can do to protect key assets and your building and whether you need to install flood protection products;
- Speak to your insurer to make sure you have sufficient flood insurance to cover your business;
- Store your insurance policy documents digitally or away from the premises so they can be accessed in the event of a flood.

SURFACE WATER FLOODING

WHAT DO YOU NEED TO DO?

BEFORE
- Find out whether you live or work within a flood risk area (use the Environment Agency website www.gov.uk/flood);
- Sign up to Floodline Warnings Direct if you are in a flood warning area using the Environment Agency website (address above) or phone Floodline on **0345 988 1188**;
- Get to know the flood warning codes and what they mean;
- Download the Environment Agency's document 'Prepare your property for flooding' (a guide for householders and small businesses);
- Check out The Flood Hub which is a one stop shop for flood information and resources to support householders, businesses and communities across the North West in becoming more flood resilient;
- Visit the Flood Information Service website for advice on what to do in a flood;
- Download and keep a copy of the flooding leaflet produced by the Environment Agency and UK Health Security Agency which provides advice on planning, managing and recovering from a flood;
- Put together your Emergency Grab Bag and prepare your Household Emergency Plan; include the locations of your water, gas and electricity in case you have to turn these off;
- Have adequate insurance and understand what to expect from your insurer if you are flooded;
- The Association of British Insurers has useful information on flooding insurance;
- Identify neighbours who may need assistance or who may be able to provide assistance to you, in case of evacuation;
- Have supplies in your home that will enable you to cope for up to 3 days should you be unable to evacuate.

DURING
- Listen carefully to weather forecasts or visit websites, heed warning and advice;
- Where possible, move valuable / irreplaceable items to upper floors during times of flood risk;
- Avoid contact with flood water it may be contaminated and regularly wash your hands;
- Listen to the Emergency Services, if they tell you to evacuate then do so.

AFTER
- If you have to enter flood water, take care as there could be hidden dangers;
- If your house is damaged due to flooding, take photos of the damaged items to support any insurance claim;
- Do not turn on your gas or electric if you have been flooded. Wait for a qualified technician;
- Visit the United Utilities website for helpful advice if you've been flooded and who to turn to for help;
- Follow UK Health Security Agency's guidance with some useful information on 'Recovering from a Flood';
- Visit the ABI website for advice on recovering from a flood.

LOSS OF CRITICAL INFRASTRUCTURE – Electricity / Gas / Telecoms / Water / Food

Critical Infrastructure is the name given to all of the different essential services which we rely on as part of a modern society and the economy. The UK's critical infrastructure is made up of electricity, water, gas, oil / fuel, transport, telecoms, food, health and financial services.

Many parts of the infrastructure network are dependent on one another, eg. electricity is required at water pumping stations, telecoms and electricity are required to allow cash machines and cash registers to function correctly.

Those services which could directly or indirectly impact upon other elements of the infrastructure network are detailed below:

Electricity / Gas Incident - Wide-scale loss of electricity or gas would have a direct or indirect impact on all other infrastructure sectors. In the event of a major gas or electricity supply emergency, both industry and government will have significant roles to play in managing the incident and its consequences. The gas and electricity companies would be responsible for the practical and operational management of the incident. These companies have well established plans and procedures in place to respond to incidents, which can range from the management of a local incident to a national level disruption.

Telecoms – Wide-scale telecoms disruption would have a direct or indirect impact on all other infrastructure sectors. Individuals and businesses are increasingly dependent on the telecoms network either for mobile and fixed line telephony or provision of internet.

Water – Water disruptions include burst water mains, supply disruption and minor or major contamination. Dependent on the severity of the incident a multi-agency emergency may be declared to ensure that people's basic water needs are met. There could also be a significant impact on health and food provision, as well as an impact on the capabilities of fire and rescue services.

Food – Widespread disruption of the transport infrastructure or fuel shortage may lead to temporary shortage of food supplies. However, if a large area of Merseyside's agricultural land was affected by an incident it would affect the economy of the country as well as impacting on food prices nationally.

WHAT ARE THE RISKS?

The consequences of a wide scale incident could include:
- Disruption to essential services and activities;
- Endangerment of vulnerable people;
- Financial impact on businesses;
- Civil unrest;
- Increased demand on emergency services;
- Travel disruptions;
- Disruption to business and normal home life.

CRITICAL INFRASTRUCTURE

LOSS OF CRITICAL INFRASTRUCTURE – Electricity / Gas / Telecoms / Water / Food

WHAT ARE WE DOING IN MERSEYSIDE?

- Working with the utility companies to manage supply interruptions;
- Production of multi-agency plans to manage long-term utilities outages;
- Identification of vulnerable people who will need special treatment in the event of utilities outage.
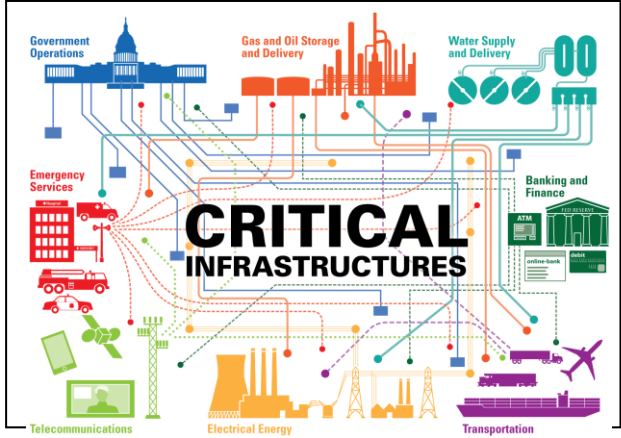

WHAT DO YOU NEED TO DO?

BEFORE

- Keep an emergency 'grab bag' in your home containing items such as a wind-up torch, battery powered radio and plug-in (not digital) telephone and supplies of tinned food and drinking water;
- Register with your utility provider if you consider yourself to be vulnerable;
- Know where the isolation valves/stop taps are for your utilities in case of gas and water emergencies. It may be necessary to shut off the supply to every premises in the affected area;
- Be aware of neighbours who may need assistance.

DURING

- Check your trip switch;
- Consider making alternate arrangements to stay with family or friends;
- Take care whilst using candles - never leave lit candles in unoccupied rooms or with unsupervised children or animals;
- Leave one light switched on so you know when the power returns;
- Limit the use of your laptop or smart phone to retain battery power;
- Keep an eye on any elderly or vulnerable neighbours;
- Unplug any sensitive appliances until your power comes back on.

AFTER

- Do not touch any electrical power lines and keep your family and pets away from them.

WHAT DO BUSINESSES NEED TO DO?

- Carry out a risk assessment to identify potential at-risk areas to your premises and put preventative measures in place;
- Create a Business Continuity Plan so that your employees know what to do if your business is affected by loss of critical infrastructure;
- Test your plan and adjust it where necessary to avoid complications in an emergency and make sure all your staff have copies of your plan and that they know their responsibilities in an emergency;
- Create a contacts list to enable employees to communicate with each other when the office is inaccessible. If your business has clients, determine who will contact them as well;
- Sign up for alerts from your utility providers;
- Put together a 'battle box' containing important documents and items to keep your business running, in case you have to relocate with little or no notice;
- Emergency items such as flashlights, first-aid kits, drinking water, food and external batteries for electronics should be kept on-hand for situations keeping employees indoors;
- Protect your data. In the case that your employees can't get to the office, or if a new temporary workspace may be needed altogether, be sure your files and data are saved to an external source such as a cloud storage system so no data is lost;
- Have standby power: having a backup power source such as a generator to keep your business functioning';
- Make sure you have suitable insurance and work with your insurer to create a comprehensive business interruption plan so you suffer as little possible.

CYBER ATTACK

A cyber-attack is an assault launched by cybercriminals using one or more computers against a single or multiple computers or networks. Cyber criminals use malicious code to alter computer code, logic or data, which can maliciously disable computers, steal data or use a breached computer as a launch point for other attacks. Cyber criminals use a variety of methods to launch a cyber-attack, including malware, phishing, ransomware, denial of service, among other methods.

Cyber threats can not only be malicious software that attempts to breach an organisation's firewalls, but it can also be an unsolicited email, containing a link to a legitimate website, which launches a program and allows unauthorised access to all of an organisations systems and databases.

One of the top five biggest cyber-attacks in the UK was WannaCry ransomware attack which took place in May 2017. While the ransomware attack that took advantage of vulnerabilities in outdated Windows operating systems left its mark on over 200 countries, the NHS was the hardest hit. Following the attack which left over 40 NHS Trusts and hospitals unable to serve their patients, not only were IT systems related to X-rays, pathology and bleep systems affected, but hackers also got their hands on thousands of patient records including reports of blood tests, medicines, and patient histories.

NHS England declared the ransomware attack a "major incident" and amongst the biggest cyber-attack of its kind in recent history. The crisis exposed the severe vulnerability of the NHS' largely-outdated IT systems to sophisticated cyber-attacks and malware intrusions.

WHAT ARE THE RISKS?

The consequences could include:
- Loss of access to systems and information services;
- Loss of or interruption to the supply of essential goods and services;
- Loss of or interruption to the communications network;
- Loss of confidentiality;
- Loss of integrity where data is damaged or corrupted;
- Disruption to critical services i.e. energy, health;
- Economic damage i.e. businesses;
- Extra expenses to keep a business operating;
- Loss of income;
- Damage to reputation.

WHAT ARE WE DOING IN MERSEYSIDE?

- Production of multi-agency plans to assist in the event of a cyber-attack;

- The individual organisations that make up the MRF each have their own Cyber Security and Business Continuity Plans in place.

CYBER ATTACK

WHAT DO YOU NEED TO DO?

BEFORE

- Purchase and install anti-virus software;
- Keep software and operating systems up-to-date;
- Use strong passwords and two-factor authentication (two methods of verification). Create a separate password for your email;
- Do not open any suspicious emails and when in doubt, don't click;
- Do not provide personal information;
- Use encrypted (secure) Internet communications;
- Update your devices on a regular basis;
- Create backup files;
- Protect your WiFi network;
- Further guidance is available on the National Cyber Security Centre website https://www.ncsc.gov.uk/

DURING

- Remove any viruses if you believe your laptop, PC, tablet or phone has been infected;
- The operating systems and apps on the devices you use should all be updated to install the latest security fixes;
- Contact and inform your provider;
- Change all of your passwords as soon as possible;
- Set up 2-factor authentication, this provides an extra layer of protection against your accounts being hacked in the future;
- Notify your contacts;
- If you can't recover your email account - create a new one and notify your contacts that you are using a new account;
- Take steps to minimise any additional damage;
- If you think you might have been a victim of cyber-crime, please visit Action Fraud or contact them on 0300 123 2040.

AFTER

- Continue to monitor the affected system(s);
- Initiate measures to prevent future attacks.

WHAT DO BUSINESSES NEED TO DO?

- Have an incident response plan and post-attack plan of action;
- Identify key/critical assets;
- Implement appropriate technology (software/hardware) to protect critical assets;
- Get legal authorisation to monitor internal user activity;
- Ensure staff are trained and educated in cyber security;
- Stay informed about threats;
- Make an initial assessment of the threat/extent of the damage;
- Take steps to minimise additional damage;
- Keep detailed records during the attack;
- Ensure backups are available for use;
- Gather forensic data from the affected system(s);
- Notify the Police/appropriate authorities;
- Work with the Police to contact other potential victims;
- Continue to monitor the affected system(s);
- Initiate measures to prevent future attacks.

Things NOT to do during an attack include using the affected systems to communicate about the incident. For example, if an email server has been compromised, don't use that server to send emails about the breach. The attackers may be hoping you will do just that, essentially making a bad thing worse. Don't attempt to hack into the attacking system, this is probably illegal and could result in civil or criminal penalties.

EMERGING INFECTIOUS DISEASE

Emerging infectious diseases include new or newly recognised diseases and could result in large numbers of people falling ill. Some recently emerged diseases, such as Ebola and Middle East Respiratory Syndrome, are classified as High Consequence Infectious Diseases.

These are acute infectious diseases that typically have a high case fatality rate and may or may not have effective treatment and can be difficult to recognise or diagnose rapidly.

Between 60% and 80% of emerging infections are derived from animal sources and usually involves two main steps:

• It is introduced into a new population;
• It is established and transmitted within the new population.

Infections have been emerging for thousands of years as interactions between humans, animals and their environments have increased and changed.

The risk requires an enhanced individual, population and system response to ensure management is effective, efficient and safe. The UK Health Security Agency and NHS responders have well-tested response capabilities to detect, contain and treat novel infectious diseases.

This covers diverse virus families, which may acquire some degree of human-to-human transmission, such as influenza viruses, coronaviruses and nipah viruses.
However, we must be prepared for a disease spread via any of the 5 main routes of transmission: respiratory, blood (including sexual contact), close contact oral (food and water) and by vectors such as mosquitos.

WHAT ARE THE RISKS?

The consequences could include:

• Large numbers of deaths or injuries, with places needed to help hospitals deal with an increased number of patients and mortuary spaces so that people can be treated with dignity;
• Disruption to public services such as school closures, bin collections and welfare payments;
• Significant disruption to all sectors of society.

WHAT ARE WE DOING IN MERSEYSIDE?

We work together to exercise and plan for:
• Management of the demand on the NHS and social care;
• Distribution of anti-viral medication to the public, if required;
• Vaccinations;
• Public awareness and media management;
• Managing excessive levels of death.

The individual organisations that make up the MRF each have their own Business Continuity Plans in place to cope in times of staff shortage.

EMERGING INFECTIOUS DISEASE

WHAT DO YOU NEED TO DO?

Actions to take to best protect yourself and others from infectious diseases.

Wash your hands regularly with soap and clean running water (for at least 20 seconds) and specifically:

- Before, during and after preparing food or handling ready to eat food;
- After using the toilet or changing a soiled nappy / underwear;
- After coming into contact with animals or animal waste;
- After coughing, sneezing or blowing your nose;
- If you are unwell, or have been around people who are unwell;
- If you do not have immediate access to soap and water, hand sanitiser can be used to clean hands that are not visibly dirty. However, hand sanitiser does not effectively remove all types of disease-causing organisms (e.g., norovirus), so soap and water should be used to wash hands wherever possible;
- Cover your mouth and nose with a tissue if you cough or sneeze (and throw used tissues in the bin);
- Clean surfaces that people touch a lot (e.g. door handles), and regularly clean and disinfect all areas in contact with food, dirt, or body fluids (e.g. toilets);
- Ensure occupied spaces are well ventilated and let fresh air in;
- Make sure you and your family are up to date with routine vaccines. While there is not a vaccination for every infectious disease, vaccinations are the most effective way to prevent many infectious diseases. Read information about how vaccines work and the most common side effects and a full list of the routine vaccinations offered and when they should be given on the NHS website, or speak to a health professional;
- If you are unwell, try to stay home or avoid contact with other people. Some diseases have specific exclusion periods: read more about these on the NHS website;
- If travelling outside of the UK, visit the National Travel Health Network website and read the NHS travel vaccination guidance and if needed, get vaccinated before you travel.

WHAT DO BUSINESSES NEED TO DO?

- Plan for the impacts of such emerging diseases on your business, employees and customers;

- Establish policies to be implemented during an outbreak;

- Allocate resources to protect employees and customers during an outbreak;

- Communicate to and educate your employees;

- Co-ordinate with external organisations and help your community;

- Visit the GOV.UK website for further information.

SEVERE SPACE WEATHER

Severe space weather is a consequence of the behaviour of the Sun, the nature of Earth's magnetic field and atmosphere, and our location in the solar system. The active elements of space weather are particles, electromagnetic energy and magnetic fields, rather than the more commonly known weather contributors of water, temperature and air. Magnetic fields, radiation, particles and matter which have been ejected from the Sun can interact with the Earth's magnetic field and upper atmosphere to produce a variety of effects.

Space weather events have always occurred, but our modern reliance on technology driven systems makes us more susceptible to the impacts.

Different systems are exposed to varying levels of risk depending on technical design, location and the type of space weather that can affect them. Our challenge is to ensure new systems are designed with appropriate engineering solutions to minimize the risk posed by space weather.

WHAT ARE THE RISKS?

The major impacts of a severe space weather event can be divided into two areas - impacts on technology on Earth and threats to equipment and health in space and at high altitude. They include:

- Power grid outages;
- Disruption to Global Navigation Satellite Systems (GNSS) / Global Positioning Satellites (GPS);
- High Frequency (HF) radio communications outages;
- Satellite damage;
- Increased radiation levels at high altitude.

WHAT ARE WE DOING IN MERSEYSIDE?

- We have plans in place to manage and co-ordinate the agencies responding to and recovering from severe space weather events;

- Working with key stakeholders to help mitigate the impacts of such events on their core roles;

- Development of ways and means of alerting the public as early as possible when there is a significant risk from space weather.

SEVERE SPACE WEATHER
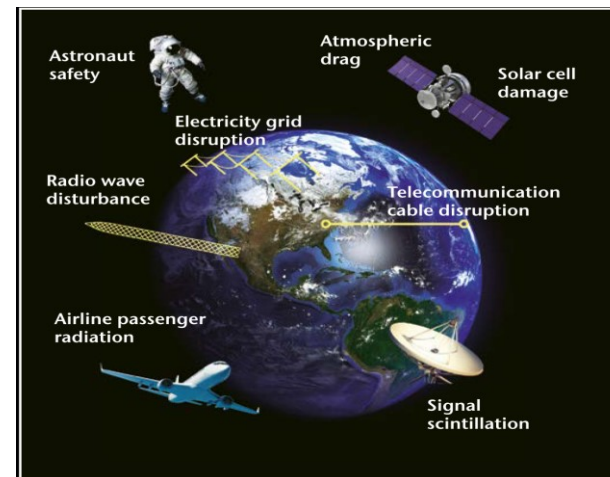
WHAT DO YOU NEED TO DO?

BEFORE
- Keep an emergency 'grab bag' in your home containing items such as a wind-up torch, battery powered radio, supplies of tinned food and drinking water;
- Register with your utility providers if you consider yourself to be vulnerable;
- Know where the isolation valves/stop taps are for your utilities in case of gas and water emergencies. It may be necessary to shut off the supply to every premises in the affected area;
- Be aware of neighbours who may need assistance.

DURING
- Consider making alternate arrangements to stay with family or friends;
- Leave one light switched on so you know when the power returns;
- Limit the use of your laptop or smart phone to retain battery power;
- Keep an eye on any elderly or vulnerable neighbours;
- Unplug any sensitive appliances until your power comes back on;
- If travelling ensure you follow the highway code and use traditional based maps.

AFTER
- Check all your circuits and electronic equipment to make sure they are functioning correctly.

WHAT DO BUSINESSES NEED TO DO?

- Carry out a risk assessment to identify potential at-risk areas to your premises and look at introducing preventative measures;
- Create a Business Continuity Plan so that your employees know what to do if your business is affected by loss of critical services;
- Test your plan and adjust it where necessary to avoid complications in an emergency and make sure all your staff have copies of your plan and that they know their responsibilities in an emergency;
- Sign up for alerts from your utility providers;
- Emergency items such as flashlights, first-aid kits, drinking water, food and external batteries for electronics should be kept on-hand for situations keeping employees indoors;
- Protect your data. In the case that your employees can't get to the office, or if a new temporary workspace may be needed altogether, be sure your files and data are saved to an external source such as a cloud storage system so no data is lost;
- Have standby power: having a backup power source such as a generator to keep your business functioning;
- Make sure you have suitable insurance and work with your insurer to create a comprehensive business interruption plan so you suffer as little possible.

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PREPAREDNESS

Knowing what to do during an emergency is an important part of being prepared and may make all the difference when seconds count.

WHAT CAN YOU DO TO BE BETTER PREPARED IN YOUR HOME?

In the case of most major emergencies, the simple advice is to go inside, stay inside and tune into the local radio.

We use local radio and other media feeds to broadcast emergency warnings and information as it is one of the most accessible means of communication. It can also be received in homes, businesses and cars.

Radio is also very reliable as it can still be broadcast and you may be able to receive during a power cut if it has batteries.

During most incidents the safest place to be is indoors, and with correct preparation you should be able to stay there safely for some time (remember in the case of a fire in a building you are in – get out and stay out).

Go in
Stay in
Tune in

The MRF organisations work together with BBC Radio Merseyside (and other media outlets) to make sure that they can give out accurate and up-to-date information to keep people fully informed on what to do during any emergency.

PLANNING FOR AN EMERGENCY

To prepare for an emergency you should take time to find out:
- Where and how to turn off water, gas and electricity supplies in your home;
- The emergency procedures for your children at school;
- The emergency procedures at your workplace;
- How your family will stay in contact in the event of an emergency;
- If any elderly or vulnerable neighbours might need your help;
- How to tune in to your local radio station.

AT HOME IN AN EMERGENCY

If you and your family need to leave your home during an emergency, it is a good idea to have an emergency 'Grab Bag' containing essential items.

Put your emergency kit together now and keep it in an easily accessible place to collect in the event of an emergency.

You may want to include some of the items below:
- Toiletries, sanitary supplies and any regularly prescribed medication;
- First aid kit;
- Glasses or contact lenses;
- Nappies and other essentials for babies;
- Mobile phone and charger;
- Cash and credit/debit cards;
- Pocket torch;
- Battery-powered or wind-up rechargeable radio;
- Passports;
- Driving licences;
- Emergency contact lists, including insurance details;
- Spare keys;
- Spare clothes and blankets.

Also, check on neighbours and vulnerable people in your community when it is safe to do so.

LEAVING YOUR HOME IN AN EMERGENCY

In certain situations, you may be asked to leave your home by the emergency services. If this happens, leave as quickly and calmly as possible.

If you have time:
- Turn off electricity, gas and water supplies, unplug appliances and lock all doors and windows;
- Take the items listed on the left of this page;
- If you leave by car, take bottled water and blankets;
- Take your pets (with suitable carriers or leads);
- Tune in to local radio for emergency advice and instructions;
- Inform emergency services of where you have gone and how you can be contacted.

RETURNING HOME AFTER AN EMERGENCY

Listen to advice from the emergency services or local authorities about any specific actions which you must follow when it is safe to return home.

HOW CAN YOUR BUSINESS BE PREPARED?

How would your organisation cope with:

- A sudden and significant reduction in staff?
- Denial of access to a site or geographical area?
- Unexpected loss of mains electricity?
- A temporary disruption to gas supplies?
- A disruption to the supply of mains water and sewerage?
- Significant disruption to transport?
- Disruption to the availability of oil and fuel?
- A loss of telecommunications?
- A loss of, or disruption to, your computer systems?
- A disruption which affects your key suppliers or partners?

Does your organisation have adequate business continuity measures in place?

BUSINESS CONTINUITY MANAGEMENT

Business Continuity Management is the process through which organisations aim to continue the delivery of their key products and services during and following a disruption to normal activity and to recover afterwards. Effective business continuity is the first line of defence for any organisation to ensure they are able to maintain the delivery of their core services and, in the long-run, to assure their survival. Organisations should consider a wide range of potentially disruptive challenges, both internal, for example disruption to computer systems, and external, for example severe weather.

5 STEPS TO EFFECTIVE BUSINESS CONTINUITY

1. Understand your business;
2. Risk assessment;
3. Consider the resource needs of each of your business functions;
4. Document information in a user-friendly format about your businesses' critical functions and the resources required including alternatives / backups for each;
5. Train and test your staff in activating the continuity plan and the roles and procedures within it.

The work of the MRF follows a simple cycle with each phase of the cycle leading into the next. Each emergency response effort leads into an assessment of what didn't go as well as it could have and this starts the next planning and preparation phase.

MITIGATION
- Understanding the risks, how they are caused and what impact they would have locally;
- Working in partnership to reduce the likelihood of the risk occurring and lesson the impacts if the risk should occur.

PREPAREDNESS
- Understanding the impacts and consequences of each risk;
- Developing contingency plans for response to the risks;
- Matching capabilities to the needs of each emergency;
- Developing longer-term recovery plans;
- Awareness of each organisation roles and responsibilities;
- Training and exercising;
- Lessons learned from previous incidents;
- Developing incident management procedures;
- Establishing links for help and assistance from other counties for lengthy wide-scale incidents.

RESPONSE
- Initial emergency activities (public safety, evacuation and shelter, limiting the spread of the incident, search and rescue);
- Initial damage assessment;
- Multi-agency command and control;
- Warning and informing the public.

RECOVERY
- Initial and long-term recovery efforts;
- Re-housing of displaced people;
- All recovery activities are based around 4 key areas:
  1. Humanitarian assistance;
  2. Infrastructure (roads, water, sewer, power, communications etc);
  3. Economic;
  4. Environmental.

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FURTHER INFORMATION

USEFUL WEBSITES

British Red Cross

https://www.redcross.org.uk/

Business in the Community

https://www.bitc.org.uk/

Business Continuity Institute

https://www.thebci.org/

Cabinet Office Guidance for Emergency Preparedness and Emergency Response & Recovery

www.gov.uk/government/publications/emergency-preparedness

www.gov.uk/government/publications/emergency-response-and-recovery

National Protective Security Authority (NPSA)

https://www.npsa.gov.uk/

Electricity North West

https://www.enwl.co.uk/

Environment Agency

https://www.gov.uk/government/organisations/environment-agency

Fire Safety in the Workplace

https://www.gov.uk/workplace-fire-safety-your-responsibilities

Met Office

https://www.metoffice.gov.uk/

National Counter Terrorism Security Office (NaCTSO)

https://www.protectuk.police.uk/

National Cyber Security Centre (NCSC)

https://www.ncsc.gov.uk/

National Grid

https://www.nationalgrid.com/

National Risk Register of Civil Emergencies

National Risk Register 2023

SP Energy Networks

https://www.spenergynetworks.co.uk/

United Utilities

https://www.unitedutilities.com/

CONTACT US

For any enquiries regarding the individual risk assessments or any aspect of the work of the MRF please contact us at:

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Or write to us at:

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WEB LINKS AND FURTHER INFORMATION

If you wish to find out more about the risk assessment process, the MRF or to see a more detailed version of the Community Risk Register please visit our website:

www.merseysideprepared.org.uk