

Scottish Risk Assessment 2018



Safer
Scotland
Scottish
Government

An assessment of risks and their impact on Scotland



We all want to live in a Scotland that is safe, secure and that can cope with and recover from the periodic emergencies that are bound to occur. We are lucky that, compared to other parts of the world, Scotland's risk environment is relatively stable. However, despite our best efforts, we will continue to be affected by disruptive events and we need to be ready when they happen.



Our ability to effectively plan for, mitigate against, respond to and recover from disruptive events is based on an understanding of the risk that we may face here in Scotland. It is important that we are aware of our own cognitive

bias and that we don't simply plan for the last emergency to have affected us. We must therefore take into account what the evidence base tells us as well as learning effectively from our own experiences.

This initial iteration of a Scottish Risk Assessment (SRA) is the first step in building that evidence base to enhance our understanding of the risks we face. It is important that we continue to develop this evidence base to remain resilient to current and emergent risks.

The SRA has been designed to complement the UK National Risk Assessment by providing the level of detail required for Scotland in those areas where that is different from the rest of the UK.

I feel very strongly that resilience is everyone's business. Our combined efforts to protect our society are the test of our resilience; the on-going safety and security of our communities is the measure of our success. Building a shared understanding of the risks we face in Scotland is vital if we are to do this successfully.

I am grateful to the wide range of stakeholders from across the resilience community that have been involved in the development of the SRA.

A handwritten signature in black ink, appearing to read 'John Swinney'.

John Swinney MSP
Deputy First Minister and Cabinet Secretary
for Education and Skills

INTRODUCTION

The management of risk is a core function of government. Risk assessments form the foundation of effective risk management. Anticipating risks ahead of time means we can be more proactive and less reactive in the face of disruptive events. It provides a way of setting out evidence to compare and prioritise scenarios so that time and resources can be allocated effectively.

The purpose of the SRA is to help the resilience community in Scotland to understand the disruptive challenges that we may face, and to use this to anticipate, assess, protect, mitigate, prepare, respond and recover.

The SRA is designed to supplement existing hazard information.

- It is informed by UK-wide issues, together with Scottish-specific information.
- It uses an adaptation of the same methodology as the UK National Risk Assessment (NRA), with impact scales adjusted down appropriately. It is focussed on natural hazards and accidents.
- An assessment of terrorist threats is not included in the SRA as most aspects of counter-terrorism are reserved to the UK Government. However an overview of malicious attacks is provided in Chapter 3. This features information drawn from the UK National Risk Register for Civil Emergencies which is produced by Cabinet Office.

In this first iteration of the SRA, 10 Scottish specific scenarios have been assessed.

Risk Title	Risk IDS	Page	Overall Assessment
Pandemic Influenza	H23S	35	Very High
Cold and Snow	H18S	21	Very High
National Electricity Transmission	H41S	58	High
Storms and Gales	H17S	16	High
Emerging Infectious Disease	H24S	42	High
Food Supply Contamination	H14S	12	High
Coastal Flooding	H19S	26	Medium
Fluvial Flooding	H21S	31	Medium
Avian Influenza	H25S	47	Medium
High Consequence Dangerous Goods	H60S	63	Medium

USING THE SRA

At a regional level resilience partners should use the Risk and Preparedness Assessment (RPA) process to help understand the risks that are relevant to each region and to plan and prepare based on that information. The SRA provides a Scottish context to resilience partners on the types of emergencies Scotland may face and makes the most relevant information available to them when completing their RPAs.

As a strategic tool, the SRA does not replace or replicate more detailed risk assessment products and evidence, whether that be detailed intelligence threat assessments or short term hazards forecasts.

The information in this document, alongside the NRA, can also be used to support investment or resource allocation on the basis of risk prioritisation. However, it should be used as a guide only and such decisions must necessarily reflect other factors such as risk tolerance, capability gaps, mitigation options, affordability and a wider cost/benefit analysis.

**GOVERNANCE**

The SRA process is coordinated by the Risk Team in the Scottish Government's Resilience Division. For this first iteration, the Scottish Risk Assessment Development Project Board has provided oversight of the SRA development project. The assessment has been produced in collaboration with a wide range of partners from within the Scottish Government and across the wider resilience community. Future governance arrangements will include an oversight body made up of stakeholders and government representatives.



Disease - Influenza type disease (pandemic)
H23S (SG - NHSScotland Resilience)

Overall Assessment → **Very High**

Overall Impact Score → **5**

Likelihood Score → **4**

Impact	5				●	
	4					
	3					
	2					
	1					
Likelihood		1	2	3	4	5

Key - ● Reasonable worst case scenario

📌 OUTCOME DESCRIPTION

Based on understanding of previous pandemics, a pandemic is likely to occur in one or more waves, possibly weeks and months apart. Each wave may last between 12-15 weeks. Up to half the population could be affected. All ages may be affected, but until the virus emerges we cannot know which groups will be most at risk.

- Up to 50% of the population could experience symptoms of pandemic influenza during one or more waves lasting 15 weeks (approximately 2.7million in Scotland).
- Up to 4% of symptomatic patients (approximately 110,000 people) could require hospital care if the virus results in severe illness, 25% of whom require level 3 critical care (approximately 27,000 people).
- Up to 2.5% of those with symptoms could die as a result of the pandemic (approximately 68,000 people).
- This scenario informs planning for pandemics but does not take into account the response measures we put in place.
- While combining these figures can be misleading and it is relatively unlikely to have both high end illness and death rates resulting in around 68,000 deaths, this is the advised reasonable worst case for guiding planning in Scotland. This figure is based on those recommended by the UK Scientific Pandemic Influenza Sub-Group on modelling.

🕒 CONFIDENCE LEVEL

High confidence in the overall assessment based on a large body of knowledge of the issue and includes evidence of a high quality informed by consistent/relevant expert judgements.

🌐 IMPACT SCORES

Pandemic Influenza

Economic						
Fatalities						
Casualties						
Transport						
Food & Water						
Fuel						
Gas						
Electricity						
Finance						
Comms						
Education						
Health Care						
Criminal Justice						
Shelter						
Evacuation						
Environment						
Psychological						
		1	2	3	4	5



Disease - Emerging Infectious Disease
H24S (Health Protection Division)

Overall Assessment → **High**

Overall Impact Score → **3**

Likelihood Score → **4**

Impact	5					
	4					
	3				●	
	2					
	1					
Likelihood		1	2	3	4	5

Key - ● Reasonable worst case scenario

📌 OUTCOME DESCRIPTION

An emerging infectious disease is one that has appeared in a population for the first time or may already exist but its incidence is rapidly increasing. An emerging infectious disease could be described as a High Consequence Infectious Diseases (HCID) if it can spread easily without adequate safeguards and personal protection equipment; have a high case-fatality rate; is difficult to recognise and detect rapidly; and for which there is no effective treatment. The potential impact will depend on the organism and route of transmission.

An emerging infectious disease could be spread by contact or airborne transmission and it could be a zoonotic disease (transmitted from animals to humans). It could also first present itself in any country and establish itself in Scotland before it has even been identified.

Based upon the experience of the Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome Coronavirus (MERS-CoV) and Ebola outbreaks, the worst case likely impact of such an outbreak originating outside the UK would be cases occurring amongst returning travellers and their families and close contacts, with spread to healthcare workers within a hospital setting. However, it is unlikely to present a wider threat to the UK through sustained spread. It could lead to short term disruption to local hospital intensive care facilities, possible disruption of several weeks to elective procedures, and public concern about travel.

🕒 CONFIDENCE LEVEL

Low confidence in the overall assessment based on a relatively small body of knowledge of the issue and includes relevant evidence and somewhat consistent/relevant expert judgements.

🌐 IMPACT SCORES

Emerging Infectious Diseases

Economic						
Fatalities						
Casualties						
Transport						
Food & Water						
Fuel						
Gas						
Electricity						
Finance						
Comms						
Education						
Health Care						
Criminal Justice						
Shelter						
Evacuation						
Environment						
Psychological						
		1	2	3	4	5