Preparedness and Response Plan for Public Health Risks in Ports and Ships 1st Edition, 2017

English abstract

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Abbreviations

CE Chief Epidemiologist

DCP District Commissioner of Police

DCCC District Crisis Coordination Centre

EAI Environment Agency of Iceland

EWRS Early warning and response system

IFVA Icelandic Food and Veterinary Authority

ICS Incident Comand System

IHR International Health Regulatins

IRSA Icelandic Radiation Safety Authority

RDE Regional/District Epidemiologist

JRCC Joint Rescue Coordination Centre-Iceland

NCCC National Crisis Coordination Centre

NCP National Commissioner of Police

OSM On-site management

SMART TAG System of emergency classification

Tetra Terrestial Trunked Radio

VHF Very High Frequency

WHO World Health Orgainization

Introduction

The Preparedness and Response Plan for Public Health Risks – National Plan for Ports and Ships (hereafter the Plan) was published in July 2017. The Plan outlines the structure and management of preventive and control measures whenever there is suspicion of an incident aboard a ship that could pose risk to public health. The ship in question can be on route to port, stationed in port or on route from Iceland after a stay in an Icelandic port. Preparedness and response plans are developed for designated ports for health security and communicable disease control and prevention according to the core capacity requirements of the International Health Regulations 2005.

The Plan applies to all ships except military ships and other ships in public ownership.

The Plan also outlines the distribution of the emergency equipment under the control of the Chief Epidemiologist (CE) for Iceland.

Objectives of the Response Plan for ships on route to port, in port or on route from port:

- To ensure coordinated response from the relevant body when a ship requests assistance due to illness onboard or an incident that might pose a risk to public health.
- To minimise or prevent, if possible, the effects of infections/pollution/radiological/accidental events and to protect public health and the environment.
- To ensure undiminished service to all concerned.
- To implement the provisions of the IHR and ensure communication/collaboration within Iceland and across borders.

Designated ports of entry

According to this Plan, eleven ports in Iceland have been designated ports of entry for health security and communicable disease control. The Chief Epidemiologist, in consultation with the Civil Protection Authorities, the Joint Rescue and Coordination Centre (JRCC) of the Icelandic Coast Guard and the relevant District Crisis Coordination Centre (DCCC) can direct ships to these ports due to potential public health threats, except for the Port of Helguvik. The Plan extends to that port only if the ship in question has already landed in the Port of Helguvik, which means that a ship at sea will generally not be directed to the Port of Helguvik. This decision is based on the Act on Health Security and Communicable Diseases, No. 19/1997, and Regulation No. 387/2015 on the appointment of head physicians to serve as Regional and District Epidemiologists (RDEs). According to this regulation, the country is divided into seven Epidemiological Regions and the RDEs are responsible for infection prevention and control within their regions and districts under the management of the Chief Epidemiologist. In accordance with Article 21 of the Sea Ports Act, No. 61/2003, all ports in Iceland are under obligation to undertake and accommodate ships in an emergency due to an incident onboard that may pose a public health risk. In such a case, the present Plan also applies.

Phases of Disaster

The three Phases of Disaster, issued by the Civil Protection Authorities of Iceland:

Uncertainty Phase (*Óvissustig*): Uncertainty Phase is characterised by an event which has already started and could lead to a threat to people, communities or the environment. At this stage the collaboration and coordination between the Civil Protection Authorities and stakeholders begins. Monitoring, assessment, research and evaluation of the situation is increased. The event is defined and a risk assessment is conducted regularly.

Alert Phase (*Hættustig*): If a risk assessment indicates increased threat, immediate measures must be taken to ensure the safety and security of those who are exposed in the area. This is done by increasing preparedness for the emergency and security services in the area and by taking preventive measures such as restrictions, closures, evacuations and relocation of inhabitants. This level is also characterised by increase in public information, advice and warning messages.

Emergency Phase (*Neyðarstig*): This phase is characterised by an event which has already begun and could lead, or already has led to, harm to people, communities, properties or the environment. At this stage, immediate measures are taken to ensure security, save lives and prevent casualties, damage and/or loss.

Early warning

All notifications on potential public health risks from ships at sea within the jurisdiction of Iceland shall be forwarded to the CE through the **on-call number 510-1933** (24/7 on-call service) as well as to the e-mail address **svl@landlaeknir.is.** The CE makes the initial assessment of potential public health risks from ships at sea in collaboration with the ship physician and immediately informs the on-call service of the Department of Civil Protection of the NCP, the JRCC–Iceland and the relevant RDE. If the results of the initial risk assessment indicate that:

- **a) Public health risk is deemed imminent:** The Plan is activated at Uncertainty Phase, Alert Phase or Emergency Phase.
- b) Public health risk is not deemed imminent: Measures are thereby completed and the CE fulfills his obligation to inform the the Department of Civil Protection of the NCP, the JRCC—Iceland and the relevant RDE. These parties, respectively, inform the parties they are under obligation to inform.

Risk assessment and outbreak investigation

The Chief Epidemiologist is responsible for the surveillance of communicable diseases and the health effects of toxic and radioactive substances. Furthermore, the CE is responsible for outbreak investigation and risk assessment in case of unexpected health incidents falling under his purview. In case of unexpected events, surveillance and outbreak investigation form the basis for risk assessment that influences policy regarding response measures.

The CE is thus responsible for implementing an epidemiological investigation whenever health incidents have occurred on board ships and in ports and carries it out in collaboration with the relevant party, including the captain of the ship, the relevant local authority health inspection and others, depending on the nature of the incident each time.

The captain and the operator of the ship in question have a responibilty as regards information gathering, being obliged to provide the CE with information on the health of passengers and/or crew. The ship's captain and operator are in possession of key information on, among other things, the total number of passengers and crew, the number of cases taken ill, what symptoms or disease are being dealt with.

Important infomation must be obtained on the nature and extent of the incident, the symptoms involved, the number of people exposed, and whether the affected site has been contained or covers a larger area. An asssessment must be made of the probability that the incident might have effect across borders. In particular, the assessment must cover transmission, toxic substances or radioctivity as possible underlying causes. Also, an examination and assessment must be made of possible countermeasures to minimise the harm.

The initial assessment takes place as soon as there is suspicion of a health incident on board a ship or in port. The first information on an incident can come from many different sources, including the captain of the ship involved, the local health inspection, the last port of entry, from cooperation partners abroad, other institutions and other unexpected parties. When suspicion of an incident has been aroused, the gathering of information and risk assessment must be initiated in collaboration with the parties concerned. This involves both the captain and ship physician, the health inspector concerned, representatives of the Icelandic Food and Veterinary Authority (IFVA), the Environment Agency of Iceland (EAI) and the Icelandic Radiation Safety Authority (IRSA) as needed, and, in case of a serious health incident, the Department of Civil Protection of the the NCP. Collaboration with foreign parties such as representatives of the last port of entry, with WHO and ECDC can also provide valuable information. When the first assessment is available it is possible to prescribe measures, to activate a preparedness and response plan, if appropriate, and to determine a Disaster Phase in accordance with the severity of the situation at hand. Risk assessment is subject to constant revision depending on the development of events.

The nature of incidents is extremely varied and consequently the risk assessment creates a basis for different responses. The nature of an illness greatly affects the risk assessment, e.g. ebola would always be considered a serious incident even though only one passenger had fallen ill. On the other hand, a suspicion of norovirus among a greater number of passengers would in all likelihood not be considered as serious although more passengers or crew members had been affected. It is also possible that an incident first becomes known after a voyage is over, e.g. in the case of an infectious disease with a long incubation period. As a consequence, measures can start long after the incident in question occurred.

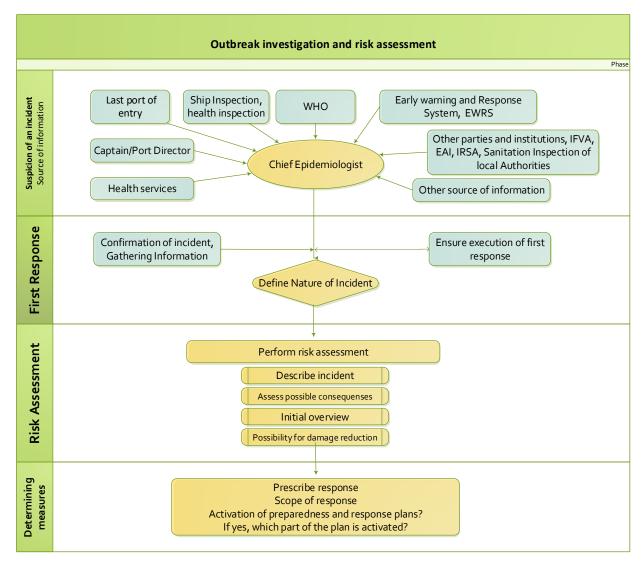


Figure 1. Risk assessment and outbreak investigation

Further information is available in:

Handbook for Inspection of Ships and Issunace of Ship Sanitation Certificates (WHO-2011)

Vector Surveillance and Control at Ports, Airports, and Ground Crossings (WHO 2016)

Activation

An illness that arouses suspicion of a public health risk must be reported to the relevant Regional or District Epidemiologist (RDE) who will, in consultation with the Chief Epdidemiologist, assess what kind of treatment to provide and whether there is need for activating the Plan.

When the Plan has been activated, the relevant DCCC takes over the management of emergency measures. The DCCC assesses the need for summoning more parties for work, in consultation with the National Crisis Coordination Centre (NCCC). The JRCC–Iceland is in charge of operations if a ship is at sea, see Figure 2.

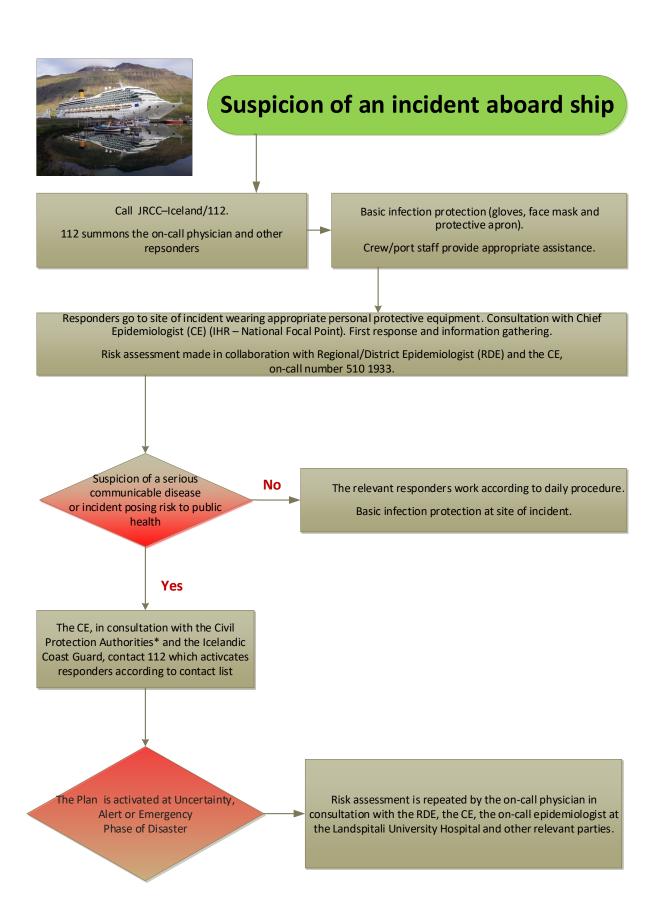


Figure 2. Activation of Preparedness and Response Plan for Public Health Risks in Ports and Ships

Link to other response plans

Other prevention and response plans (accidents, pollution) can be activated alongside the Plan for public health risks in ports and ships. Similarly, other plans can be activated as soon as response measures against a public health risk are cancelled. In such a case, a formal decision is taken and responsibility is transferred to registered responders according to each plan.

Cancellation

The decision to cancel is taken by the CE in consultation with the National Commissioner of Police/the Icelandic Coast Guard and the DCCC concerned. The NCCC is responsible for notifying the cancellation or change to the 112 National Emergency Number, which is responsible for carrying out the cancellation and issues a notification to that effect.

The Icelandic system of civil protection governance

Government policy on civil protection and security issues is set by the Civil Protection and Security Council for three years at a time. In times of crisis, the Civil Protection and Security Council works with the National Commissioner of Police (NCP). According to Art. 4 of the Civil Protection Act, No. 82/2008, the government ministers responsible for public security, pollution protection, health, energy, defence and foreign relations have seats on the Council. The Minister of Justice is responsible for issues under the Civil Protection and Security Council and chairs the Council. The Minister of Justice can summon two other ministers to sit on the Council at any time in connection with specific matters.

Organisation of civil protection in Iceland

The NCP is in charge of civil protection affairs in Iceland on behalf of the Minister of Justice and operates the Department of Civil Protection, which handles any civil protection projects in the whole country, whether on land, in the air or at sea. The NCP is responsible for implementing measures in accordance with Government policy in matters of civil protection and security according to the Civil Protection Act, Nr. 82/2008. Under Article 11 of that Act, it is the role of District Commissioners of Police (DCPs) to be in charge of civil protection activities in times of crisis, each in their respective district. According to Regulation No. 1150/2014, the country is divided into nine Police Districts. In case of an incident involving risk to public health, the relevant DCP and RDE are supposed to work in close collaboration.

The National Crisis Coordination Centre (NCCC)

On the activation of this Plan, the CE or his substitute is in charge of health security and communicable disease control measures and has a seat on the NCCC management team as a senior expert. The NCCC controls the overall coordination of measures, maintains active communication with the DCCC and organises support for the districts. It procures further resources on request each time.

District Crisis Coordination Centre

In times of crisis, the management of response activities is in the hands of the District Commissioner of Police (DCP). The DCP sits on the management team of the DCCC together with representatives for other responders. On the activation of this Plan, the RDE or his representative assumes control of relevant health security and communicable disease control measures. The DCP appoints an Incident Manager who is in charge of and coordinates on-site activities in collaboration with on-site health service representatives.

On-Site Management (OSM)

On-site management and coordination is the responsibility of the Incident Manager, who is appointed by the the DCP. When an incident occurs at sea, the on-site management and coordination is the responsibility of the Icelandic Coast Guard. The Incident Manager is usually a member of the police force. He/she must have training and experience in on-site management.

Important tasks of the OSM

- Overall management and coordination of on-site operations in accordance with the Incident Command System (ICS).
- Work according to the task organisation chart of the ICS.
- Deviation from the chart is permitted if it is deemed necessary.
- The person who has been assigned the task of *Operation* shall communicate with the task managers by means of telecommunications and must have a car at his/her disposal in order to drive between the location of the on-site management and other locations of operations.
- Responsibility for carrying out transmission tracking and assistance in epidemiological investigations as needed.
- Ensuring basic infection control.
- Organising and ensuring on-site telecommunications.
- Ensure that telecommunications are in place to communicate with the DCCC.

NCCC - DCCC - OSM

Tasks at each management level in the event of risk to public health incident

The National Crisis Coordination Centre (NCCC) – situated in Reykjavik

The Chief Epidemiologist (CE) for Iceland and the Department of Civil Protection of the National Commissioner of Police (NCP) are in charge of the NCCC if an incident occurs in port while coordination at sea is the responsibility of the Icelandic Coast Guard.

The tasks of the NCCC are maintaining active communication with the DCCCs in Iceland, organising support, supplying resources on request and managing the overall coordination. The NCCC establishes connection with the government institutions that supply assistance, with health care institutions and foreign institutions. The NCCC activates the Trauma Care Consultation Group. The NCCC operates according to the ICS task organisation char, see figure 4.

District Crisis Coordination Centres (DCCCs)

There are nine DCCCs in Iceland, one in each Police District. They are located in Reykjavik and the towns of Borgarnes, Isafjordur, Saudarkrokur, Akureyri, Eskifjordur, Hvolsvollur, Westman Islands, and Reykjanesbær. The management of crisis coordination at sea is under the command of the Icelandic Coast Guard.

The DCP and the RDE function as Crisis Coordination Managers within their districts in case of infection/pollution that may pose a risk to public health.

The DCCCs of Police Districts/JRCC – Iceland work closely with the NCCC, the sanitation inspection of local authorities, the agent of the ship in question as well as related parties and others that can be of assistance in some way.

The tasks of a DCCC are management, coordination, information gathering and communication. The DCCC guarantees smooth communication with everyone concerned and works according to the DCCCs task organisation chart, see figure 4.

On-site Management (OSM)

Location and members: Management and coordination at the site of emergency is in the hands of the Incident Manager who is appointed by the DCP. Coordination at sea is in the hands of the Icelandic Coast Guard. The OSM forms a support group for task managers.

The tasks of an OSM are the overall management and coordination of operations in accordance with the ICS task organisation chart on behalf of the DCP or the Coast Guard, as well as reporting on on-site operations. The OMS guarantees smooth communication/telecommunication with all relevant parties within a specified site.

Task Managers

Manage and coordinate individual tasks on site in collaboration with the OSM.

Health Care	Protection	Transport Manager	Rescue Manager
Manager	Manager	Appointed by the S&R	Appointed by the local
Appointed by the	Appointed by the	district management/	authority Fire Brigade
RDE	DCP	district ambulance service	Director

Figure 3. Organisation of Civil Protection in Iceland, the NCCC, DCCC and OSM

Management					
Technical management	Contacts	Media	Security		
Planning		Logistics			
Gathering Information and sharing	Specific plans/ input of experts	Equipment	Supplies		
Forecasts	Goals and action plan	Special equipment	Basic service		
On-site circumstances	Needs of the affected	Telecommunication	Special services		
	Structure		Maintenance		
Operation Operation					
Communication with incident site	Communication within district	Communication outside district	Statistics and flow		
Handling of on-site requests	Health care institution	Mass casualty centre/Temporary service centre	Number of victims		
Transport of victims	Communication with Health Care Manager	Gathering site for relatives and friends	Time line		
Management of deceased	Communication with the NCCC		Location of victims		
Transfer of incident site to investigators			Final report		

Figure 4. Task organisation chart for DCCCs

Communication and flow of information

This Plan is based on a specified flow of information and channels of communication. The NCCC/Chief Epidemiologist and the DCCCs/RDEs play a key role in the dissemination of information. The RDEs are responsible for communication within their Epidemiological Districts/Regions in collaboration with the relevant District Commissioners of Police and the Chief Epidemiologist is responsible for nationwide communication in collaboration with the Department of Civil Protection of the NCP. The telecommunications make use of the Tetra mobile telephone system in which the DCCCs have their own channel for communicating and another channel is exclusively for use by health care workers.

The Government of Iceland					
Ministry of Welfare	Ministry of the Justice				
National Crisis Coordination Centre (NCCC) – in Reykjavik The CE for Iceland and the NCP are responsible in case of incidents posing risk to public health					
District Crisis Coordination Centre of the DCP for the Capital Region	District Crisis Coordination Centre of the DCP for the Western Region				
District Crisis Coordination Centre of the DCP for the Westfjords	District Crisis Coordination Centre of the DCP for the Northwestern Region				
District Crisis Coordination Centre of the DCP for the Northeastern Region	District Crisis Coordination Centre of the DCP for the Eastern Region				
District Crisis Coordination Centre of the DCP for the Southern Region	District Coordination Management of the DCP for the Westman Islands				
District Crisis Coordination Centre of the DCP for the Southern Peninsula	Incidents at sea are the responsibility of the Icelandic Coast Guard in consultation with the NCCC and other stakeholders				

Figure 5. Channels of communication in case of incidents posing risk to public health

The media

Reliable media information is important when circumstances arise that could possibly pose a threat to public health. Information must be communicated in a clear and purposeful manner. An incident may affect only few individulas while it may also be so extensive that the whole community suffers harm. Inaccurate media information can cause unnecessary alarm.

The CE or CE representative and the DCP concerned are in charge of media information. The CE staff are in charge of information to passengers and crew together with the DCP and the CE makes his/her own media communication plan in an emergency situation. The plan can be in the form of a checklist that would include: Motto, responsibility, specified information officers, main tasks and division of tasks, list of contacts with names, telephone numbers and e-mail addresses of responders and methods of communication. In addition, foreign media, authorities and international institutions must be informed as far as possible when the consequences of a disaster can have effect across Icelandic borders.

The NCP Information and Media Team operates from the NCCC when needed. Besides a representative of the NCP, the Team is composed of the information officers of key institutions, such as the Icelandic Red Cross, ministries and the relevant local authorities, depending on what type of incident is being addressed. The role of the Team is to communicate important information to the media and the public, and government ministries shall seek its advice on communication regarding official information and news reporting.

The Team also assists media people in planning their work and provides them with data and advice on emergency zones etc. Depending on the nature of an incident, a temporary workstation close to the

incident site shall be established, if possible. The Team is also responsible for ensuring information flow to reponders, the Government, Permanent Secretaries and the institutions concerned.

The NCP shall also employ social media for communication with the general public as appropriate in each case. It is necessary for the public to know that response measures have been implemented and that correct news and information is offered from responsible parties. When reporting news, special attention shall be paid to those groups and individuals who have difficulty in accessing information.

Areas of operation

The areas of operation are defined as all Icelandic ports and the jurisdiction of Iceland. In addition, 11 ports are specially designated ports of entry as they are better equipped to deal with incidents on board ships that may pose risks to public health.

The country is divided into seven Epidemiological Regions. In practice, the Westman Islands are a special Epidemiological District and Northern Iceland has been divided into two Epidemiological Districts to correspond to the region's two Police Districts. The Epidemiological Regions have thus been adapted to the Police Districts in the country, whereby the DCP and the RDE within each Epidemiological Region / District form the core of the District Crisis Coordination Centre (DCCC).

A public health incident aboard a ship belongs directly under the Chief Epidemiologist for Iceland and the Icelandic Coast Guard. The ship in question receives service or is directed to port in consultation with the NCP, the Icelandic Coast Guard and the relevant DCCC.

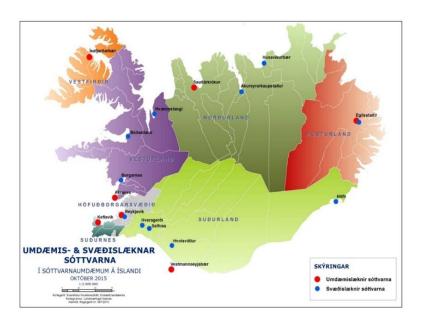


Figure 6. The seven Epidemiological Regions and offices of Regional/District Epidemiologists

Role of responders

The following institutions/organisations have a registered role in the Preparedness and Response Plan for Public Health Risks in Ports and Ships:

Civil Protection Authorities

112, the National Emergency Telephone Number The National Crisis Coordination Centre, NCCC The District Crisis Coordination Centre, DCCC On-site Management, OSM

Health Services

Chief Epidemiologist for Iceland
The Regional and District Epidemiologists
Specialised hospital service – Landspitali University Hospital (LUH)
Specialised hospital service – Akureyri Hospital
Hospitals and health care centres in the Capital Area

The Police

The National Commissioner of Police, NCP, – Department of Civil Protection NCP – Telecommunications Centre NCP – Identification Committee NCP – Special Unit District Commissioners of Police

The Icelandic Coast Guard

Joint Rescue and Coordination Centre – Iceland, JRCC–Iceland Aircraft Division Patrol Vessels Division The Directorate of Customs/Customs Authorities Fire Brigades

Ports

Port Directors, security officers and Chief Harbour Pilots Ship agents Ship Captain

The Icelandic Red Cross - Emergency Centre

The Icelandic Association for Search and Rescue

National Management District Management

The Icelandic Tourism Board
The Icelandic Radiation Safety Authority, IRSA
Sanitation Inspection of Local Authorities

Icelandic Food and Veterinary Authority, IFVA

For animals on board Illness attributed to infected food

The Icelandic Transport Authority
The Icelandic Transportation Accident Investigation Board
The Environment Agency of Iceland, EAI

Distribution

Preparedness and Response Plan for Public Health Risks in Ports and Ships is not published on paper. The Plan is available at these websites:

Civil Protection Authorities: www.almannavarnir.is

Directorate of Health: www.landlaeknir.is

Federation of Icelandic Harbours: www.hafnasamband.is

The organisations and other bodies referred to in this Plan will be notified of any changes made to the Plan. They are encouraged to publish the Plan on their websites as well as any updates as soon as they receive notification to that effect.