

THE MINISTRY OF HEALTH AND SOCIAL CARE

Preparedness plan

Comprehensive national health and social preparedness plan

Version 1.0 approved 31 January 2007

Introduction

As a step in the follow-up of Report no. 37 (2004-2005) to the Storting on the tsunami disaster in South Asia and central crisis management, the Ministry of Health and Care Services decided to draw up a survey presenting the main features of the country's health and social preparedness.

The aim of this comprehensive plan is to call attention to the main elements of the health and social sector's preparedness plan and the relationships among these elements.

The comprehensive national health and social preparedness plan describes the entities involved in the health and social care administration and the health and social services during crisis and disaster situations and in the planning phase. This description includes the relevant Acts, regulations, etc., the involved entities' roles and positions in the organisation of preparedness, responsibilities, tasks and resources, cooperation and warning paths. A brief presentation is also given of the international parties with which Norwegian health authorities collaborate in crisis situations. The comprehensive plan is based on both general and sector-specific established principles for preparedness work, and it does not introduce any changes in premises or responsibility.

The comprehensive national health and social preparedness plan is not an operative set of plans for use in a crisis situation. All involved entities mentioned in the comprehensive plan have their own preparedness and crisis plans on which the crisis management is to be based. This document gives a comprehensive framework to which each of the involved entities can relate the set of plans for their own activities.

The comprehensive national health and social preparedness plan will be updated annually by the Ministry of Health and Care Services.

Oslo, Norway, 31 January 2007
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1. Goals and principles for the preparedness work

The objective of health and social preparedness is to protect life and health and help ensure that the population can be offered necessary medical treatment, nursing and care together with social services in crises and disasters in peacetime and in war.

Health and social preparedness shall also protect the population against radioactive fallout and radiation accidents, against infectious diseases and against the use of biological and chemical agents. In addition, emergency preparedness is meant to protect against food-borne and water-borne illnesses, impurities in food, feed and drinking water and serious communicable diseases that can be transmitted between animals and people (zoonoses) and other infectious illnesses.

The distribution of responsibility and the crisis organisation in the health and social care administration and service are based on the following fundamental preparedness principles:

- *The principle of responsibility:* The entity that is responsible for a discipline and/or service provided in a normal situation is also responsible for necessary emergency preparations and the handling of extraordinary events.
This also applies to the responsibility for providing information within your own discipline.
- *The subsidiarity principle:* A crisis shall be managed at the lowest possible operative level.
- *The equivalency principle:* The organisation that is established during crises and in war shall be as equivalent as possible to the organisation with which you normally operate.

2. Acts, regulations and sets of plans

2.1. Acts and regulations

The most important Acts and regulations pertaining to health and social preparedness are:

Act on Health and Social Preparedness (Act no. 56 of 23 June 2000)

This Act, which entered into force on 1 July 2001, orders municipalities, counties, regional health authorities and the state to draw up a preparedness plan for the health and social services that they are charged with providing or for which they are responsible. Hospitals, water utilities and the food control authority (The Norwegian Food Safety Authority¹) have an independent duty to draw up a preparedness plan. Preparedness planning should make it possible for the entities to be able to continue and if necessary reorganise and expand operations during war and in the event of crises and disasters in peacetime. The duty to draw up a preparedness plan is also laid down in the Act relating to the municipal health services², in the Act relating to social services³ and in the Act relating to the specialist health services⁴. These acts also specify the duty of an entity to coordinate its own preparedness plan with other collaborating parties. The Act contains special provisions regarding powers⁵ that can be implemented in wartime or under threat of war or during crises and disasters in peacetime after a decision in the Council of State. Under particular

¹ In and with the Food Act (passed on 19 December 2003), the Norwegian Food Safety Authority assumed the tasks that had previously been delegated to the food control authority, including tasks that are specified in the Health Preparedness Act (passed on 23 June 2000).

² Act no. 66 of 19 November 1982 relating to the municipal health services.

³ Act no. 81 of 13 December 1991 relating to social services.

⁴ Act no. 61 of 2 July 1999 relating to the specialist health service.

⁵ Sections 3-1, 4-1, 5-1, 5-2, cf. Section 1-5.

circumstances, these powers confer the right to requisition real property, etc. to the duty and assignment to serve and to order entities covered by the Act to accept and treat patients, reorganise their operations and implement restrictions on sales. A number of regulations have been specified in connection with the Act.

Regulations no. 881 of 23 July 2001 relating to requirements for preparedness planning and preparedness work

These regulations require entities with the duty to draw up a preparedness plan pursuant to the Act on Health and Social Preparedness to have procedures to ensure the necessary provision of services at:

- a) Internal and external events that substantially reduce the entity's capacity.
- b) External events that impose an extraordinary strain on the entity and that may require a general reorganisation of ordinary operations in order to be able to increase capacity. The preparedness plan should be based on risk and vulnerability analyses. The entity shall have procedures for operative management, information preparedness and coordination of plans. The entity shall ensure that personnel who are meant to perform certain tasks in the preparedness plan, have been drilled and have the necessary protective equipment and expertise. The entity shall ensure that it has adequate security of supply of important materials, equipment and medicines in accordance with the principle of ensuring reliable health and social services.

Regulations no. 252 of 18 March 2005 concerning requirements for emergency medical services outside hospitals (

These regulations are meant to help ensure that the population receives professionally reliable emergency medical services outside hospitals when there is a need for immediate assistance, by specifying requirements for the professional content of the emergency medical services, for cooperation in the emergency medical chain and for cooperation with the fire and police services and rescue coordination centres. The regulations shall help strengthen and regulate the cooperation and make apparent the distribution of responsibility in the various parts of the emergency medical chain. The regulations also regulate the requirements for the medical emergency call service (Norwegian Emergency Medical Alarm (AMK) centres and the accident and emergency units), the ambulance service and the municipal accident and emergency unit.

Act no. 55 of 5 August 1994 relating to control of communicable diseases

This Act shall protect the population from communicable diseases with preventive measures and hinder them from spreading among the population and prevent such diseases from being brought into Norway or carried out of Norway to other countries. The Act shall ensure that the health authorities and other authorities implement the measures necessary to control communicable diseases and coordinate their efforts to control such diseases. The Act also gives the health authorities powers to implement measures to prevent or hinder the spread of contagion, e.g. by imposing quarantines, preventing movement into or out of specified areas and limiting travel. Pursuant to the Act, regional health authorities and the municipality shall draw up plans to control communicable diseases that are supposed to deal with measures and services for preventing communicable diseases. A number of regulations have been specified in accordance with the Act. In addition, cf. the duty to report cases and the duty to give notification of communicable diseases, which are imposed on health personnel pursuant to the Act relating to control of communicable diseases.

The Food Act (Act no. 124 of 19 December 2003 relating to food production and food safety, etc.)

This Act shall ensure that food is safe and promote health, quality and consumer interests along the whole chain of production. The Act encompasses all matters relating to the production, processing and distribution of material inputs and food and beverages, including drinking water.

The Act also encompasses all matters relating to plant and animal health, including products, objects and organisms that may spread contagion, including communicable diseases that can be transmitted between animals and people (zoonoses). The Act also gives the Norwegian Food Safety Authority powers to implement measures in order to prevent or hinder the spread of contagion, e.g. quarantining animals, slaughtering animals, preventing movement of animals into or out of specified areas and requiring that products be withdrawn from the market.

The Act imposes the duty to give notification on everyone when there are grounds for suspecting the incidence of infectious animal diseases that may be hazardous to health and have significant consequences for the society. The Act also requires the entities to alert the Norwegian Food Safety Authority immediately when there are grounds for suspecting a risk that foods or beverages may be hazardous to health or that material inputs may be hazardous to health or the environment. A number of regulations have been specified in accordance with this Act.

Act no. 36 of 12 May 2000 on radiation protection and use of radiation)

This Act is meant to prevent harmful effects of radiation on people's health and to promote protection of the environment. Among other things, the Act applies to planning and emergency preparedness against mishaps, accidents and other events.

Section 16 specifies that the King in Council organises preparedness against nuclear accidents and other events that may involve ionising radiation or the spread of radioactivity, in order to protect life, health, the environment or other important interests of the society. In the acute phase of an event, the government may require state and local government agencies to implement specific measures and also require private and public entities to carry out analyses and obtain information for assessing the situation. Powers are also granted to delegate authority to a designated state agency for nuclear preparedness.

Royal Decree of 17 February 2006 concerning nuclear accident preparedness – central and regional organisation

This Royal Decree establishes a separate nuclear accident preparedness organisation at the central and regional levels. This organisation is established in order to make expertise available to deal with nuclear events and to ensure the rapid implementation of measures to protect life, health, the environment and other important interests of society. Nuclear events include both accidents and events resulting from intended actions during peacetime and during crises and/or wars that threaten national security. The organisation consists of the Crisis Committee for Nuclear Preparedness, the Crisis Committee's advisors, the Crisis Committee's secretariat (the Norwegian Radiation Protection Authority) and the County Governor acting as the Crisis Committee's regional liaison.

The Crisis Committee consists of representatives from the Norwegian Radiation Protection Authority, the Ministry of Defence, the Norwegian Food Safety Authority, the Directorate for Health and Social Affairs, the Directorate for Civil Protection and Emergency Planning and the Norwegian Police Directorate. The Committee is chaired by the Norwegian Radiation Protection Authority. This Royal Decree gives the Crisis Committee for Nuclear Preparedness the power to make decisions and give orders concerning specific measures to be taken during the acute phase of an event. In addition, a Civil Service Group has been established for the coordination of nuclear preparedness at the ministerial level. (cf. Section 4.1.2).

2.2. Sets of plans

The health and social care administration and services have several types of preparedness plans:

Preparedness plans and/or crisis plans

The legislation requires the services to have preparedness plans in order to ensure reliable services during crises and war. The specialist health service (regional health authorities, health trusts and/or hospitals), municipal health service and social services (municipal enterprises and services) have made plans to manage crisis situations in their own entities. The set of plans is used in crisis situations both in Norway and abroad.

The health and social care administration is required by the Ministry to draw up emergency preparedness or crisis plans for their own entities. These are general plans that aim to ensure the rapid notification and establishment of the crisis organisation, including rapid implementation of reporting procedures and information preparedness.

Sector-specific preparedness plans and/or crisis plans

By basing the preparedness planning on general reorganisation and crisis plans that are meant to ensure that the agencies can also continue their activities and provision of services during crises and wars, a sound foundation has been laid for being able to manage various crisis situations. However, individual scenarios appear to be so extensive and demanding that special preparedness planning has been undertaken in order to be prepared for the crisis management:

- *The nuclear accident preparedness organisation:* A separate preparedness organisation has been established by Royal Decree, cf. Section 2.1. The entities involved have established their own set of plans based on the Crisis Committee's preparedness plan. The plans are adapted to the extensive international cooperation in the area.
- *National preparedness plan for pandemic influenza⁶:* This plan arranges matters to help reduce illness and death, treat the sick and dying at home and in hospitals, maintain necessary functions of the society and provide necessary information to the public during a pandemic. The plan, which is based on similar sets of plans in the World Health Organisation (WHO) and the EU, lists a number of measures for implementation during the six different phases of a pandemic. As part of the emergency preparedness, the Ministry has appointed a Pandemic Committee that is supposed to give advice to the Ministry on preparatory measures and the implementation of measures in an emergency preparedness situation. In addition, arrangements have been made for the individual entity to draw up its own pandemic plan (or a supplement to the ordinary crisis plan), which complies with laws and regulations as well as the requirements in the national plan.
- *National preparedness plan against smallpox:* An interim plan has been drawn up in order to implement measures when an infectious outbreak of the smallpox virus is suspected. The plan has clear similar features to the pandemic plan.
- *Plan for combating infectious animal diseases:* This set of plans describes relevant measures if there is a suspicion or incidence of food or beverages that are hazardous to health, material inputs that are hazardous to health or the environment, pests that damage plants and diseases that affect fish and animals, including diseases that can also infect people (zoonoses).

⁶ Version 3.0 laid down by the Ministry of Health and Care Services on 16 February 2006.

3. Involved entities, roles and responsibility in the health and social sector

The specialist health service and the emergency medical services outside hospitals, including the municipal accident and emergency unit, constitute the main entities in the health service's normal emergency preparedness. When an accident or disaster occurs, the health service at that location will become involved in the crisis management through the rapid response of the emergency agencies (police, fire and health). Outbreaks of communicable diseases will normally be discovered when those who are sick visit the municipal accident and emergency units and their primary physicians. Radiation injuries will also be discovered in this way or perhaps through admissions to hospitals as well.

If the management of an accident and/or disaster requires more resources than those that are available locally, resources are mobilised by contacting other municipalities and health trusts, or through a request to a higher administrative level. In practice, this is done through the Norwegian Emergency Medical Alarm centres⁷, which have a mandate to requisition supplementary resources both within a particular region and from other regions.

Crisis situations are managed in accordance with the subsidiarity principle at the lowest possible operative level (cf. Section 1). The nature and scope of the crisis situation determine whether the establishment of the strategic and operative crisis management bodies at the central government level will also be necessary. Information management is handled within each discipline, where local bodies express themselves about measures and observations within a particular field.

Drills are an important measure for being prepared to be able to take responsibility and continue functioning in a good way during a crisis. All entities have an independent responsibility to see that their own organisation is sufficiently trained and drilled. The directorate level of the administration is responsible for assessing the need for and if necessary taking the initiative to arrange major drills within a sector and taking the initiative to see that drills shall also include the central government level if that is also necessary.

3.1. The health and social services at the local and regional levels

3.1.1. The municipalities

The (431) municipalities shall provide primary health services and social services to those who are domiciled in the municipality, cf. the arrangements for community nursing, primary physician, accident and emergency unit and social welfare office. This responsibility also applies in a crisis situation. In order to ensure that the municipalities are capable of so doing, they have a duty to draw up a preparedness plan pursuant to the Act on Health and Social Preparedness and the Act relating to control of communicable diseases.

⁷ AMK: Norwegian Emergency Medical Alarm Centre.

Preparedness planning in the health, care and social welfare sectors should be coordinated with the municipalities' other preparedness plans and with the planning in the health trusts, e.g. with regard to the need to increase the capacity to admit patients in a situation where hospitals must free up capacity in order to treat new patients. The planning should also take into account the preparedness tasks related to environmental health, including cooperation with the Directorate for Health and Social Affairs, the Norwegian Food Safety Authority, the Norwegian Institute of Public Health, the fire service and the pollution control authorities.

The duty to provide health and social services also applies to the entities at international border crossings, ports and airports. International border crossings, ports and airports are an additional challenge in an emergency preparedness situation, cf. the need to organise the reliable reception of a large number of passengers or patients and other challenges during a pandemic or other serious events. The municipality of Ullensaker is in a special position with regard to Oslo Airport Gardermoen⁸.

Pursuant to the Act on Health and Social Preparedness, the municipal water utilities have the duty to draw up a preparedness plan. In accordance with the Norwegian Drinking Water Regulations,⁹ the Norwegian Food Safety Authority's district offices monitor the water utilities' compliance with the requirements. The plan shall be coordinated with other parts of the municipality's preparedness planning. In events where nuclear energy is involved, the municipality should confer with the County Governor and implement measures that have been decided upon by the Crisis Committee, while providing information to its inhabitants. Most municipalities have established a set of plans that also cover nuclear events.

In the Act relating to control of communicable diseases, the municipalities have been granted authority to pass resolutions to limit outbreaks of communicable diseases, including the shutting down of activities and bans on meetings. The chief municipal medical officer is the medical advisor for the municipality in matters concerning health and social preparedness and is professionally responsible for the efforts to prevent and manage outbreaks of communicable diseases. The chief municipal medical officer is also responsible for preventing and managing outbreaks of food-borne and water-borne diseases. The Norwegian Food Safety Authority's district offices have a duty to assist the chief municipal medical officer in these efforts¹⁰ and the district offices also have an independent responsibility to do this for entities pursuant to the Food Act.

The municipalities have a broad range of areas of responsibility and must make preparedness plans in order to be able to carry on their functions in a crisis situation as well¹¹. If a crisis situation arises, the municipality's crisis management meets to coordinate the crisis management. The crisis management consists of the chairman of the municipal council, the chief municipal executive and various administrators or key persons from involved disciplines in the municipality, including the chief municipal medical officer. Many municipalities have also established a municipal preparedness council under the leadership of the chairman of the municipal council, where local central government participants (e.g. the Norwegian Home Guard, the Civil Defence, lensman [district police officer], vicar) and NGOs attend.

⁸ The health and social preparedness at Oslo Airport Gardermoen has been studied by the Directorate for Health and Social Affairs as a step in the follow-up of Report no. 37 (2004-2005) to the Storting on the tsunami disaster in South Asia and central crisis management.

⁹ The Norwegian Drinking Water Regulations are sanctioned by both the Food Act and the Health Preparedness Act.

¹⁰ Cf. Section 4-10 of the Act relating to control of communicable diseases.

¹¹ There is no statutory duty of general preparedness planning for the municipality's comprehensive activities. For some individual sectors, however, there is such a duty, including the health and social services, cf. Section 3.1.

3.1.2. Regional health authorities and health trusts

The regional health authorities¹² (RHF) are responsible for seeing that specialist health services¹³ are provided to the population in their area. These services are provided through the health trusts¹⁴ (HF) and agreements with private-sector entities. In order to be able to also provide health services during crisis situations in peacetime and in wartime, the RHF's and hospitals have a duty to draw up preparedness plans for the health services for which they are responsible pursuant to the Act on Health and Social Preparedness. These preparedness plans shall be coordinated with regard to municipalities and other HF's and/or RHF's.

HF's are responsible for operative crisis management in their area. The HF's and/or hospitals have a duty to cooperate. If the resources at the hospital and/or HF are insufficient, more resources may be requisitioned from that region and other regions.

3.2. The health and social care administration at the regional level

3.2.1. The County Governor's Office and/or the Board of Health in the county

Both in the capacity of a sector authority and a coordinating authority, the County Governor is an advocate for and facilitator of the preparedness work in the county and coordinates the planning with municipalities and other government agencies¹⁵. The County Governor is also delegated responsibility for coordination at the regional level during crises and disasters in peacetime¹⁶. The County Governor is the state's regional liaison and is responsible for alerting the Directorate for Health and Social Affairs of major events in the county that affect the health and social sector.

The County Governor plays an important role in the health and social preparedness in the following areas:

- The County Governor (with the Board of Health in the county) is the body with authority for health and social policy at the county level. Both through their role as authorities and their role as supervisory bodies, the County Governor's Office and/or the Board of Health in the county provide guidance and support in the preparedness work vis-à-vis the health and social services (cf. Section 3.3.4). Professionally, the Board of Health in the county comes under the Norwegian Board of Health Supervision.
- The County Preparedness Council is the County Governor's coordinating body for crisis prevention and management in order to ensure mutual sharing of information among the County Governor, the Chief of Police, the regional government administration, the county

¹² As of the autumn of 2006, there are five regional health authorities (RHF).

¹³ In addition to the hospitals, the specialist health service also includes the medical emergency call service (the AMK centres and medical emergency number 113) and the ambulance service (by air, automobile and boat).

¹⁴ As of the autumn of 2006, there are 34 health trusts (HF).

¹⁵ The County Governor's preparedness instructions (Royal Decree of 21 September 1979).

¹⁶ Setting of guidelines for responsibility for regional coordination during crises and disasters in peacetime (Royal Decree of 12 December 1997).

administration and affected municipalities. The Norwegian Food Safety Authority is represented on the council by their regional offices.

- Pursuant to the Act relating to control of communicable diseases, the County Governor shall pay particular attention to the communicable diseases that pose a threat to public health.
- The County Governor is the Crisis Committee's regional liaison for nuclear preparedness (cf. Section 2.1). The County Governor shall be responsible for coordination and help facilitate the implementation of measures that are coordinated regionally and locally. This applies to both protective measures and the dissemination of information to the press and general public. Through facilitation and guidance, the County Governor shall help regional and local agencies establish necessary plans as part of a coordinated set of plans.
- The County Governor is delegated authority to appoint the health service's representative to the rescue coordination centres¹⁷.

In situations where the Directorate for Health and Social Affairs is delegated responsibility for comprehensive coordination of the health services' efforts, the County Governor assists the directorate in crisis management with its whole organisation. The County Governor will then receive orders for activity and reporting from the directorate in its capacity as the health authority with overall responsibility. If the Directorate for Civil Protection and Emergency Planning has initiated coordinated reporting from the local level through the County Governor to the central government level, the Directorate for Health and Social Affairs and other involved directorates must also receive copies of the County Governor's report.

3.3. The health and social care administration at the central government level

3.3.1. The Directorate for Health and Social Affairs

In all preparedness activities involving the health and social services and the health and social administration in their entirety, the Directorate for Health and Social Affairs shall help ensure that the need for cooperation is met, both in the preparedness planning and in a crisis situation. In a crisis situation, the main task is to ensure that the population is provided necessary health services, also abroad if necessary.

In accordance with the established division of tasks between the Ministry of Health and Care Services and the Directorate for Health and Social Affairs, the Directorate shall be delegated by the Ministry to handle the overall coordination of the health and social sector's efforts and, if necessary, initiate measures when a crisis situation threatens or has occurred. If the Directorate thinks that there is an obvious need to implement measures when it has not been possible to make contact with the Ministry beforehand to arrange such a delegation of authority, the Directorate may nonetheless take steps to establish the overall coordination. Contact with the Ministry should be established afterward as soon as this is feasible.

The Directorate shall be prepared to handle the overall coordination of the health and social sector's crisis management when a crisis situation has arisen and/or is about to arise. The Directorate must therefore keep informed about the situation that has occurred and how it is developing. The Directorate and the affected regional health authorities have a mutual obligation to establish contact, which provides a basis for evaluating whether the Directorate ought to get

¹⁷ The Directorate for Health and Social Affairs has delegated the authority. Pursuant to the Act relating to the municipal health services, the chief municipal medical officer shall be a representative in the local rescue centre (LRS) or regional rescue centre (RCC).

involved in the task of coordination. When the function has been established, the Directorate shall also keep the county governors updated on the situation. The county governors will in turn receive orders for activity and reporting from the Directorate; cf. the discussion in Section 3.2.1.¹⁸

In a crisis situation where measures must be implemented to hinder the outbreak and spread of communicable diseases and in connection with chemical preparedness, the Directorate's crisis management occurs in close cooperation with the Norwegian Institute of Public Health. In situations where communicable diseases are spread or there is a risk that they may spread through food products or animals, the crisis management also occurs in close cooperation with the Norwegian Food Safety Authority.

The Department for Poison Information at the Directorate for Health and Social Affairs has expertise in risk assessment and the treatment of acute poisoning from chemicals and operates a round-the-clock advisory service that is available to the health service, the emergency agencies and the general public.

The Directorate for Health and Social Affairs coordinates the security of pharmaceutical supplies in cooperation with the Norwegian Medicines Agency, the Norwegian Institute of Public Health and regional health authorities.

The Director General at the Directorate heads the Ministry of Health and Care Service's advisory Pandemic Committee. The Directorate also chairs the Health Preparedness Council, a cooperative body for the health sector and the Norwegian Armed Forces in order to coordinate preparedness measures in the two sectors.

3.3.2. The Norwegian Radiation Protection Authority

The Norwegian Radiation Protection Authority is a national professional body for nuclear preparedness and nuclear accidents. In addition to the responsibility for preparedness that derives from being a national professional body, the Radiation Protection Authority is responsible for the cross-sectoral coordination of nuclear preparedness and holds the management and secretariat function of the Crisis Committee for Nuclear Preparedness (cf. Section 2.1). The Crisis Committee can implement measures in the acute phase when a crisis situation threatens or has occurred.

3.3.3. The Norwegian Institute of Public Health

Pursuant to the Act relating to control of communicable diseases, the Norwegian Institute of Public Health is the state's institute for the control of communicable diseases. Important tasks include monitoring, including the reception of reports and warnings, contagion tracking, vaccine preparedness, advisory services, information and research. Thus, the institute is a national professional body for preparedness in the control of communicable diseases and events where biological agents have to be managed. The institute has analytical capacity in these areas and in chemical preparedness. The institute is a technical advisor on the control of communicable diseases when a crisis situation has arisen, and through its field epidemiological group it can

¹⁸ These are orders comparable to orders from other directorates for which the County Governor is the regional competent authority. If several government bodies are involved in dealing with a crisis, reporting will be coordinated through the line of reporting to the Directorate for Civil Protection and Emergency Planning (DSB). The Directorate for Health and Social Affairs will receive a copy of reports from the County Governor at the same time as they are submitted to DSB.

assist municipalities and hospitals in investigating outbreaks of communicable diseases regardless of whether they are due to mishaps, premeditated dispersal or a natural cause. The group can also provide assistance abroad in response to a request from the World Health Organisation (WHO) and the EU.

The institute has a national preparedness laboratory that meets the requirements for safety in the handling of bacteria and viruses of risk class 3, and the institute coordinates microbiological preparedness among medical microbiological laboratories in Norway. Among other things, the preparedness laboratory will establish strain banks, prepare and test procedures, take part in quality assurance systems and assist the microbiological hospital laboratories that have the main responsibility for patient samples.

The institute maintains a national stock of vaccines. The institute is responsible for the Norwegian Surveillance System for Communicable Diseases (MSIS), takes part in the EU's Early Warning and Response System for outbreaks of communicable diseases (EWRS) and is a national contact centre for matters pertaining to the control of communicable diseases and/or notification to the WHO. The institute is the secretariat for the Pandemic Committee.¹⁸

3.3.4. The of Health Supervision

The County Governor supervises the social services. If the services are run in a way that may have detrimental effects on the recipient of the services or that is unfortunate or unjustifiable in some other way, the County Governor may issue an order to rectify the situation. The Board of Health in the county supervises the health service, e.g. ensures that health trusts, municipalities, and other service providers meet statutory requirements for preparedness planning and preparedness work¹⁹. If activities in the health service are run in a way that may have detrimental effects on patients or others or that is unfortunate or unjustifiable in some other way, the Norwegian Board of Health Supervision may issue an order to rectify the situation.

During a crisis where the Directorate for Health and Social Affairs is delegated the overall responsibility for coordination of national crisis management, the Norwegian Board of Health Supervision is kept informed about the developments through the alert that the Directorate sends to the county governors and the situation reports that are drawn up by the Directorate. If the Directorate for Health and Social Affairs thinks that a service provider does not meet its responsibility, it may be relevant to give an account of the situation to the Norwegian Board of Health Supervision and ask the Board to consider issuing an order to the responsible entity to rectify the situation.

3.3.5. The Norwegian Medicines Agency

The Norwegian Medicines Agency is responsible for appraising and approving new medicines, including vaccines. The Norwegian Medicines Agency monitors the medicines that are already on the market with regard to technical quality and side effects and can take measures to remove medicines that are of poor quality or when the benefit analysis and/or risk assessment are altered, e.g. if there is a report of serious side effects. The Norwegian Medicines Agency has considerable knowledge about the use, safety and effect of medicines. This knowledge is also put at the disposal of the health service in an emergency preparedness situation.

¹⁹ Cf. Section 2-1 of the Act on Health and Social Preparedness

The Norwegian Medicines Agency issues permits to and supervises all entities involved in the pharmaceutical supply system. That gives the Norwegian Medicines Agency a thorough knowledge of the production, distribution and delivery of medicines in Norway. This knowledge is important for both the central and local planning of emergency preparedness and for strategic decisions in a crisis situation, where the supply of medicines may rapidly change.

Wholesalers have a delivery obligation for all medicines. Pharmacies are obligated to deliver and stock all medicines that are in regular demand. Pursuant to the wholesaler regulations, the Norwegian Medicines Agency may also order the individual wholesaler to maintain an emergency stockpile of necessary medicines. During 2007, holders of marketing authorisation will be obligated to report any lapse in deliveries to the Norwegian Medicines Agency.

3.3.6. The Norwegian Food Safety Authority

The Norwegian Food Safety Authority has both directorate and supervisory tasks that encompass the whole supply stream from sea, fjord and earth to the dinner table, including drinking water. The agency coordinates the efforts to combat infectious animal diseases, including diseases that can be transmitted to people (zoonoses). The regional offices coordinate the district offices²⁰ supervision of food and beverages and plants, fish and animals. The Norwegian Food Safety Authority also supervises the water utilities to make sure they have preparedness plans in accordance with the drinking water regulations²¹. The Norwegian Food Safety Authority is also responsible for supervising plant and fish health, together with the ethically acceptable husbandry of fish and animals. In clearing up outbreaks of food-born contagion, the Norwegian Food Safety Authority cooperates closely with the Norwegian Institute of Public Health. When necessary, the Norwegian Food Safety Authority may request assistance from the police, Norwegian Customs and Excise, the Coast Guard and municipalities. The Norwegian Food Safety Authority also has tasks relating to cosmetics and the supervision of medicines outside Norwegian pharmacies, and it supervises animal health personnel.

3.3.7. The Norwegian Ministry of Health and Care Services

The Ministry of Health and Care Services has the overall responsibility for preparedness planning and crisis management in the health and social sector²². Measures and information management must also be coordinated to the necessary extent with other ministries²³. In addition to the responsibility for the internal emergency preparations, this also entails responsibility for seeing that the preparedness work in the ministries and in subordinate entities is coordinated. The Secretary General has a permanent seat on the Government Crisis Council (cf. Section 6.1).

In crisis situations where the Ministry of Health and Care Services is the lead ministry, the Ministry is also responsible for media monitoring, press conferences, calling and chairing meetings of the Government Crisis Council and preparation of joint situation reports.

²⁰ As of the autumn of 2006, there were a total of 8 regional offices and 63 district offices.

²¹ The regulations are sanctioned in the Food Act and the Act on Health and Social Preparedness.

²² The Ministry of Labour and Social Inclusion is responsible for Sections 4-5 (temporary accommodation) and 5 (financial support) of the Act relating to social services.

²³ This applies to the general coordination duty that is incumbent upon each ministry. If the arrangement with the lead ministry is established (cf. Section 4.1.1), the lead ministry is responsible for interministerial coordination.

4. Cooperation at the ministerial level

4.1.1. The government crisis council and the lead ministry function

Crisis management at the ministerial level (strategic level) is based on three main elements²⁴:

- improved crisis coordination through the Government Crisis Council
- clarification of the responsibility for crisis management in the lead ministry
- establishment of a crisis support unit that shall assist with support functions to the lead ministry and the Government Crisis Council in crisis management

The Government Crisis Council is chaired by the Secretary General in the lead ministry and is the top-level strategic coordinating body in crises where there is a need for extensive coordination among several ministries. The Government Crisis Council handles coordination of affected ministries and furnishes coordinated information and necessary documentation to the government.

All ministries must be prepared to accept the role of the lead ministry. The selection of the lead ministry is based on the principle of "most affected ministry" given the nature of the crisis, the ministry that has best access to information and policy instruments for managing the crisis. The appointment of the lead ministry does not change the constitutional responsibilities.

The lead ministry is responsible for the regular coordination of crisis management at the ministerial level. In a crisis situation, the lead ministry shall:

- draw up coordinated situation reports
- identify and assess the need for measures at the strategic level
- handle necessary coordination with other ministries
- ensure that coordinated information is given to the media and the population

If there is uncertainty about which ministry is to coordinate the crisis management, the Prime Minister in consultation with affected ministers will appoint the lead ministry in accordance with a recommendation from the Government Crisis Council. In such situations, the Ministry of Justice and the Police shall take the necessary initiative until something else is decided. The Ministry of Health and Care Services must also be prepared to assume the role of the lead ministry, e.g. during a pandemic, if one should occur. With assistance from the Crisis Support Unit, the lead ministry will assume the secretariat function for the Government Crisis Council. The Secretary General at the Ministry of Health and Care Services has a permanent seat on the Government Crisis Council²⁵.

4.1.2. The Civil Service Group for the Coordination of Nuclear Preparedness

The Civil Service Group for the Coordination of Nuclear Preparedness is chaired by the Ministry of Health and Care Services and consists of representatives from key ministries involved in

²⁴ Report no. 37 (2004-2005) to the Storting on the tsunami disaster in South Asia and central crisis management.

²⁵ Other permanent representatives are the Secretary to the Government at the Prime Minister's office, the Secretary General in the Ministry of Foreign Affairs and the Secretaries General in the Ministry of Justice and the Police and the Ministry of Defence.

nuclear preparedness. The Civil Service Group considers interministerial issues and helps facilitate a coordinated organisation and maintenance of the national nuclear preparedness.

5. Alerts and the establishment of preparedness

When an accident and/or crisis situation has occurred or is about to occur, it is necessary to send an alert calling for assistance from the health and social services and to implement any management and coordination that may be necessary in the administration. However, this alert does not entail automatic implementation of measures. It is important to maintain a low threshold for conveying information through the hierarchy in order to ensure in this way that involved entities and decision-makers in the health and social services and the health and social care administration are as well informed as possible. On the basis of the content of the information, the recipient must still assess whether measures should be implemented, including further alerts.

5.1. Alerts

It is generally the case that all entities that become aware that a crisis situation is developing or has occurred within their own sector must alert affected central, regional and local entities as soon as possible. An alert is defined here as the first report from an affected entity or authority to superior, equally ranking or subordinate entities that an extraordinary situation has occurred. An alert follows a predefined chain of responsibility. Depending on the situation, the alert may contain information about how to handle the situation, the need to establish emergency preparedness, and also the need for resources.

In addition, it may be appropriate for affected entities or authorities to give each other a report that an extraordinary situation has occurred. This information is not part of the formal chain of notification, but may still be useful and necessary.

The Ministry of Health and Care Services and subordinate entities have established alert and response systems that shall ensure rapid consultation and notification, if necessary, on a 24-hour basis, both internally and among the entities, when a crisis situation has occurred. A low threshold has been established for consultation at the management level.

5.1.1. National

When sending an alert from the local to the central government level:

The medical emergency call service²⁶ constitutes the backbone of the health sector's warning system when crisis situations occur locally, whether through accidents or in extensive crisis situations. Moreover, if life and health are at risk, the local rescue centre (LRS) will also become functional under the leadership of the police. The LRS, or alternatively the Rescue Coordination Centre (RCC) in the event of major accidents and disasters²⁷, is responsible for coordinating these efforts.

²⁶ AMK and the accident and emergency units' nationwide system for notification and handling of inquiries as to whether there is a need for emergency medical assistance and communication in the health service.

²⁷ Including rescue operations at sea and/or offshore.

When an extensive crisis situation occurs locally, the health service shall alert the Directorate for Health and Social Affairs (by a duty phone manned round-the-clock), which in turn alerts the Ministry of Health and Care Services.²⁸

In the event of (the suspicion of) an outbreak of communicable diseases, including food-borne and water-borne diseases, doctors and laboratories will alert the Norwegian Institute of Public Health through the Norwegian Surveillance System for Communicable Diseases (MSIS), cf. the discussion in the next section.

When sending an alert from the central to the local government level:

- The Ministry alerts subordinate entities through established contact points, cf. the notification list for the health and social care administration, which is distributed to entities in the health and social care administration.
- An alert to the specialist health service goes from the Directorate for Health and Social Affairs to the regional health authorities, which alert the health trusts.
- An alert to the municipalities goes from the Directorate for Health and Social Affairs to the County Governor, who alerts the municipalities.
- If there is an outbreak of communicable diseases, the Norwegian Institute of Public Health will alert the relevant municipality/municipalities and the specialist health service.
- In addition, the Ministry provides information in the owner's channel to the responsible management of the affected regional health authorities.

The Norwegian Radiation Protection Authority is a national contact point in the event of nuclear accidents and other events that may involve ionising radiation or the spread of radioactivity. The Radiation Protection Authority has a continuous round-the-clock duty roster for receiving and/or sending national and international alerts and information. When an alert is received, the need for alerting the nuclear preparedness organisation is immediately assessed (the Crisis Committee, advisors, ministries and county governors) and likewise the need to establish the Radiation Protection Authority's internal emergency preparedness and to call a meeting of the Crisis Committee.

The Norwegian Institute of Public Health is in charge of data processing for the Norwegian Surveillance System for Communicable Diseases (MSIS) and receives reports from doctors and laboratories that discover or suspect the incidence of specific communicable diseases. In addition, the institute receives alerts relating to health personnel's duty to warn about communicable diseases. The institute has established a 24/7 operations centre for receiving these alerts²⁹. When it receives such alerts, the institute will offer assistance to clear up and manage the situation. The institute takes care of alerting the Directorate for Health and Social Affairs and, if necessary, international warning systems under the direction of the WHO or the EU.

The emergency preparedness duty personnel shall ensure that the Norwegian Food Safety Authority also maintains an adequate emergency preparedness outside of ordinary working hours in order to prevent, limit or manage extraordinary situations, etc. Fixed warning routines have been established between the ministries that administer the Norwegian Food Safety Authority, the Norwegian Food Safety Authority's regional and local units and their external partners both during and outside of working hours. The warning and reporting routines for food-borne and water-borne disease are part of the surveillance system, MSIS.

²⁸ The regional health authorities will simultaneously inform the Ministry of Health and Care Services in keeping with established principles for conveying information in the owner's channel.

²⁹ The 24/7 emergency operations centre for the control of communicable diseases (*Smittevernvakten*): tel. +47 22 04 23 48.

The alerting and reporting channels during crises are illustrated in figures 1, 2 and 3 that are included in a separate appendix to this plan.

5.1.2. International

Norwegian health authorities take part in a number of international alert and response systems. These systems entail that Norwegian health authorities are alerted about accidents, crises or outbreaks of communicable diseases abroad and are obligated to issue an alert through these systems if something similar should occur in Norway:

- Pursuant to the Nordic health preparedness agreement, Norway and the other countries that signed the agreement are obligated – during a crisis or disaster situation – to inform each other about measures they plan to implement or are implementing that are expected to have an impact on other Nordic countries and, insofar as it is possible, to provide assistance to each other.
- The Ministry of Health and Care Services takes part in the EU's rapid alert system for terror events RAS-BICHAT³⁰. The alert is received directly in two departments, and in the Ministries' Service Centre (DSS) and/or the emergency operations centre that can alert the ministry's staff on a 24/7 basis. When an emergency preparedness alert is received, the need to alert subordinate entities and other ministries will be assessed immediately.
- Norway has entered into the conventions relating to assistance and early warning and signed bilateral agreements regarding sending alerts and exchanging information³¹ in the event of nuclear events. The Norwegian Radiation Protection Authority is the international contact point for these conventions and/or agreements. The Radiation Protection Authority has a 24/7 alert and response system for receiving and, if necessary, sending national and international alerts and information linked to all events in the nuclear area. When an alert is received, the need to alert the preparedness organisation and the need to establish the Radiation Protection Authority's internal emergency preparedness and to call for a meeting of the Crisis Committee will be assessed immediately.
- The Norwegian Institute of Public Health participates in the EU's Early Warning and Response System for outbreaks of communicable diseases, EWRS³². Furthermore, the institute is the WHO's national contact point for alerts about outbreaks of communicable diseases, cf. the system established through the International Health Regulations (IHR) (2005)³³.
- The Norwegian Food Safety Authority takes part in the EU's rapid alert system RASFF³⁴. In this system, alerts about findings concerning food products that are damaging to health and other products are sent from the national level to the EU Commission, which conveys the alert further to other EU and/or EEA countries. This also applies to the WHO and/or FAO's alert and response system for serious events involving food safety (INFOSAN EMERGENCY). The Norwegian Food Safety Authority also takes part in the EU's and the World Organisation for Animal Health's (OIE) alert and response system for outbreaks of serious infectious animal diseases, including those that may be transmitted to people (zoonoses). An informal alert and response system among the Nordic veterinary authorities has also been established.

³⁰ Rapid Alert System – Biological and Chemical Agent Attacks

³¹ Convention on Early Notification of a Nuclear Accident (1986); Convention on Assistance in the Case of a Nuclear Accident or a Radiological Emergency (1986) together with bilateral early warning agreements with Sweden, Finland, Russia, Lithuania, the Ukraine, Poland, Germany, the Netherlands and the UK.

³² Early Warning and Response System.

³³ International Health Regulations (2005).

³⁴ Rapid Alert System for Food and Feed.

- The Norwegian Medicines Agency takes part in the alert system in the EEA area for reports of failures in quality and side effects of medicines.

5.2. Establishment of the preparedness organisation in the health and social care administration

A crisis staff is established as soon as an entity in the health and social care administration has received and assessed the emergency preparedness alert and it is found to be necessary:

- At the ministerial level, the crisis staff assures itself that necessary further alerts have been sent and that the current status, reporting routines and information preparedness will be quickly established.
- If the situation requires it, the Ministry of Health and Care Services will pass resolutions regarding the delegation of the overall coordination. Pursuant to the established division of functions between the ministry and the Directorate for Health and Social Affairs, the Directorate shall then conduct an overall coordination of the health and social service's efforts. That entails an implementation of measures and an overall coordination of measures aimed at other entities in the health and social care administration and in municipal health and the specialist health service. In order to be able to perform this function, the Directorate must keep itself regularly informed about how the situation develops.
- If the directorate finds that there is clearly a need to initiate measures where it has not been possible to contact the Ministry beforehand to arrange such a delegation of authority, the directorate may nonetheless take steps to establish the overall coordination. Contact with the Ministry should be established afterward as soon as this is feasible.
- The Secretary General establishes contact with other members of the Government Crisis Council, cf. Section 4.1.1. If the Ministry of Health and Care Services is appointed as the lead ministry for the crisis management, routines and a division of tasks with the Crisis Support Unit must be rapidly established.
- The Norwegian Radiation Protection Authority establishes internal emergency preparedness and calls in the Crisis Committee's members if necessary as soon as the emergency preparedness alert has been received. By Royal Decree, the Crisis Committee is delegated authority to implement specific measures in the acute phase of a nuclear event.
- The Norwegian Food Safety Authority's administrative preparedness plan describes the agency's routines for declaring a heightened emergency preparedness and establishing the preparedness organisation.

5.3. Reporting

In order to give top-level authorities a sufficient basis for drawing up a comprehensive status report for all involved entities, coordinating the crisis management, and making a decision about new measures, entities that participate in the crisis management must be prepared to rapidly implement procedures for reporting to the top-level authorities.

In crisis situations where many entities in the health and social sector are affected, the reporting must be coordinated with the Ministry of Health and Care Services:

- When the Directorate for Health and Social Affairs is delegated the responsibility for the overall coordination of the health and social services' crisis management, the RHF or the HF that is delegated responsibility for the operative crisis management shall report to the directorate.

- Reporting from the municipal health service goes through the County Governor to the Directorate for Health and Social Affairs. If the Directorate for Civil Protection and Emergency Planning has initiated coordinated reporting from the local level through the County Governor to the central government level, the Directorate for Health and Social Affairs and other involved directorates must also receive the County Governor's report.
- When the nuclear accident preparedness organisation is established, the secretariat of the Crisis Committee for Nuclear Preparedness coordinates the status reporting.
- When the Norwegian Food Safety Authority manages a crisis situation on behalf of the Ministry of Health and Care Services, the Norwegian Food Safety Authority coordinates the reporting from involved entities. The Norwegian Food Safety Authority also reports to the two other ministries that administer it.
- If there is a serious outbreak of a food-borne communicable disease, a food investigation unit (*Matkripos*) shall be established to coordinate the clarification work.

In a similar way, the entities must see that information about decisions, etc. at the central government level is also conveyed further to involved authorities at the regional and local levels and in the municipalities.

When the Ministry of Health and Care Services is the lead ministry with responsibility for coordinating the authorities' comprehensive crisis management, the ministry will be responsible for drawing up cross-sectoral status reports. That entails summarising reports from all involved sectors into a comprehensive status report that is updated daily. The status reports are drawn up and updated in the Directorate for Health and Social Affairs. As the lead ministry, the Ministry of Health and Care Services can consider providing resources to the effort from the Crisis Support Unit as needed.

6. Resources

The health service (primary health service and/or municipal accident and emergency unit and the specialist health service) is a standing preparedness organisation. The emergency medical chain, from the medical emergency call service (Norwegian emergency medical alarm centres and the accident and emergency units) and emergency service via the ambulance service to the hospitals, handles daily emergencies that require a rapid response to acute events (injuries or illness). There are routines for sounding a disaster alarm when there are a large number of injured persons. An important measure in this sense will be to quickly free up treatment and bed capacity in order to take care of seriously injured patients.

The experience derived from the daily crisis management ensures good basic preparedness in the specialist health service. The regional health authorities administer the ownership of a total of 34 health trusts. The health trusts encompass a varying number of institutions in the specialist health service's area of responsibility. The division of functions and tasks among the institutions, which also includes crisis situations, is presented in the preparedness plans.

The health trusts are required to cooperate in order to be able to optimally utilise the treatment capacity of various enterprises if an extensive crisis situation should arise. If there is a need to send health personnel to crises abroad, a health team will be composed of health personnel who have voluntarily consented beforehand to participate in this kind of arrangement. The Directorate for Health and Social Affairs is responsible for dispatching this team in close cooperation with the regional health authorities, the health trusts and the Ministry of Foreign Affairs.

In the following section, a brief summary is provided of important resources in the health service³⁵ that may be utilised in crises and disasters.

6.1. Health personnel and/or specialist units

The national function for treatment of NBC injuries³⁶ is delegated to the Eastern Norway Regional Health Authority and based at Ullevål University Hospital (UUS). The function includes the roles of national resource centre in the field of NBC medicine and treatment institution for NBC injuries. Key tasks are related to the transport and clinical treatment of patients, competence building and advice on the field. The centre is supposed to assist with services for and advice to state and municipal authorities and to the health service as needed. It is assumed that the centre will continue to develop professional contact and cooperation with relevant authorities, health care institutions and professional units in the field.

The following division of responsibility has been established among UUS and the Norwegian Radiation Protection Authority, the Norwegian Institute of Public Health and the Department for Poison Information at the Directorate for Health and Social Affairs:

- *N injuries*: The Norwegian Radiation Protection Authority and/or the Crisis Committee have overall responsibility for nuclear preparedness and have been given authority with regard to measures aimed at the population and coordinating responsibility for the communication of information³⁷. The Haematological Research Laboratory at UUS is responsible for the treatment of persons with radiation injuries and for giving advice to the Crisis Committee with regard to preventive measures in the population, and for giving advice to the primary health service as needed.
- *B injuries*: in the event of biological terrorism and/or disasters, the municipal health service is responsible for managing the aspects related to the control of communicable diseases and for information related to that. The Directorate for Health and Social Affairs has this responsibility on the national level. The Norwegian Institute of Public Health gives advice to the municipalities and authorities. The Institute is responsible for health monitoring, including alerts and reports. The Institute operates the Norwegian preparedness laboratory for medical microbiology and coordinates the microbiological emergency preparedness through a national microbiological preparedness committee. The Department of Infectious Diseases at UUS is responsible for the treatment and/or isolation of persons exposed to biological agents and also furnishes expertise to other hospitals (cf. the discussion below).
- *C injuries*: the municipal health service and the specialist health service treat injuries. The national resource centre for the treatment of NBC injuries at UUS is a treatment and expert body for C injuries. The Department for Poison Information at the Directorate for Health and Social Affairs handles information and inquiries both from individuals and with regard to the treatment of patients in the primary and specialist health service. The Norwegian Institute of Public Health can prove the incidence of poisons in drinking water and cooperates closely with the Norwegian Food Safety Authority and the Norwegian Pollution Control Authority.

³⁵ The summary is not exhaustive.

³⁶ Radiation injuries or radiological injuries, biological and chemical injuries.

³⁷ Cf. the Royal Decree of 17 February 2006.

In response to a request from the Directorate for Health and Social Affairs, the national resource centre at UUS shall attend and, if necessary, represent the central government health authorities in relevant national and international professional fora. The centre shall submit recommendations and proposals to the directorate for measures in NBC medicine and the treatment of NBC injuries, including recommendations concerning specific clarifications of the division of roles and efforts among various involved entities.

UUS's emergency response team in the event of an outbreak of smallpox: The Department of Infectious Diseases at UUS has established an emergency preparedness and emergency response team if there is a suspicion of smallpox. The team includes emergency nurses and medical personnel with expertise in infectious diseases, paediatrics and hospital hygiene. The team was revaccinated for smallpox in the winter of 2003. A preparedness plan has been drawn up for the members of the team, and all members must be available as needed. The team shall be able to respond rapidly to places in Norway where there is a suspicion of smallpox.

The field epidemiological group and the Norwegian preparedness laboratory at the Norwegian Institute of Public Health: cf. the discussion in Section 3.3.3.

The national function for the advanced treatment of burn injuries has been delegated to the Western Norway Regional Health Authority and based at Haukeland University Hospital (Helse Bergen Health Trust). The function and tasks (including the dissemination of expertise) are also attended to in major accidents.

The National Knowledge Centre on Violence and Traumatic Stress (NKVTS): the centre gives the health authorities advice and can also assist in a disaster situation in accordance with an assignment from the Directorate for Health and Social Affairs, if necessary in cooperation with the Ministry of Foreign Affairs.

The National Veterinary Institute has state-of-the-art expertise in veterinary bacteriology, virology, pathology, immunology and epidemiology, and implements monitoring and control programmes to document the status or absence of animal diseases. The institute is equipped for the study of micro-organisms that give serious infectious animal diseases (a class 3 laboratory) and can assist with diagnostic response teams if there is suspicion of an outbreak. The institute has job tasks in connection with surveying and monitoring chemical and microbiological agents in feed and food, together with advice including risk assessments.

6.2. Medicines, materials and medical equipment

The municipalities, the regional health authorities and the health trusts are responsible for security of supply in the areas of medicines, medical consumables and equipment. Among other things, this responsibility is met by incorporating preparedness considerations in logistical systems and delivery agreements. The Directorate for Health and Social Affairs has a coordinating function in the area and carries out the task in cooperation with the Norwegian Medicines Agency and the Norwegian Institute of Public Health.

In addition to the emergency preparedness in the health service, the following emergency preparedness arrangements have been developed under the direction of the central government:

- In order to quickly combat an outbreak of a pandemic, a stock of 1.4 million treatment courses of the antiviral medicine Tamiflu has been amassed. About 12 million daily doses of

rimantadine tablets³⁸ for preventive treatment of persons in functions of importance to the society have also been procured. In addition, an agreement has been entered into concerning high priority delivery of vaccines from a Dutch manufacturer when the vaccine is fully developed. That means approximately 4-6 months after an outbreak of a pandemic.

- A stock of about 2 million potassium iodide tablets (iodine tablets) has been amassed for use in the event of radioactive fallout. These tablets are partly stored in Oslo, and partly distributed to the municipalities north of the Ofot Fjord.
- The Directorate for Health and Social Affairs has entered into an agreement with the Norwegian Medicinal Depot regarding a crisis stock of medicines at a purchase value of NOK 82 million. The agreement encompasses storage, rotation and replacement of a specified number of medicines. Among other things, the stock includes antidotes against poisoning and anti-microbial substances. The Directorate makes decisions about the use of the stock.
- The Norwegian Institute of Public Health is responsible for the national supply of vaccine. The institute has a stock of vaccines for the child vaccination programme and also for other special vaccines, including vaccines and immunoglobulins that may be relevant in the outbreak of special diseases.
- A stock of 130 100/10 units has been established, where each unit consists of surgical consumables and medicines capable of treating 100 people in 10 days. The material is rotated in connection with international disaster relief operations.
- 7 NorHosp units (light field hospital) have been stocked for national and international use. The material is rotated in connection with disaster relief operations. In addition, the Ministry of Foreign Affairs has 13 NorHosp field hospitals at its disposal.
- A total of 16 decontamination units (cleaning units) have been stocked at selected hospitals. These units are used for decontamination of injured persons and/or persons who are exposed (or suspected of being exposed) to radiological or chemical agents before those persons are admitted to the hospital.

6.3. Transport resources

- The health trusts have ambulance resources at their disposal (automobiles, boats) as part of the ordinary emergency medical preparedness. The emergency preparedness is taken care of both through their own services and through agreements with private undertakings. Agreements have also been entered into relating to making reserve resources available, e.g. with NGOs (the Red Cross, etc.).
- The air ambulance service is an integral part of the health trusts' emergency medical preparedness through the agreements that have been entered into with aeroplane and helicopter operators. In addition, an agreement has also been entered into between the health trusts and the Ministry of Justice and the Police regarding the use of the rescue helicopter service in connection with the air ambulance.
- The Ministry of Defence has entered into an agreement with SAS Braathens on the leasing of aeroplane capacity to transport patients, the so-called Medevac agreement³⁹. The aeroplanes can be used in both domestic and foreign transport and are staffed with pre-appointed health personnel. When there is a need for transport for civilian purposes, the Directorate for Health and Social Affairs may invoke the agreement on behalf of the health and social sector. The airline clears the aeroplanes for use after 24 and 36 hours respectively and can carry both sitting patients and patients on stretchers.

³⁸ Equivalent to 300,000 courses in 6 weeks.

³⁹ Medevac = Medical Evacuation.

- The Ministry of Defence has entered into an agreement with the private ferry companies concerning the conversion of coastal steamer boats, etc. into hospital ships. Stretchers and consumables have been stored which enable the ships to be rapidly converted so that they can admit a large number of patients.

Normally these resources will be at the disposal of the specialist health service as part of the crisis management. When the Directorate for Health and Social Affairs is delegated authority to execute comprehensive coordination of the health service's efforts, the Directorate can also make a decision about how the resources will be used.

Agreements have been reached on the requisitioning of international resources, e.g. an agreement among the Nordic countries participating in the rescue service. The health and social care authorities will be involved in the requisitioning of resources from abroad that goes beyond these agreements. The Directorate for Health and Social Affairs will normally have the coordinating role in these situations in accordance with the delegation of authority from the Ministry of Health and Care Services. Cooperative relations have also been established by the health trusts for the transfer of patients to hospitals abroad, which are involved in the ordinary activities regardless of major events and/or crises.

7. NGOs

The Report to the Storting on the tsunami disaster⁴⁰ emphasises the need to develop the contact with NGOs in order to improve the utilisation of resources in the form of personnel, resources and expertise that these organisations have at their disposal in connection with crisis management. In crises and disasters in Norway, NGOs are mobilised to provide assistance as part of the police's coordination of the relief efforts through the local rescue centre (LRS) or as part of the efforts that are made at the municipal level with the municipal preparedness council acting as the coordinating body.

As part of the health and social sector's follow-up of the Report to the Storting, an agreement was entered into with the Red Cross on 14 July 2006 regarding a permanent support group preparedness. This emergency preparedness shall ensure that support groups can rapidly be established in future disasters where the expertise and experience from previous support groups is further developed. Pursuant to this agreement, the Red Cross shall facilitate the establishment and operation of new support groups for survivors and relatives in future disasters.

8. Cooperation with other countries and international organisations

International cooperation in the health sector is extensive, and its importance is steadily increasing. Countries cooperate to solve health-related challenges that do not stop at their borders, both in order to increase knowledge and to develop cooperative arrangements in order to be able to make effective preventive efforts and combat illness on a national level, in local communities and in other parts of the world. This also applies to cooperation on disaster-relief efforts. Access

⁴⁰ Report no. 37 (2004-2005) to the Storting on the tsunami disaster in South Asia and central crisis management; cf. Recommendation no. 265 (2004-2005) to the Storting.

to quick information and cooperation on measures can help prevent or delay the spread of contagion across national borders or help facilitate a quicker and more effective aid effort.

In an emergency preparedness situation, Norway can be asked to provide assistance with health resources both on a bilateral basis and to the international organisations in which we participate. On an equal basis with other countries, Norway itself can also request this kind of assistance. For example, this may involve competence building or the transfer of skills, assistance in analytical work and the transfer of medical materials or medicines.

8.1. Nordic cooperation on health preparedness

In June 2002, the Nordic countries signed a framework agreement on health preparedness, where the countries are obligated as far as possible to:

- provide mutual assistance to each other in a crisis situation
- inform and consult with each other about measures that are implemented in crisis situations
- promote cooperation by removing obstacles in national rules, etc.
- cooperate on the exchange of experience and competence building

The agreement arranges matters so that countries can establish specific cooperative projects, such as the coordination of efforts in crises abroad and cooperation on the joint development and production of vaccines.

The Nordic cooperation on preparedness in the area of food is organised under the Nordic Council of Ministers for fisheries, agriculture and forestry and food and beverages (*MR-FJSL*). The Nordic authorities have entered into an informal agreement to mutually alert each other.

The Nordic preparedness authorities have established close cooperation in the nuclear area.

8.2. The EU

Preparedness measures and crisis management are a national responsibility for the member nations in the EU/EEA area. However, there is broad agreement on the need to establish cooperative arrangements in order to improve health preparedness. This applies, for example, to consultations, alert and response systems and standardisation work (e.g. classification systems and preparedness plans) in order to be able to communicate and manage a crisis situation across international borders. Norway is fully involved in this cooperation.

Since 1998, the EU/EEA countries have cooperated on measures to detect and warn about outbreaks of communicable diseases. After 11 September 2001, the EU countries also established cooperation on emergency preparedness against terrorism by means of biological and chemical agents. This cooperation includes:

- Participation in the Network Committee for Communicable Diseases, including the Early Warning and Response System for outbreaks of communicable diseases (EWRS/Norwegian Institute of Public Health), cf. Section 5.1 above.
- Participation in the Health Security Committee (Ministry of Health and Care Services) and working groups under the committee (the Ministry's subordinate agencies), to develop tools and cooperative arrangements for use in crisis management within the EU/EEA area, plus

participation in the alert system for terrorism with biological and chemical agents (RAS-BICHAT/The Ministry of Health and Care Services, cf. Section 5.1.2).

Norway also participates in the EU's Centre for Disease Prevention and Control⁴¹. This centre shall assist the EU/EEA countries and the EU Commission with advice with a scientific basis related to the management of crisis situations. The health authorities are also planning participation in the EU's food safety authority⁴² during 2006. The Norwegian Food Safety Authority takes part in the EU's unit for managing crises involving food and/or feed.

The Radiation Protection Authority has observer status in the EU's ECURIE network for preparedness in the nuclear area.

8.3. The UN

Like the EU/EEA cooperation, the cooperation in the World Health Organisation (WHO) is based on voluntary efforts by the member countries. An important objective for Norway is to support the WHO's role as a global organisation for disease monitoring and crisis management in the health area.

In May 2005, the WHO's member nations approved international health regulations (IHR 2005) that are to be complied with in outbreaks of communicable diseases and other health threats of international importance. The rules, which shall replace the current regulations from 1969, provide guidelines for the WHO's and each individual country's management of outbreaks of communicable diseases and other health threats and obligates the countries to a greater degree of cooperation on reporting and control measures. The rules contain an overview of measures and policy instruments, including restrictions on transport, trade and tourism, which the member nations have agreed can be implemented in combating illness. According to the plan, these rules shall enter into force no later than 1 July 2007⁴³. (??9)

The Norwegian Institute of Public Health is the contact point for sending and receiving alerts about outbreaks of communicable diseases and requests from the WHO for assistance in combating any such outbreaks.

The Norwegian Food Safety Authority takes part in the development of regulations and professional cooperation with both the WHO and the EU Commission. The Norwegian Food Safety Authority is also a national contact point for the World Animal Health Organisation (OIE), the International Plant Protection Convention (IPPC) and Codex Alimentarius. These standard-setting organisations are specially mentioned in the SPS agreement under the World Trade Organisation (WTO). Preparedness work is primarily related to cooperation with the EU, OIE and WHO. Cooperation on preparedness measures, e.g. against avian flu, plays a key role in this work.

The Norwegian Radiation Protection Authority has assumed a leadership role in the work to improve the international nuclear preparedness. In a collaboration among the IAEA, the IAEA's member nations and other international organisations, an International Action Plan for Strengthening the International Preparedness and Response System for Nuclear and Radiological

⁴¹ European Centre for Disease Prevention and Control (ECDC) in Stockholm, Sweden.

⁴² European Food Safety Authority (EFSA) in Parma, Italy.

⁴³ The WHO is considering whether relevant portions of the regulations can be implemented earlier on a voluntary basis as part of preparedness for any flu epidemic.

Emergencies is now being implemented in which health preparedness plays an integral part. The Radiation Protection Authority is also a liaison institution in the WHO's REMPAN network (Radiation Emergency Medical Preparedness and Assistance Network)

8.4. NATO

NATO's civilian cooperation also includes health-related cooperation through the joint civilian-military health committee: the Joint Medical Committee (JMC). Norway may be asked to assist with health resources for both humanitarian and military operations. In order to ease the implementation of this assistance, summaries of the capacities and resources of the individual member nations have been drawn up under the direction of the committee. Among other things, summaries have been prepared of the contributions that Norway can make in situations where nuclear and/or radiological, biological or chemical agents have been used.

Figure 1: Alerting and reporting channels in the health sector during crises

Helse- og omsorgsdepartementet = The Ministry of Health and Care Services
Justisdepartementet og andre departementer = The Ministry of Justice and the Police and other ministries
Krisestøtteenheten = The Crisis Support Unit
Statens Helsetilsyn = The Norwegian Board of Health Supervision
Statens legemiddelverk = The Norwegian Medicines Agency
Sosial- og helsedirektoratet = Directorate for Health and Social Affairs
Nasjonalt folkehelse institutt¹ = Norwegian Institute of Public Health¹
Mattilsynet = Norwegian Food Safety Authority
Statens strålevern = Norwegian Radiation Protection Authority
Direktoratet for samfunnssikkerhet og beredskap = Directorate for Civil Protection and Emergency Planning

Har ansvar for å håndtere kriser på mattrygghetsområdet (se figur 3) = Is responsible for managing crises in the food safety area (cf. figure 3)

Har ansvar for tverrfaglig koordinering av atomberedskap (se figur 2) = Is responsible for interdisciplinary coordination of nuclear preparedness (cf. figure 2)

Regional helseforetak RHF² = Regional health authorities²
Helseforetak, HF = Health trusts
HF-ledelse = Health trust management
Katastrofeledelse = Disaster management
Avdelinger = Departments

Fylkesmenn = County Governors
Kommunene = The municipalities
Katastrofeledelse = Disaster management
Legevakt = Accident and emergency unit

STRATEGISK NIVÅ NASJONALT = NATIONAL STRATEGIC LEVEL
STRATEGISK NIVÅ REGIONALT = REGIONAL STRATEGIC LEVEL
TAKTISK NIVÅ LOKALT = LOCAL TACTICAL LEVEL
OPERATIVT NIVÅ LOKALT = LOCAL OPERATIVE LEVEL

Overordnet nasjonal helse- og sosialberedskapsplan = Comprehensive national health and social preparedness plan
Fastsatt 31.01.2007 = Approved 31 January 2007

Helse- og omsorgsdepartementets linje = The Ministry of Health and Care Services' channel
DSBs (Direktoratet for samfunnssikkerhet og beredskap) rapporteringskanal = The Directorate for Civil Protection and Emergency Planning's reporting channel

¹ If there is an outbreak of communicable diseases, the Norwegian Institute of Public Health will alert the relevant municipality/municipalities and the specialist health service.

² Does not alter the RHF's' delegations to the health trusts

Figure 2: Alerting and reporting channels in the event of nuclear events

Helse- og omsorgsdepartementet = The Ministry of Health and Care Services
Departementer med ansvar i atomberedskapen = Ministries with responsibility for nuclear preparedness

Kriseutvalget for atomberedskap = The Crisis Committee for Nuclear Preparedness
Sosial- og helsedirektoratet = Directorate for Health and Social Affairs
Statens strålevern LEDER KRISEUTVALGET = Norwegian Radiation Protection Authority CHAIRS
THE CRISIS COMMITTEE
Mattilsynet = Norwegian Food Safety Authority
POD = Norwegian Police Directorate
DSB = Directorate for Civil Protection and Emergency Planning
FD = Ministry of Finance
Kriseutvalgets rådgivere = The Crisis Committee's advisors

Regional helseforetak RHF = Regional health authorities²
Helseforetak, HF = Health trusts
HF-ledelse = Health trust management
Katastrofeledelse = Disaster management
Avdelinger = Departments

Fylkesmenn = County Governors
Kommunene = The municipalities
Katastrofeledelse = Disaster management
Legevakt = Accident and emergency unit

Etater/virksomheter = Agencies/Entities

STRATEGISK NIVÅ NASJONALT = NATIONAL STRATEGIC LEVEL
STRATEGISK NIVÅ REGIONALT = REGIONAL STRATEGIC LEVEL
TAKTISK NIVÅ LOKALT = LOCAL TACTICAL LEVEL
OPERATIVT NIVÅ LOKALT = LOCAL OPERATIVE LEVEL

Overordnet nasjonal helse- og sosialberedskapsplan = Comprehensive national health and social preparedness plan
Fastsatt 31.01.2007 = Approved 31 January 2007

Helse- og omsorgsdepartementets linje = The Ministry of Health and Care Services' channel
Andre departementers sektorlinje = Other ministries' sector channels

Figure 3: Alerting and reporting channels when the Norwegian Food Safety Authority handles a crisis situation

Helse- og omsorgsdepartementet = The Ministry of Health and Care Services
Landbruks- og matdepartementet = The Ministry of Agriculture and Food
Fiskeri- og kystdepartementet = The Ministry of Fisheries and Coastal Affairs

Sosial- og helsedirektoratet = Directorate for Health and Social Affairs
Nasjonalt folkehelse institutt = Norwegian Institute of Public Health
Matkripos¹ = Food Investigation Unit¹
Mattilsynets hovedkontor = Norwegian Food Safety Authority's head office
Norges veterinær høgskole = Norwegian College of Veterinary Medicine
Veterinærinstituttet = National Veterinary Institute
Bioforsk = Norwegian Institute for Agricultural and Environmental Research
NIFES = National Institute for Nutrition and Seafood Research

Regional helseforetak = Regional health authorities
Helseforetak, HF = Health trusts
HF-ledelse = Health trust management
Katastrofeledelse = Disaster management
Avdelinger = Departments

Fylkesmenn = County Governors
Kommunene = The municipalities
Katastrofeledelse = Disaster management
Legevakt = Accident and emergency unit

Mattilsynets regionkontor = The Norwegian Food Safety Authority's regional office
Mattilsynets distriktskontorer = The Norwegian Food Safety Authority's district offices

Laboratorier = Laboratories
Virksomheter/produsenter/personer = Entities/producers/persons

STRATEGISK NIVÅ NASJONALT = NATIONAL STRATEGIC LEVEL
STRATEGISK NIVÅ REGIONALT = REGIONAL STRATEGIC LEVEL
TAKTISK NIVÅ LOKALT = LOCAL TACTICAL LEVEL
OPERATIVT NIVÅ LOKALT = LOCAL OPERATIVE LEVEL

Overordnet nasjonal helse- og sosialberedskapsplan = Comprehensive national health and social preparedness plan
Fastsatt 31.01.2007 = Approved 31 January 2007

Departementenes samordningskanal = The ministries' coordinating channel
Departementenes sektorlinje = The ministries' sector line
Mattilsynets varslings- og rapporteringskanal = The Norwegian Food Safety Authority's alerting and reporting channel

¹ Established during crises

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