The National Board of Health and Welfare’s Centres for Research and Development

DISASTER MEDICINE

DISASTER PSYCHIATRY

DISASTER TOXICOLOGY

RADIATION MEDICINE DURING CATASTROPHES
SOCIETY’S EMERGENCY preparedness needs to be continuously developed and adapted in order to effectively deal with crises and disasters that may arise. For that purpose knowledge regarding the best way of dealing with certain issues is necessary, e.g. how the psychiatric health care should meet people who have been involved in a crisis or catastrophe, how the emergency health services can handle large numbers of wounded, or how to protect individuals in case of a large accident involving chemicals.

The National Board of Health and Welfare has established a number of Centres of Research and Development spread out across the country, whose purpose is to develop and coordinate knowledge regarding crises preparedness and disaster medicine, as well as staying updated within their field of research. The National Board of Health and Welfare first proposed to establish these Centres of Research and Development against the background of the contents of the report from the Defence Commission and the government bill 1998/99:74 concerning a changed world and a changed defence.

**Conditions and tasks for the Centres for Research and Development**

The Centres for Research and Development must be located at a university, public authority, or the equivalent, with a connection to clinical activity. Their tasks are to

- Follow events and stay updated regarding developments within their field of interest.
- Function as the National Board of Health and Welfare’s expert authority within their field of interest.
- Carry out investigations and analyses (including operative).
- Carry out scientific research.
- Participate in education and training.
CENTRES FOR RESEARCH AND DEVELOPMENT
DISASTER MEDICINE

Disaster medicine is the fundament of the healthcare’s handling of large accidents and catastrophes.

The task of the Centres for Research and Development within the field of disaster medicine is to develop methods that enable limiting loss of life and health as well as physical and mental suffering as a result of large accidents and catastrophes. Their main areas of research and development are

- Medical command and control major incidents (doctrine)
- Carry out disaster medicine quality control
- Develop disaster medicine methodology
- Develop international disaster medicine
- Develop disaster medicine pedagogy and the dissemination of scientific results
- Develop quantitative measurement methods for evaluating operative efforts
- Carry out scientific research and acquire knowledge internationally
- Coordinate research and development within the field, both on a national and an international basis
- Prepare medical information for disaster medicine preparedness
- Participate in cooperation with the other Nordic countries within the healthcare sector
- Planning of preparedness
- Planning of healthcare efforts in connection with public events
- Develop simplified methods for initial needs assessment in connection regarding international disaster medicine efforts
- Develop methods for evaluating international disaster medicine efforts
- Research within the field of disaster medicine
- Coping with mass casualty accidents within the transport sector
- Coping with hypothermia and cold related injuries
- Advanced transportation over long distances
- Limit damage in connection with large accidents and catastrophes
- Pre-hospital care under extreme conditions

The Centres for Research and Development within the field of disaster medicine are located in

- Linköping (www.lio.se/templates/PageWithColumn.aspx?id=10046)
- Göteborg (www.vgregion.se/vgtemplates/Start____41457.aspx)
- Stockholm (ki.se/ki/jsp/polopoly.jsp?id=12350&a=29787&f=sv&l=en) och
- Umeå (www.umu.se/dsp/surgery/forskning/katastrofmedicinskt_kunskapscentrum_Umea.htm).
CENTRE FOR RESEARCH AND DEVELOPMENT

Disaster Psychiatry

Disaster psychiatry includes knowledge of how people are influenced by severe traumatic experiences and how they should be taken care of and treated.

The Centre Research and Development for disaster psychiatry is located at Uppsala University on behalf of the National Board of Health and Welfare within the psychiatric department of the Uppsala University Hospital.

- The Centre for Research and Development mission is to
- Develop knowledge within the area disaster psychiatry, psychotraumatology and post-traumatic stress syndroms
- Participate in research projects, investigations, assessments and risk analyses
- Provide a database for literature including knowledge and experience regarding preparedness, emergency measures and long-term effects of catastrophes
- Prepare and collect knowledge about self assessment scales and follow up instruments after trauma exposure
- Develop Swedish guidelines for training regarding psycho-social support, care and treatment of PTSD and stress related disorders
- Participate in education

The Centre for disaster psychiatry is located at Uppsala University (www.katastrofpyskiatri.uu.se/).

CENTRE FOR RESEARCH AND DEVELOPMENT

Disaster Toxicology

Disaster toxicology is the knowledge of how people are affected by catastrophes involving chemicals, and how they should be treated.

The Centre for Research and Development disaster toxicology is to work for improvement of physical and medical protection, diagnostics, care and principles for treatment in connection with chemical catastrophes. Experts from the Centre are to provide support and disseminate knowledge within the field disaster toxicology. These measures can help to prevent and limit the scope and effects of chemical catastrophes.

The Centre for Research and Development is connected to the Swedish Defence Research Agency (FOI) in association with the Swedish Poisons Information Centre (GIC), whose mission is to prevent and counteract chemical catastrophes during peacetime, crises and war.

The mission of the Centre for Research and Development disaster toxicology, and with the support and on commission of the National Board of Health and Welfare, is to

- Carry out research within the field disaster toxicology, within the antidote area and regarding decontamination
- Follow events and stay updated regarding developments within the field of disaster toxicology
- Analyse risks and threats from a disaster toxicology perspective, during peacetime as well as in war
- Maintain and develop preparedness from an information perspective, pertaining to large scale chemical accidents and corresponding incidents involving chemical warfare agents
- Participate in, and in some cases lead, projects, investigations and risk analyses in disaster toxicology
- Develop principles for treatment, and methods for caring for, people affected during large scale chemical accidents or corresponding incidents
- Participate in establishing preparedness stock-piles of antidotes for chemical accidents or corresponding incidents
- Collect information and knowledge regarding international stock-piling of antidotes
- Participate in stock-taking of large chemical stock-piles in Sweden

More information can be found at http://www.foi.se/FOI/Templates/ProjectPage_____6642.aspx.

**CBRN Defence and Security Division, Umeå**
The Swedish Defence Research Agency (FOI) is an expert authority and has, during a crisis, no operative responsibility. FOI has, however, as an expert authority great competence and can support other public authorities during a crisis.

**The Swedish Poisons Information Centre, Stockholm**
The Swedish Poisons Information Centre (GIC) plays an important role in case of large scale accidents and catastrophes involving chemicals.

**CENTRE FOR RESEARCH AND DEVELOPMENT RADIATION MEDICINE DURING CATASTROPHES**
Scientific research within the areas radiation biology and molecular biology is carried out at the Centre’s laboratory at Cancer Centre Karolinska Institute (CCK), and its clinical activities tied to Karolinska hospital.

The Centre research includes the medical consequences of ionising radiation, research that includes both basic research within radiation biology and clinical radiation medicine.

The Centre offers specialised medical expertise in connection with planning of preparedness stock-piles and unexpected incidents involving suspected or confirmed exposure of persons to radiological or nuclear (RN) substances.

The Centre for research and Development works mainly with
- Research and maintaining knowledge with the field of radiation medicine
- Preparing Prepare medical information regarding preparedness for radiation accidents
- Participate in, and lead, investigations and risk analyses
- Education and training of personnel with command and control functions pertaining to preparedness within the healthcare system
- Cooperate with the Swedish Radiation Protection Authority (SSI) regarding preparedness issues

More information at www.ki.se/csm.
THE NATIONAL BOARD OF HEALTH AND WELFARE has established a number of Centres of Research and Development spread out across the country, whose purpose is to develop and coordinate knowledge regarding medical emergency preparedness, as well as staying updated within their field of research. This brochure gives a brief description of their activities. You can also read more at www.socialstyrelsen.se/krisberedskap.