

ANNUS MEDICUS 2005

ICELAND

EXTRACT FROM THE ANNUAL REPORT OF THE DIRECTORATE OF HEALTH 2005

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FROM THE MEDICAL DIRECTOR OF HEALTH



Health service issues constitute an extensive and important sector affecting the whole population of Iceland. Approximately 40% of all national expenses go to the health serin Iceland. vices Nevertheless, health service issues have remained a marginal

political issue, rarely entering the sphere of political debate under elections. Fortunately there are some indications that this has been changing in recent years even though the public debate has too often been somewhat lacking in foresight. In many cases we tend to be reactive rather than proactive in our approach. This may well be due to the fact that these are complicated issues that have to do with facts and feelings, religion as well as science. A number of these issues have been under discussion in the past few months in Iceland.

Treatment of people with psychiatric disabilities is presumably the most complex type of treatment in our health care system today. Too often there is a lack of continuity and coordination in the treatment. Community support services have to be increased and we need to establish mental health centres in our society. Obviously, such centres should be operated in connection with the primary health care in the country. The Minister of Health has recently proposed a plan to improve services for mentally ill elderly people.

Issues concerning the elderly have been very much in focus in the past several months and rightly so. There are indications that there is sufficient supply of residential and nursing-home accommodation for the elderly in non-urban communities whereas the supply is insufficient in the

capital and surrounding communities. Some nursing homes are completely unsatisfactory because they offer too little space per resident and have too many residents per unit. In addition, home services for the elderly must be improved since most elderly people prefer living at home for as long as possible. Part of this issue involves elderly married couples who are forced to live in separate accommodation because the nature and/or degree of their illness prevents them from being able to share the same place.

The avian influenza strain H5NI has been frightening the world lately. However, the risk of transmission to humans is very small as this is a birds' disease which, under certain circumstances, may be transmitted to mammals, men among them. The likelihood of this happening is minimal, however.

On the other hand, the chief concern relating to this influenza strain is whether or not the strain might mutate into one that can be transmitted between humans. No one knows the probability of whether or when this may happen, and as a matter of fact it is impossible to say whether the likelihood is great or little.

It is well to remember that the influenza pandemics of 1957 and 1968 caused relatively small harm in the West. Nonetheless, it is necessary for society to be thoroughly prepared for an influenza pandemic, and under the leadership of the Chief Epidemiologist for Iceland those preparations have been conducted in an efficient manner. By no means, however, should such activities be interpreted as a predecessor to doomsday.

Patient safety. Information on the frequency of health service incidents or adverse events is very limited in Iceland. The Landspitali University Hospital (LUH) has introduced a regular report system for hospital incidents, which may offer an insight into the matter. In other countries research has

revealed that incidents or adverse events occur on average in one out of every ten admissions and that approximately half of these could have been prevented.

If these data are applied to the LUH, which admits

about 30.000 patients annually, one may assume that some kind of incident takes place about 3000 times a year, 600 of these lead to serious handicaps or disability, and about 180 deaths occur as a result of them, deaths that could have been avoided in approximately half of the cases. Is this the real state of affairs? We do not know.

One preventive measure is to encourage and support the compilation of clinical guidelines and procedures. It has been demonstrated that the application of certain procedures in connec-

tion with the so-called "100.000 lives campaign", with 3000 participating hospitals in the USA, has greatly improved hospital safety.

The admission of patients in hospital corridors has been an eternal problem in the largest hospitals in Reykjavik for a number of decades. Last year some 60 patients were lying in the corridors of LUH every month according to the hospital's incident reports. This is a problem related to delayed hospital discharges, which in turn have to do with the shortage of nursing-home accommodation for the elderly. Every day, around 70–100 hospital beds in the LUH are occupied by patients that would be better off if placed somewhere else. This situation calls for a huge effort if it is to be amended in the near future.

A bill of law proposing a ban on smoking in public places has been presented to the Althingi. Its aim is to reduce the harmful effect of indirect smoking on one hand, both in the workplace and elsewhere, and on the other hand to send a message to the environment on the dangers of smoking.

I believe that no one has doubts any longer that smoking is dangerous, while there is still some debate on the harmfulness of indirect smoking. The rights of those who smoke must not override the rights of non-smokers who wish to be free of indirect smoking. Such rights would indeed be the reverse of human rights.

Chronic diseases. The relatives of patients with chronic and debilitating diseases often complain of a lack of continuity in their treatment. Furthermore, information on a patient and his/her treatment is often missing for those who need the information.



The health care system must be adjusted to the needs of these patients to a larger degree. One could claim that the health system is better adapted to the needs of people requiring emergency or intermittent discontinuous service once in a while rather than to those with long-term illnesses. One thing that needs to be done is to adopt a standardised electronic patient journal for the whole population of Iceland.

The hospitals should not compete with the primary care services in the treatment of long-term illnesses. Instead, primary care service should be strengthened still further since the general practitioner is usually the one most likely to be able to supervise a continuous treatment of long-term patients. In other countries the experience of having a special Patient Ombudsman has already been established. We need to provide a similar service in Iceland

Obesity and overweight, particularly among children and adolescents, is becoming one of the biggest health concerns in the world, something we have also experienced in Iceland. The problem should not be unconquerable, however, and we have already witnessed some useful preventive measures. The focus of these measures is the education of people on their responsibility for their own health. Such education needs to address methods of raising children, lifestyles, discipline, the importance of setting a good example, and the need for

defining boundaries. Another important factor is to encourage and support parents in these matters.

Recently a sensible sports policy was adopted, which is to be commended. There are also significant arguments in favour of supplying free meals to children and teenagers in all schools and day-care centres. In this respect, the importance of offering healthy food in all public catering establishments is obvious.

The access to treatment for those who already are too fat should be enhanced. Such treatment should be offered at primary health care centres and in the communities or suburbs concerned.

Registration of health services data. The Directorate of Health gathers data from hospitals and primary health care centres but has insufficient data from the clinics of specialists in private practice. The collection, assessment and processing of these data are among the major functions of the Directorate of Health and serve in many respects as a basis for the two other principal functions, i.e. counselling and supervision.

A new University Hospital. A decision has been made to construct a new building for the Landspitali University Hospital. It was decided to build it

close to the University of Iceland, thereby enhancing the hospital's status as a university hospital. It is extremely important that every aspect of the construction will be of first-class quality. This is particularly true of the building for out-patient services, which will provide facilities for one of the major expansion opportunities of the hospital in the close future.

In spite of loud voices of criticism the conclusion is inevitable that the health care services in Iceland are of high quality as demonstrated by the fact that the health standard of the people of Iceland ranks among the highest in the world. Life expectancy is high, infant mortality is low, the incidence of cardiovascular diseases is going down, and, by and large, there is good access to the best available treatment of serious conditions. In most places around the world people do not enjoy such privileges and therefore we must appreciate them. Nevertheless, there are ample opportunities for further improvement of the Icelandic health care services. The greatest assignments waiting to be addressed are in the fields of mental disorders, aging and increased obesity.

Sigurður Guðmundsson, MD, PhD Medical Director of Health

I. THE DIRECTORATE OF HEALTH

The Directorate of Health operates in five divisions, Clinical Quality and Public Health, Communicable Disease Control, Finance and Administration, Health Statistics, and Patient Complaints. Together with the Medical Director of Health and the Deputy Medical Director of Health the heads of divisions form the management of the institution.

In 2005, the Directorate of Health employed 29 people, in 25.2 full-time equivalent positions, 7 men and 22 women, in addition to hiring several contractors.

Some activities in 2005

Revision of legislation and policy

Revision of legislation on the health care services in general and provisions concerning the Directorate of Health in particular was continued.

In the last quarter of the year new policy formation for the Directorate of Health was started, centring primarily on the infrastructure of the Directorate as well as its function in society.

Formal reports on bills of law and regulations

The Directorate of Health issues formal reports and statements on bills of law and proposals for parliamentary resolutions concerning health service issues and other issues within the domain of the Directorate. The Directorate of Health also issues statements on relevant regulations.

Information

Many of the employees use a sizable part of their time on various forms of information activities, such as giving lectures and providing information in newspapers and on radio or TV. Some employees are also involved in formal teaching of certain groups and health care workers.

The operation of the web site, http://www.landlaeknir.is, is also an important part of the Directorate of Health's dissemination of

Conferences

The Directorate of Health sponsored nine conferences in 2005, sometimes in cooperation with other institutions and associations. Among these was the 8th Nordic Public Health Conference, held in Reykjavik in October. The conference was attended by some 250 people, the majority of them from the other Nordic countries.

Research projects

An Icelandic study on the health of Icelandic physicians was conducted with the participation of the Directorate of Health as part of an international research project which started in 2004 and continued in 2005. It is part of the so-called "HOUPE Study" or "Health and Organisation among University Hospital Physicians in four European Countries: Sweden, Norway, Iceland and Italy" (see the web site http://www.houpe.no).

A related study, entitled "The Health and lifestyle of Icelandic physicians", was conducted in the spring of 2005 in cooperation with the Faculty of Medicine at the University of Iceland. In addition, an Icelandic MS student studying abroad worked at the Directorate of Health on a study entitled "Access to Selected Specialized Cardiac Operations in Iceland - The Effect of Distance."

International cooperation

The Directorate of Health cooperaties extensively with international organisations, both in the Nordic framework, in Europe and other parts of the world. The Directorate participates in the work of the World Health Organisation in addition to various international projects. There is an established tradition for Nordic cooperation while cooperation with EU organisations is steadily increasing.

II. COMMUNICABLE DISEASE CONTROL

Communicable Disease Control is a special division headed by the Chief Epidemiologist for Iceland who is, according to law, responsible for and supervises communicable disease control and prevention in Iceland.

Communicable diseases

Reportable diseases

Primary health care centres and independent general practioners are under obligation to report to the Chief Epidemiologist aggregated data on the number of certain communicable diseases diagnosed without personal identification, and to report on contact tracing. The return of these reports, however, is very poor and figures on these diseases are therefore unreliable.

Notifiable diseases

The obligation to notify certain diseases involves submitting data to the Chief Epidemiologist that include the name or other personal identification of the infected person. This information is very reliable since it is based on data from both physicians and laboratories.

Events relating to communicable diseases

Mumps outbreak

In the spring of 2005, three individuals in Iceland were diagnosed with mumps, which had not been diagnosed in the country since 1989. Before 1989,

however, mumps was common, but after the introduction of vaccinations against the disease, its incidence decreased dramatically and since 1999 not a single case had been diagnosed until 2005.

These infections, which were traced to an outbreak in England, marked the beginning of a mumps outbreak in Iceland, particularly among individuals born in the years 1981 through 1985, i.e. those who missed out on the MMR vaccination when it was introduced in 1989. The number of cases continued to rise in the autumn of 2005, at which point the Chief Epidemiologist decided to encourage all Ice

landers born in that period to have an MMR vaccination, free of charge. The outbreak peaked in November 2005 and during the year 84 individuals were diagnosed with the disease.

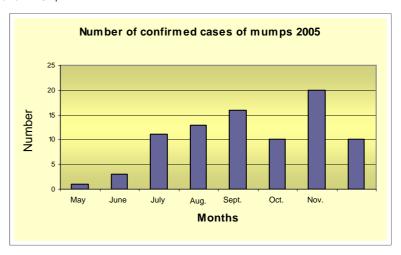
Influenza

The influenza outbreak of the winter 2004–2005 began in mid December 2004 and reached a peak in January 2005. The influenza was almost exclusively of the strain A, type H3, and it was most severe among the oldest age groups, but also among children. The outbreak proved to be far larger than in previous years.

If death figures for the first 10 weeks of 2005 are compared with an average for the same period in the last five years, according to a computational model, it turns out that there was a considerable excess mortality during these weeks. The influenza in the beginning of the year played a role in this.

RSV infections

An outbreak of RSV infections began in the middle of December 2004, reaching a peak in February 2005. The 2005 outbreak caused more serious symptoms in otherwise healthy children than that of the previous year and a number of children with RSV infection were hospitalised. A special intensive-care unit had to be opened at the Children's Hospital of the Landspitali University Hospital for this reason, admitting nine severely ill children, three of whom needed lung-and-heart machine treatment. The RSV outbreak of early 2005 is believed to be one of the most severe in Iceland in recent years.



MRSA infection

In the first two months of 2005, an unusually high number of people were diagnosed with MRSA infection, or a total of nine individuals, a number exceeding the total for all of 2004. All the cases occurred among patients in hospitals or nursing homes. The spread of the bacteria within those institutions was successfully prevented. During the whole year of 2005, the total reached 33 cases .

Giardiasis

In recent years the incidence of giardiasis has been on the increase without any satisfactory explanation. In 2005, 43 individuals were diagnosed with the disease.

Salmonella

In the first half of August 2005 an increased number of *Salmonella* cases was noted among Icelandic tourists returning from vacation on the island of Crete. A warning was sent to the EU Early Warning and Response System, which is connected to all communicable disease control institutions in the EU. The Chief Epidemiologist communicated directly with the communicable disease control authorities in Crete. No further cases of *Salmonella* infection were diagnosed among travellers returning from Crete after the date in question.

Food-borne infections

Three outbreaks of food-borne infections occurred in September in different parts of the country, none of which could be unequivocally traced to a definite origin. A likely cause of these infections was poisoning from either *Clostridium perfringens, Bacillus cereus* or *Staphylococcus aureus*.

Sexually transmitted diseases

As many as 19 cases of gonhorroea were diagnosed in 2005, mostly in men aged 20–29 years.

This is a doubling of gonhorroea cases as compared with 2004 and in the past eight years the annual number of cases has ranged from 2—10 cases a year.

In 2005, the number of chlamydia cases somewhat decreased in Iceland in comparison with the previous year. In 2005, a total of 1622 individuals were diagnosed with the infection compared with 1735 the year before.

In 2005, eight persons, five men and three women, were diagnosed as HIV positive in Iceland, making a total of 184 since the infection was first reported in 1983. Towards the end of the year one person was diagnosed with AIDS. The figure below shows the incidence of HIV infection and AIDS since 1983 as well as the death ratio from the disease.

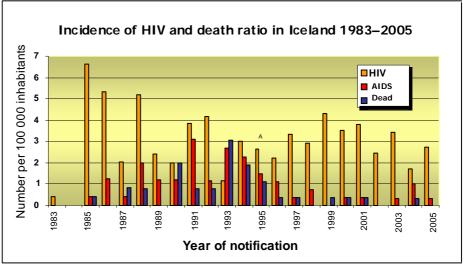
Vaccinations

Vaccination data bank

On 29 March 2004, the Chief Epidemiologist signed a contract with an Icelandic software company (eMR, Inc.) on a pilot project involving web based submission of data on individual vaccinations from primary health care centres to a centralised data bank. The project was supported by the Ministry of Health and Social Security and was completed in 2005. The solution was successful, earning the 2005 Icepro award. Icepro is an umbrella organisation for cooperation between the public and private sectors to promote electronic communication.

Childhood vaccination uptake

When the centralised vaccination data bank covering the whole country has been completed it will become possible to confirm the true nature of childhood vaccination uptake in Iceland. By means of assessment, based among other things on vaccine sales data, the uptake of vaccination against tetanus, polio and haemophilus influenzae-b has been estimated at 97% for one-year old children and the MMR vaccine uptake (two vaccinations against measles, mumps and rubella) at just over 90%.



Vaccination campaign against group C meningococcal infection

Serious meningococcal C infections have been common in Iceland with around ten individuals diagnosed annually. In October 2002, a vaccination campaign against group C meningococcal infection was launched in Iceland with the aim of vaccinating all individuals 20 years old and younger. At the same time the vaccination was included in the National Childhood Vaccination Programme for children at six and eight months of age. The campaign was very successful and by mid year 2003 close to 90% of the population, 20 years and younger, had been vaccinated.

By the end of 2005, only six individuals had been diagnosed with group C meningococcal infection. All were unvaccinated and over 20 years of age and none of them died.

Interagency Committee on Environmental Infectious Disease Health Threats

According to law, the Minister of Health appoints an

Interagency Committee on Environmental Infectious-Disease Health Threats, which is composed of three representatives, the Chief Epidemiologist, a representative for the Environment and Food Agency and another for the Icelandic Veterinary Services. The Committee's function is to collect data and supervise measures necessary for assessing and exterminating transmission hazards in the environment that may be a threat to human health. In 2005, the Interagency Committee discussed the increased spread of the highly pathogenic avian influenza A (H5N1) and the need for special responses to it in Iceland. It was deemed necessary to investigate the epidemiology of avian influenza in the country among migratory birds and domestic poultry by means of antibody testing and viral culture for the purpose of establishing knowledge of the actual spread of avian influenza and to examine the likelihood of transmission from wild birds to domestic poultry in Iceland. In addition, such viral research of wild migratory birds would be of use to neighbouring countries to the south of Iceland in the development of vaccines and tools for diagnosis. Referring to provisions of the Communicable Diseases Act, the Interagency Committee strongly recommended the initiation of such research without delay and proposed that the research would be performed in collaboration between the Chief Epidemiologist, the Icelandic Veterinary Services and from the Environment and Food Agency. The Interagency Committee also prepared instructions for the general public, veterinarians and poultry farmers on protective measures against avian influenza.

The National Committee on Communicable Diseases

The National Committee on Communicable Diseases is appointed by the Minister of Health to form policy in issues concerning communicable disease control and to advise the health service authorities on measures to prevent the spread of communicable diseases.

In the beginning of 2005, the Committee recommended that the authorities initiate a formal investigation of the implementation of communicable disease control measures, their social implications as well as legal prerequisites, in case a highly pathogenic influenza pandemic were to break out.

National communicable control measures

Preparedness for an influenza pandemic

In cooperation with the National Committee on Communicable Diseases the Chief Epidemiologist worked on the development of a preparedness plan against an influenza pandemic in accordance with recommendations from World Health Organization (WHO). The main objectives of national preparedness in Iceland were defined as follows:

- To prevent a pandemic from reaching Iceland, if possible.
- To contain or delay its spread within the country, as far as possible.
- To treat and care for those affected.
- To protect those who diagnose and treat patients.
- To protect society 's infrastructure and those individuals carrying out vital activities.

Government resolution

In the spring of 2005, the main proposals for an influenza pandemic preparedness were presented to the Minister of Health. As a follow-up the Icelandic government established a committee, made up of the Permanent Secretaries of the Ministry of

Health and Social Security and the Ministry of Justice and Ecclesiastical Affairs. Their assignment was to assess the status of preparedness in the country, relating to a possible influenza pandemic, and to present proposals for action.

On October 7th 2005, the Government approved a proposal, submitted by the Minister of Health and Social Security and the Minister of Justice and Ecclesiastical Affairs regarding a response to a possible influenza pandemic. According to the Government resolution, the development of risk assessment and preparedness plans in other countries, by the European Union, and at the WHO, are to be carefully monitored, and subsequent adjustments made to the national preparedness plans if needed.

This will primarily be the responsibility of the Ministry of Health and Social Security, the Chief Epidemiologist and the Civil Protection Department of the National Commissioner of the Icelandic Police. The collaboration between the Icelandic Veterinary Services and the Chief Epidemiologist will be increased as regards infections that can be transmitted from animals to humans. Issues concerning medicines, information, rehearsals and communication were also emphasised.

It was decided that the above-mentioned ministerial committee should continue working, in order to monitor the development of preparedness plans and assess the costs involved.

Special measures regarding medicines

The most important interventions to effectively contain the spread of an influenza pandemic are vaccines and anti-viral drugs. It is a fact that there will be a shortage of vaccines in the beginning of such a pandemic because of the limited production capacity of the pharmaceutical industry. For this reason the Ministers of Health of the Nordic Countries made a proposal in June 2005 calling for an investigation into the possibilities of starting the production of influenza vaccines within the Nordic Countries. A committee of specialists has been working on this investigation.

In 2004, the Icelandic Government authorised the purchase of a considerable amount of the anti-viral drugs Tamiflu and Relenza and in 2005, additional supplies of Tamiflu were purchased. By the end of 2005, the stockpile of influenza drugs in the country was sufficient to treat one third of the population, a proportion which ranks as one of the highest among other countries. Should there be an outbreak of an influenza pandemic, the influenza drugs will be distributed to health care institutions and primary health care centres which will be in charge of dispensing the drugs.

The Goverment resolution called for the enactment of statutes providing for the possibility of emergency measures regarding drug production. It included a proposal on starting the production of intravenous (IV) solutions in Iceland. It also proposed that the security stockpiles of IV solutions and other necessary drugs in the country should at all times be equivalent to that which constitutes at least three month suse in an epidemic.

Infection control and hazardous substances control

In 2005, the main emphasis was placed on prevention and control of infections associated with hospitals, primary health care centres, health care workers and the general public as these relate to an influenza pandemic.

Temporary work permits

In March 2005, the Ministry for Social Affairs issued a regulation on the employment rights of foreign citizens working in Iceland. It requires that the Directorate of Labour submits health certificates for foreign citizens in temporary employment to the Chief Epidemiologist for examination with respect to communicable diseases. A half-time secretary had to be employed to cover the work involved. The Chief Epidemiologist received almost 2000 applications for these certificates in 2005.

Antimicrobial resistance and antibiotics use

In 2000, the Minister of Health appointed a committee on antibiotics immunity and antibiotics use, whose function was to monitor antimicrobial resistance in infections of humans, animals and in the environment. Today, the Chief Epidemiologist receives data on the use of antibiotics from both the Pharmaceuticals Data Bank of the Directorate of Health and from hospitals. Since the beginning of 2005 it has thus been a great deal easier for the committee to gather information on the use of antibiotics than it was before.

Information and publication

A social worker is responsible for information and education on HIV and other sexually transmitted diseases. The aim of the information is to reduce the incidence of these diseases by enhancing people's knowledge of routes of transmission and promote a change in sexual behaviour and a more responsible sex life. The main emphasis in this work is placed on reaching groups at risk and young people.

EPI-ICE

In the beginning of 2005, a newsletter from the Chief Epidemiologist, entitiled EPI–ICE, was launched (*Farsóttafréttir*, in Icelandic). It is published every month, simultaneously in Icelandic and English.

Chief Epidemiologist for Iceland

EPI-ICE

International communicable disease control

International Health Regulations - IHR

The World Health Assembly, held in May 2005, adopted revised International Health Regulations which will become an internationally binding contract within two years. The objective of the new regulations is to prevent the spread of lifethreatening infectious diseases as well as diseases caused by hazardous and radioactive substances without causing unnecessary disruption of international travel and trade.

European Centre for Disease Prevention and Control – ECDC

The European Centre for Disease Prevention and Control formally began operating in May 2005. The Permanent Secretary of the Ministry of Health represents Iceland on the Board of the institution while the Chief Epidemiologist is a member of its Advisory Board.

Already in its first year of operation the institution has proved its value for the member states of the EU and EFTA.

III. CLINICAL QUALITY

One of the functions of the Directorate of Health is to enhance the quality of the health care services in an effort to ensure the safety of patients. This involves monitoring on one hand to ensure that clinical quality requirements in the health care services are met in every respect and, on the other hand, calls for the supervision of health care institutions and health care personnel. In addition, it involves providing information to the general public.

Clinical quality policy and Clinical quality programme

The clinical quality programme of the Directorate of Health has been an ongoing project in the past few years. The work has now been completed and the programme will soon be published.

Health care institutions

Clinical Quality Monitoring

In recent years, an effort has been made to streamline the monitoring of the work and facilities of health care workers and make it more structured than before. To this end the Directorate of Health has developed a methodology for assessing the operation of health care institutions.

In 2005, the Directorate of Health made a formal assessment of five health care institutions, using information gathered in employee attitude surveys and client service surveys. Statistical information already available at the Directorate of Health was examined as were formal complaints that had been submitted to the Directorate of Health in recent years of the services provided by the institution concerned. Finally, the institutions received a visit

from Directorate-of-Health staff who interviewed managers and employees and examined the facilities. The conclusions of these formal assessments are based on all aspects of this data collection.

Resident Assessment Instrument (RAI) in institutions for the elderly

A regulation issued by the Ministry of Health calls for the regular assessment of the accommodation and health of residents in facilities for the elderly. An international instrument for this assessment, called Resident Assessment Instrument (RAI) has been developed for this purpose. In Iceland the Directorate of Health is in charge of implementing the RAI assessment.



The instrument and its related training materials provide a standardised approach to assessing the health, functional and psychosocial needs and strengths of individuals living in nursing homes and residential homes or receiving short-term post-acute care in skilled nursing facilities. The full tool was designed to be used upon admission to a facility and on a quarterly basis to assist in identifying and managing emerging problems.

The RAI project manager is responsible for training health care staff in the registration of RAI data and gives special courses for nurses, nurse assistants and others involved in the implementation of RAI assessment. In 2005, five such courses were held in the premises of the Directorate of Health.

Health care personnel

Advice to health care personnel is an important part of the Directorate of Health's clinical quality work. Mostly it involves recommendations issued by the Directorate of Health or provided in response to enquiries from individuals. The advisory function also involves the publication of clinical guidelines.

Applications for licences to practice

According to regulations, the Directorate of Health gives its opinion on applications from health care professionals for a licence to practice. In 2005, a total of 212 applications were handled involving 21 different professions, about one third of which were applications for physicians $\hat{}$ licences.

Clinical guidelines

The Directorate of Health started the publication of clinical guidelines on the Directorate of Health web site in January 2000. Since then guidelines on some 30 different subjects have been published. Besides, the web offers access to guidelines from two of the largest hospitals in the country. Revision of already published guidelines has now become a substantial part of the work. Since 2004, there has been an increased emphasis on introducing selected clinical guidelines from foreign institutions accompanied by short evaluations in Icelandic.

The Directorate of Health's clinincal guidelines unit works in cooperation with other providers of clinical guidelines, both nationally and abroad. Cooperating institutions in Iceland are the Landspitali University Hospital in Reykjavik and the FSA University Hospital - Regional Hospital in Akureyri, and abroad in particular the Intercollegiate Guideline Network (SIGN) in Scotland, besides NICE in the UK, NZGG in New Zealand, NHMRC in Australia, and SBU in Sweden.

Other instructions and guidelines are also published by the Directorate of Health. Among these were e.g. revised instructions on how to treat hypothermia, working procedures for specially trained paramedics and guidelines regarding driver's and captain's licences for people suffering from epilepsy.

Medical devices

According to a law enacted in 2001 the Directorate of Health is the competent authority in matters concerning medical devices, and in that capacity is responsible for inspection and surveillance of medical devices in Iceland. The Directorate received 345

notifications in 2005 reporting defects of medical devices, a reduction by almost 50% from the previous year. The Directorate of Health also received over 200 notifications on devices and methods for biological sampling marketed in European. The Directorate of Health cooperates with other European countries, the EU and EFTA, in order to ensure the implementation of EU resolutions on the safety of medical divices.

Pharmaceuticals and monitoring of prescriptions

The pharmaceuticals data bank as a monitoring tool

A law enacted in 2003 permitted the Directorate of Health to operate a data bank containing data on the handling of prescription medicines for the purpose of monitoring prescriptions issued by physicians, as well as monitoring the development of the

use of pharmaceuticals and addictive drugs. The law entered into force in the beginning of 2005 and the data bank began operating in mid 2005.

The pharmaceuticals data bank has already proved its usefulness in all the above-mentioned functions. In addition. it provides possibilities for other uses, e.g. the monitoring of patients' compliance



to treatment and control of polypharmacy.

In the early stages of operation a good deal of work went into improving the data for the data bank. The maximum time allowed for storing the data is three years, a definite drawback since this is too short a time span for assessing any development in a statistically significant manner.

Treatment and health care services

Trauma treatment

In April 2005, a workshop on trauma treatment was sponsored in cooperation with the Icelandic Red Cross, the Landspitali University Hospital, the Civil Protection Department of the National Commissioner of the Icelandic Police and the Bishop of Iceland.

Mental health care

In 2003, the Minister of Health and Social Security appointed a committee to address the situation in mental health care for children and adolescents. The committee submitted proposals to the Minister in November 2005, calling for steps to ensure access to the service as well as continuity in the diagnosis, treatment and follow-up.

The Directorate of Health also held a conference in cooperation with other institutions on behavioural problems and mental disorders of children and adolescents.

Treatment of ADHD

In 2005, there was discussion in the media on the alleged overuse in recent years of methylphenidate for treating children with Attention Deficit Hyperactivity Disorder (ADHD). The increase in the use of this medicine can in part be explained by the introduction in 2003 of extended-release tablets that only need to be administered once a day. The Medical Director of Health established a working group that is supposed to prepare procedures concerning the diagnosis and treatment of ADHD.

Health care in prisons

A conference on health care for prisoners was held in April in cooperation with the Ministry of Health and other institutions. The health care service offered to prisoners was examined from different angles with emphasis on the importance of collaboration between all the specialists involved in the rehabilitation of prisoners. As a follow-up, a consultation group on prisoners' issues was established.

Living will

In 2005, the Directorate of Health published a living will, which is a form indicating an individual's wishes and preferences concerning treatment or life support when death is imminent, including the name of a representative who will make health care decisions on the behalf of the person in question. It is intended to prepare a data bank containing the information supplied in living wills.

Civil Protection

According to law, the Medical Director of Health, who is a member of the Civil Protection Council, is responsible for those aspects of civil protection that have to do with health care institutions and the medical treatment and nursing of sick and injured people.

The management of communicable disease control as it relates to civil protection is in the hands of the Chief Epidemiologist.

In 2005, several large-scale exercises were held to practise response to accidents, natural catastrophes and epidemics.

A campaign to promote the emergency line, 112, was sponsored in February.

IV. COMPLAINTS

There are various possibilities for those who wish to lodge a complaint of medical treatment or to seek their rights by some other means. Some of these are provided for in the Health Services Act of 1990 and the Patients' Rights Act of 1997. There are more ways of doing this than people usually realise, cf. the following summary of where to submit a complaint:

- 1. directly to the physician treating the patient
- 2. to the head physician in question
- 3. to the management or manager of the institution concerned
- 4. to the Committee for Solving Health Care Service Disputes
- 5. to the Medical Director of Health
- 6. to patient insurance
- 7. to the courts.

Complaints in 2005

A complaint is registered as such if it leads to an examination by the Directorate of Health. The number of complaints by the general public because of health care services rose from 244 in 2004 to 290 registered cases in 2005. These ranged from complaints of minor communication problems to cases involving serious medical errors (cf. Table 1).

Table 2. Complaints in 2005. Action taken.			
Reminder	64		
Reproof	18		
Legal reprimand	3		
Cancellation of licence	2		
No action taken	145		
Other	7		
Not completed, Feb. 2006	51*		
Total	290		

Table 1. Complaints in 2005 by re	eason
Wrong treatment	58
Unsatisfactory/Insufficient treatment	50
Access to health care	34
Patient journal	26
Communication difficulties between health care worker and patient	21
Alcohol or drug abuse by health care worker	6
Medical certificates	18
Unsatisfactory follow-up	11
Wrong diagnosis	11
Breach of confidentiality	7
Incomplete information	6
Communication difficulties between health care workers	5
Disability assessment	4
Unclear reasons	3
Unsubstantiated complaints	3
Health care worker goes beyond his/her scope of office	3
Other reasons	24
Total	290

Before the end of February 2006, solutions had been reached in 241 complaint cases, 91 of which had been partly or fully substantiated. This was a somewhat higher proportion than in 2004.

Action taken by the Directorate of Health is shown in Table 2. The most serious action is the cancellation by the Minister of Health of a licence to practice. This happened in two cases in 2005. In 145 cases there was no cause for action.

V. PUBLIC HEALTH AND PRIMARY CARE

The Directorate of Health is responsible for policy making and advice to the health authorities as regards public health, primary health care and prevention, in cooperation with health care professionals and the universities in Iceland. The Directorate also cooperates with the recently established Public Health Institute of Iceland in matters concerning first-stage prevention and health promotion.

Primary health care

In the field of primary health care the major projects in 2005 involved the revision of instructions on infant and newborn care and the compilation of guidelines for maternal care. Other projects involved a risk assessment relating to the choice of place for giving birth as well as producing information on foetal diagnosis for professionals and the general public. A final project worth mentioning related to health care for the elderly.

Cooperation projects on prevention and public health

- 1. Everything has effect, particularly we ourselves! is the title of a project being prepared by the Directorate of Health under the leadership of the Public Health Institute of Iceland and in cooperation with over 20 municipalities with the aim of improving the lifestyle of children and their families.
- 2. A project sponsored by the World Health Organization (WHO) on policy formation in matters concerning the health of children and adolescents, addressing in particular the health of mothers and children under the motto "Make every mother and child count".
- A working group prepared guidelines on foetal screening in the first trimester of pregnancy, involving an integrated probability assessment based on the age of the expectant mother, ultrasound examination of the foetus and blood

tests, commonly referred to as the "combined test". The guidelines were planned to be published in the spring of 2006.

Other cooperative projects include an information and prevention campaign on mental health and its determinants, aimed at reducing prejudice; a cooperation group fighting the effects of pervasive pornographic influence in society by encouraging a critical discussion on sexual health and related subjects; a cooperation group on drug addiction education; cooperation on measures against obesity among children and adolescents; awareness campaign to warn youngsters of the dangers of using tanning beds; discussions on the pros and cons of recommending colonrectal screening; and a committee sponsored by the Ministry of Health on stress factors in the lives of children and adolescents.



The logo of the World Health Day 2005. The WHD motto was "Make every mother and child count".

Suicide prevention

The Icelandic Alliance against Depression is the name of a project, started in 2002, on suicide prevention and follow-up treatment for those who have attempted suicide and the relatives of suicide victims. From the beginning it has been carried out in close co-operation with professionals of the psychiatric departments of the two university hospitals

in Iceland, the primary health care, the social services, the police, schools and the Church.

One of the most important elements of the project from the start has been the education of professionals. A new type of one-day courses, "Train the trainers" was introduded in 2005, in which certain professionals in every region of the country are activated to become the educators in their area for other professionals and the general public.

At the same time, raising the awareness of the general public on mental disorders, depression, suicide and suicide attempts remained a major task. To this end numerous articles for magazines and newspapers were written and the project representatives appeared on radio and TV to discuss these subjects. In addition, the project has its own sub-web, www.thunglyndi.landlaeknir.is, which is connected to the web site of the Directorate of Health, with contents intended for both professionals and the public.

International relations

The structure and ideology of the project originates in Germany and there is still close cooperation with the initiators at the University of Munich. The project has spread to many other Euopean countries that have formed an umbrella organisation called the *European Alliance Against Depression*, EAAD, with a membership of 16 countries. The alliance

received a grant from the EU, which was divided among the member countries in 2004 and 2005. There has also been cooperation from the start with the *Center for the Study and Prevention of Suicide*, at the Faculty of Psychiatry at the University of Rochester in the State of New York.

Healthy advice

The Directorate of Health has sponsored an awareness and information campaign in the mass media since early 2002 for the purpose of calling attention to various health issues and health promotion and pointing out what people can do on their own to improve their health and wellbeing.

In the autumn of 2004 the Directorate of Health and the Public Health Institute of Iceland joined hands in this effort and have since then been responsible for short articles on health that appear every week in *Morgunblaðið*, one of the major daily newspapers in Iceland. Each institution supplies an article every other week.

VI. HEALTH STATISTICS

One of the Directorate of Health's major functions is to collect data and compile statistics on health and health services, something which is essential for management, monitoring, policy formation and planning within the health care sector.

Health services data

Hosptal discharges

Gradually the electronic collection and processing of hospital discharge data has become a more stabilised process. In 2004 the gap between the age of Icelandic statistics and that of our neighbouring countries in international data banks was closed.

Non-hospital contacts

The Directorate of Health published a minimum data set for primary health care centres and specialist clinics in 2002. Electronic data collection from primary health care centres was begun in 2005 for data covering year 2004.

The data gathered in this manner are entered into a data bank at the Directorate of Health where they are used to generate statistics.

The Icelandic Accident Registry

The Icelandic Accident Registry is a centralised data bank on accidents operated by the Directorate of Health. The objective of the registry is to gather information on accidents in Iceland and to ensure their uniform registration.

In the beginning of 2005, five institutions were entering data into the Icelandic Accident Registry, the emergency unit of Landspitali University Hospital, one insurance company and one non-urban health institution, besides the Institution of Occupational Safety and Health and the National Commissioner of the Icelandic Police. In 2005, an adaptation was made to the primary health care registration

system, Saga, which allows for submission of data into the Accident Registry. As a result it is hoped that more primary health care centres and eventually other parties will join the Registry.

Statistics from the Icelandic Accident Registry are published regularly on the Directorate of Health web site. The total number of accidents registered in 2005 was 31.737. A report, *Accidents among the elderly*, was published in 2005, a good example of the possiblities for using the Accident Registry as a research tool.

Classification systems

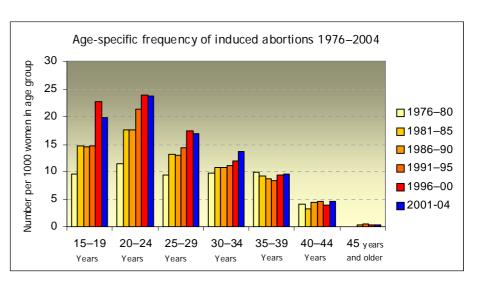
The Directorate of Health is responsible for maintaining classification systems used within the health care sector, according to a decision by the Minister of Health and Social Security. This involves decision-making regarding the adoption of classification systems, their translation, publication, distribution in electronic format, and updating.

Location of accidents, 65 years and older, 2003

Location	Number	%
Home - inside	796	43,6
Home - outside	404	22,1
Transport area	143	7,8
Commercial, service and school area	115	6,3
Nursing home, hospital	112	6,1
Open nature, outdoor area	85	4,7
Sports area	40	2,2
Production and workshop area	36	2
Sea, lake and river	11	0,6
Unspecified	85	4,7
Samtals - Total	1827	100

Development projects

The development of an electronic patient journal and the increased emphasis on electronic communication in recent years has resulted in a great increase in the work around classification systems for the health care services. In 2005, a public grant of 3 million ISK was allocated to this work, which was utilised for the improvement of the electronic presentation of ICD-10 and NCSP.



Registry of physicians and nurses

The Directorate of Health keeps a registry of physicians, containing information on all physicians with a licence to practice in Iceland. In the registry every physician is allotted a unique physician's number. Since 2001 a registry of dentists has also been accessible on the Directorate of Health web site.

In 2004, the Directorate of Health compiled a registry of nurses containing specific information on all registered nurses with a licence to practice in Iceland. The first edition of the registry was distributed to several health institutions in September 2004 and it has been kept up to date since then.

Data banks

Pharmaceuticals data bank, see above.

Registers of opt-outs

According to law the Directorate of Health is responsible for receiving and registering opt-outs from bio banks. By the end of 2005, some 200 such cancellations had been received. In addition, the Directorate of Health publishes detailed information on its web site on all licenced bio banks. In this connection the Directorate issued a fact sheet in 2005 on the rights of donors of biological samples.

The Directorate of Health is also in charge of a register of opt-outs from a centralised data bank, which by 2005 contained around 20.500 entries.

Induced abortions and sterilisations

Statistics on induced abortions and sterilisations is based on registered data from special forms that are submitted to the Directorate of Health following an operation. These data are entered into a data bank that is maintained solely for the purpose of generating statistics, without any identifiable personal information. At the end of 2005, a total of nearly 21.600 registrations had been entered into the data bank, which now has an almost unbroken registration of abortions since the year 1984 and on sterilisations since the year 2000.

In early 2005, a report entitled *Abortions 2003* was published. It contains information on abortions in Iceland from 1961 to the year 2003. In 2004, 889 abortions were carried out and sterilisations were, according to preliminary data, 511.

Surveys in health institutions

In connection with statutory monitoring and supervision of health institutions the Directorate of Health has carried out attitude surveys among the employees of 16 health institutions and primary health care centres, as well as client service surveys in all primary health care centres belonging under those institutions. In addition the Directorate carried out a service survey in 2005 among clients of all health care clinics belonging under the Reykjavik Primary Health Care.

VII. PUBLICATION

In 2005, the Directorate of Health published several reports and pamphlets besides clinical guidelines, circulars and classifications. In the beginning of the year, a newsletter was launched. The bulk of the Directorate's publications are web publications even though some of them are also published in print.

Reports and other publications in 2005

- Abortions 2003 –
 New statistics from the Directorate of Health. 2005:1
- 2. The Annual Report of the Directorate of Health 2005.
- 3. Trauma treatment on a national level.
- Accidents among the elderly 2003 –
 New statistics from the Directorate of Health. 2005:2

Pamphlets

- 1. Good Medical Practice.
 - A web publication with guidelines on the obligations and responsibility of medical doctors, based to a large extent on similar guidelines from the General Medical Council, published in 2001 in the UK.
- Guide to Contraception to help you choose the most suitable contraception.
 A revised edition of a pamphlet published in 2002.
- Pain and pain treatment.
 Published in cooeration with the Icelandic Medicinces Control Agency.

Newsletter

A newsletter from the Chief Epidemiologist, entitled *Farsóttafréttir*, was launched in February 2005. A monthly web publication, it is also published in English under the title *EPI-ICE* (see http://www.landlaeknir.is/template1.asp?PageID=944).