



DIRECTORATE  
OF HEALTH

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## THE SALE AND USE OF INFLUENZA VACCINES IN ICELAND

The World Health Organisation has set a goal of achieving a 75% coverage of yearly influenza vaccination for the age group over 65 years by the year 2010.

For the past several years the annual sale of influenza vaccines in Iceland has increased and reached a peak in 2005–2006. However, as shown in table 1, it decreased in 2007–2008.

**Table 1. Annual sale of influenza vaccines in Iceland**

Year	Number of doses
2000–2001	47.488
2001–2002	48.240
2002–2003	47.370
2003–2004	50.800
2004–2005	51.839
2005–2006	53.570
2006–2007	52.350
2007–2008	50.900

Compared to other nations the annual sale of influenza vaccines per 1.000 inhabitants in Iceland has been among the highest reported (*Vaccine* 2005; 23: 5133–5143) but because the vaccinees are currently not centrally registered, the coverage of risk groups, including individuals 60 years and older, is not known.

**Table 2. Influenza vaccination of individuals 60 years and older**

Age (year)	Number (% of vaccinees $\geq 60$ )	Coverage in age groups (%)
60–64	1.790 (11,3)	13,2
65–69	2.326 (14,7)	24,1
70–79	6.878 (43,4)	41,6
80–89	4.270 (26,9)	50,9
$\geq 90$	590 (3,7)	44,3
Alls $\geq 60$	15.854	32,0

In order to achieve the goals of WHO, the Icelandic health authorities offered the influenza vaccine free of charge to specified risk groups in 2007–2008.

A four-year purchase agreement of 60.000 doses per year of influenza vaccine was made with GlaxoSmithKline and Sanofi Pasteur in 2007 in the hope that vaccination coverage of individuals 60 years and older as well as other risk groups might be maximised.

The sales figures for 2007–2008 indicate that 17.117 individuals in risk groups were vaccinated during the season, including 15.854 individuals 60 years and older (see table 2). The best coverage was achieved among individuals 70 years and older but overall the coverage was only 32%. Unfortunately, this indicates that the 75% coverage goal of WHO is far from being achieved. However, it is possible that registration of the vaccinees in the risk groups was incomplete and therefore the coverage may be higher.

As indicated in the March issue of EPI-ICE 2008, the influenza epidemic this season was characterised by three strains of the influenza virus. This fact probably explains why some unvaccinated individuals suffered from more than one influenza-like illness this winter.

*Influenza vaccination can be useful even if the influenza virus has already been diagnosed in the society. It is therefore unreasonable to limit vaccinations to a short period every autumn.*

*In 2007, 95 new cases of hepatitis C were diagnosed, which is a substantial increase compared with previous years.*

Studies have indicated that vaccination is an effective way of preventing influenza. Therefore it is worrisome that the sale of influenza vaccines in Iceland may be decreasing despite the official effort to increase its use. Influenza vaccination of individuals can be useful even if the influenza virus has been diagnosed in the society. Therefore, it is

unreasonable to limit influenza vaccinations to a short period of time every autumn before the epidemic has started. Influenza vaccination should be encouraged before and during the epidemic to individuals who have not yet caught the infection.

## INCREASING INCIDENCE OF HEPATITIS B AND C IN 2007

In 2007, 48 individuals were diagnosed with hepatitis B, which is an increase compared with previous years. Half of these were immigrants and eight were IV (intravenous) drug abusers. The last epidemic among IV drug abusers in Iceland was in 1989–1991 (figure 1).

In order to prevent hepatitis B epidemics among IV drug abusers it is important to have them vaccinated. Immigrants are still a significant proportion of the total number of hepatitis B cases in Iceland.

Hepatitis C is the most common form of hepatitis in Iceland, caused by IV drug abuse in most cases. In 2007, 95 new cases were diagnosed, which is a substantial increase compared with previous years. This increase indicates a possible increase in IV drug abuse as well as reckless sharing of contaminated needles (figure 2).

Hepatitis B among immigrants is most often a chronic infection caused by a perinatal infection in countries where the disease is endemic. On the other hand, hepatitis C among immigrants is most likely caused by IV substance abuse.

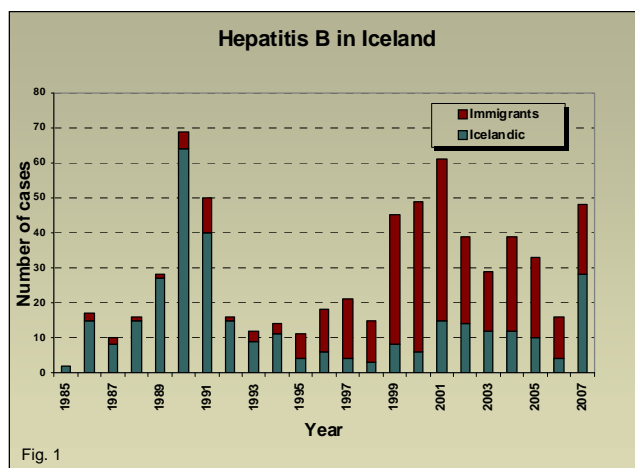


Fig. 1

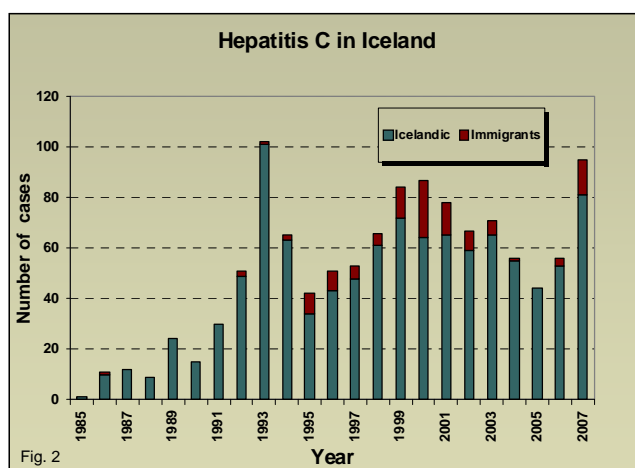


Fig. 2