Greenland: The health care systems, communicable diseases control and introduction of vaccination against Hepatitis B in childhood immunization program.
**Area**
Total area of the country 2,175,600 km²
Coastline 39,000 km
From north to south: 2,670 km
From east to west: 1,050 km
Area of the ice sheet 1,833,900 km² (85%)
Ice-free area 341,700 km²

**Form of government**
1721 - 1953 Colony
1953 - 1979 Danish county
1979 - 2009 Home Rule
2009 – Self Government

**Infrastructure:** There are roads in the towns, but the towns are not connected by roads. Shipping is still the main element in Greenland's infrastructure. A well-developed freight system handles transport between Greenland and Denmark and increasingly also between Greenland and countries such as Iceland and Canada. Part of the local passenger transport within Greenland is by ship, but most people travel by air. Local traffic is by helicopter, while transport between most cities is by plane. In recent years, air traffic has been developed and runways have been established near to several major towns. The main international airport is Kangerlussuaq.
The central parts of West Greenland are the most densely populated. Most of the population around 47,500 live in the towns, of which Nuuk is the largest (16,000). The settlements have only one shop with relatively few goods and few opportunities for paid employment. Conversely, many of the larger towns offer a rich choice in terms of both shopping goods, schools and education, which in turn gives access to a larger number and variety of jobs.

Population (2010):
- 56,452
  - Men: 29,936
  - Women: 26,516
- Average life expectancy:
  - Men 67,8
  - Women 72,8
- Fertility rate: 2.277 (2009) per 1000 women (15-49 year)

Inuit 90%
Danish and others 10%
History

• 1742 – The first doctor in Greenland
• 1838 – 2 doctors
• 1853 – First hospital Nuuk
• 1950’erne – hospital in all the distrikts, SANA i Nuuk
• The Government of Greenland became responsible for the Healths Care System in 1992
Economy

The total budget for the health care:
• 1.237.697.000 (2012)

• 100% public paid
• Free treatment (Except travel-vaccination)
• Free medcin (Except no-prescription drugs)
• Free physiotherapy
• "Free" dental care
For 1.1.2011
siornatigut

Nakorsaqarfiit 16
16 sundhedsdistrikter

Efter 1.1.2011
kingornatigut

Peqqinnissaqarfiit 5
5 sundhedsregioner
<table>
<thead>
<tr>
<th>Peqqinnissaqarfik Sundhedsregion</th>
<th>Peqqinnissaqarfimmi napparsimmavik Regionssygehus</th>
<th>Peqqissaaviit Sundhedscentre</th>
<th>Peqqissaasoqarfik/nunaqarfimmi nakorsiartarfik II.IL. Sygepicjeestationer / bygdekonsultationer m.v.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kujataa</td>
<td>Qaqortoq</td>
<td>Narsaq, Nanortalik</td>
<td>Alluitsup Paa, Tasiusaq, Narsarmiut, Aappilattoq, Ammassivik, Qassimiut, Saarloq, Eqdlugaarsuit, Narsarsuaq, Qassiarusk, Igoliku</td>
</tr>
<tr>
<td>Sermersooq</td>
<td>Nuuk</td>
<td>Paamiut, Tasilaq, Ittoqqortoormiit</td>
<td>Qeqertaarsuatsiaat, Kapisiliit, Arsuk, Kulusuk, Kuummiut, Sermiligaaq, Tiniteqliqaaq, Isortoq</td>
</tr>
<tr>
<td>Qeqqa (misiliiffiuosq/pilotregion)</td>
<td>Sisimiut</td>
<td>Maniitsoq</td>
<td>Kangerlussuaq, Sarfannnguit, Itileq, Kangoamiut, Atammik, Napasoq</td>
</tr>
<tr>
<td>Disko (misiliiffiuosq/pilotregion)</td>
<td>Aasiaat</td>
<td>Qasigiannguit, Qeqertaarsuq</td>
<td>Akunnaaq, Kitsissuarsuit, Attu, Kangaatsiaq, Niaqornaarsuk, Ikerasaarsuk, Iginniarfik, Ikamiut, Kangerluk</td>
</tr>
<tr>
<td>Avannaq</td>
<td>Illulissat</td>
<td>Qaqanaaq, Upernavik, Uummannaq</td>
<td>Saqqaa, Qeqertaq, Ilmantaq, Oqaatsut, Ikerosak, Illorsuit, Niaqornaat, Nuugaatsiaq, Qaarsut, Saattut, Ukkusissat, Kullorsuaq, Aappilattoq, Kangersuatsiaq, Nuussuaq, Tasiusaq, Upernavik Kujalleq, Nutoarmiut, Naajaat, Innaarsut, Moriusaq, Savissivik, Siorapaluq, Qeqertaq</td>
</tr>
</tbody>
</table>
Telemedicine:
Surveillance (Communicable disease control)

• The National Board of Health:
  • Notifiable infectious diseases (TB, STD, Invasive infections)
  • IHR (National Focal Point at SSI)

• Birth Registry
• Cause of Death Registry
• Cancer Registry
• Birth Defect Registry
• Childhood vaccinations
Hepatitis B:

• From the mid-sixties it was known that Hepatitis B was endemic in Greenland.
• Several studies showed a carrier frequency between 7 to 12%.
• The National Board of Health concluded in 1987:
  • That hepatitis B was endemic in Greenland.
  • That neonatal infection and infection through sexual contact was well known.
  • That infection during early childhood was not likely.
  • That there was no observed excess risk of chronic sequelae as liver cirrhosis and hepatocellular carcinoma.
• The National Board of Health recommended in 1987.
  • Screening of all pregnant women for HBsAg.
  • Vaccination of children born by HBsAg-positive mothers.
  • Vaccination of household and sexual contacts to carriers.
  • Vaccination of relevant groups in the health care system.
The National Board of Health recommended in 1989, 1999 and 2009:

• Vaccination against hepatitis B of all newborns as a part of childhood immunization program.

• Continuous screening of all pregnant women for HBsAg.
<table>
<thead>
<tr>
<th>Age</th>
<th>Diseases</th>
<th>Vaccines</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 months</td>
<td>Tuberkulose, <strong>Hepatitis B</strong></td>
<td>BCG, <strong>Engerix B</strong> (for children)</td>
</tr>
<tr>
<td>3 months</td>
<td>Difteri, Tetanus, Pertussis, Polio, Hib, <strong>Hepatitis B, Pneumokokker</strong></td>
<td><strong>InfanrixHexa</strong> (1), <strong>Prevenar-13</strong> (1)</td>
</tr>
<tr>
<td>5 months</td>
<td>Difteri, Tetanus, Pertussis, Polio, Hib, <strong>Hepatitis B, Pneumokokker</strong></td>
<td><strong>InfanrixHexa</strong> (2), <strong>Prevenar-13</strong> (2)</td>
</tr>
<tr>
<td>12 months</td>
<td>Difteri, Tetanus, Pertussis, Polio, Hib, <strong>Hepatitis B, Pneumokokker</strong></td>
<td><strong>InfanrixHexa</strong> (3), <strong>Prevenar-13</strong> (3)</td>
</tr>
<tr>
<td>15 months</td>
<td>Morbilli, Parotitis, Rubella</td>
<td>Priorix (1) (MFR)</td>
</tr>
<tr>
<td>4 years</td>
<td><strong>Morbilli, Parotitis, Rubella</strong></td>
<td>Priorix (2) (MFR)</td>
</tr>
<tr>
<td>5 years</td>
<td>Difteri, Tetanus, Pertussis, Polio (Booster)</td>
<td><strong>InfanrixTetra</strong></td>
</tr>
<tr>
<td>12 years</td>
<td>Morbilli, Parotitis, Rubella*</td>
<td>Priorix (2) (MFR)*</td>
</tr>
<tr>
<td><strong>Hepatitis B</strong></td>
<td></td>
<td><strong>Engerix B</strong> (for children) (0 months)**</td>
</tr>
<tr>
<td><strong>Hepatitis B</strong></td>
<td></td>
<td><strong>Engerix B</strong> (for children) (2 months)**</td>
</tr>
<tr>
<td><strong>Hepatitis B</strong></td>
<td></td>
<td><strong>Engerix B</strong> (for children) (6 months)**</td>
</tr>
<tr>
<td>Girls</td>
<td>HPV</td>
<td>Gardasil (0 months)</td>
</tr>
<tr>
<td></td>
<td>HPV</td>
<td>Gardasil (2 months)</td>
</tr>
<tr>
<td></td>
<td>HPV</td>
<td>Gardasil (6 months)</td>
</tr>
</tbody>
</table>

*For children older than 4 years (September 1, 2010) (Ends 2018)

** For children older than 3 months (September 1, 2010) (Ends 2022)