The COVID-19 pandemic and the Icelandic experience so far

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The objective of pandemic preparedness

- To prevent the pandemic reaching the country if possible.
- To reduce its domestic spread to the extent possible.
- To administer medical treatment and care to patients.
- To protect the people involved in the diagnosis, treatment, and care of patients.
- To protect social infrastructures and people responsible for indispensable services in the country.
Experience and strategy

• Strong Civil Protection and Emergency Management due to volatile nature
  • Weather, Volcanic activity, Earthquakes, Epidemics
• Testing – Quarantine - Social distancing – Suppression
• Clinical testing (symptomatic and healthcare workers)
• Epidemiology in practice - the deCODE approach (random sample testing)
• Prediction model updated daily
• Economical measures to secure jobs and companies
• Strong public and media relation
<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests</td>
<td>20.930</td>
<td>5,7% of population</td>
</tr>
<tr>
<td>In Quarantine</td>
<td>7.166</td>
<td>2,0%</td>
</tr>
<tr>
<td>Completed Quarantine</td>
<td>8.945</td>
<td>2,5%</td>
</tr>
<tr>
<td>Positive covid-19</td>
<td>1.319</td>
<td>6,3% of tested</td>
</tr>
<tr>
<td>In hospital</td>
<td>43</td>
<td>3,2%</td>
</tr>
<tr>
<td>ICU</td>
<td>12</td>
<td>1%</td>
</tr>
<tr>
<td>Deaths</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**COVID-19 statistic – Iceland (02.04.2020)**

Ref: [www.covid.is](https://www.covid.is)
## Landspitali and deCode samples (02.04.2020)

<table>
<thead>
<tr>
<th></th>
<th>Landspitali (clinical indication)</th>
<th>DeCode population sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of positive tests</td>
<td>1.229</td>
<td>90</td>
</tr>
<tr>
<td>Number tested</td>
<td>9.671</td>
<td>11.218</td>
</tr>
<tr>
<td>% COVID-19 positive</td>
<td>12.7%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Ref: www.covid.is
Diagnosed in Quarantine – 54% (more than half been isolated before symptoms appear)

Ref: www.covid.is
COVID-19 statistic – age distribution (range 3 months – 96 years)
COVID-19 in Iceland
Prediction model (covid.hi.is)
Cumulative confirmed infections in total (covid.hi.is) indicates that the strategy applied in the population is working with flattening of the curve and avoiding exponential spread of infection.
Active cases each day
(covid.hi.is)
Cumulative total hospitalizations (covid.hi.is)
Hospitalization each day (total) (covid.hi.is)
ICU- cumulative admittance indicates the most pessimistic prediction which puts strain on the weakest part of the health system.
Total number of individuals in ICU each day (covid.hi.is)
Main predictions with data through April 2nd 2020

• It is expected that throughout the epidemic, about 1800 individuals in Iceland will have been diagnosed with COVID-19, but the number could reach as high as 2500 individuals, according to the pessimistic forecast.

• It is expected that the number of diagnosed individuals with an active disease will peak in the first week of April and will at that time probably be about 1200, but could be as many as 1700 individuals according to the pessimistic forecast.

  • (covid.hi.is)
• The greatest burden on health care services due to hospital admissions will be around mid-April. At that time it is expected that around 60 individuals will be hospitalized but the pessimistic forecast predicts 90 individuals.

• It is expected that during the epidemic, approximately 26 individuals will become seriously ill (i.e. hospitalized in intensive care units), but this number might turn out to be as high as 40, according to the pessimistic forecast.

• (covid.hi.is)