



## COVIDWATCHEU-NPA PROJECT #411 FINAL REPORT 1 - March, 2021

### 1. COVIDWATCHEU-NPA Region Descriptions, Demographics and Data Sources and Definitions

#### 1.1 Region description

The Northern Periphery and Arctic 2014-2020 Programme forms a cooperation between 9 programme partner countries: the member States of Finland, Ireland, Sweden and the United Kingdom (Scotland and Northern Ireland) in cooperation with the Faroe Islands, Iceland, Greenland and Norway. The programme area encompasses the Euro-Arctic zone, parts of the Atlantic zone and parts of the Barents region, neighbouring on Canada in the West and Russia in the East.

Despite geographical differences, the large programme area shares a number of common features, such as low population density, low accessibility, low economic diversity, abundant natural resources, and high impact of climate change. This unique combination of features results in joint challenges and joint opportunities that can best be overcome and realised by transnational cooperation.

The Northern Periphery and Arctic 2014-2020 Programme is part of the European Territorial Cooperation Objective, also known as INTERREG, in the framework of the cohesion policy, supported by the European Regional Development Fund. The programme operates in a multi-layered policy landscape, making it well positioned to contribute to and align with the Europe 2020 Strategy, national and regional policies and development strategies, macro regional and sea basin strategies, and other programmes covering parts of the geographical area.

#### 1.2 Data sources

The information provided in this report is based on the following key open data sources:

- <https://ec.europa.eu/eurostat/en/data/database>
- <https://www.google.com/covid19/>
- <https://www.statista.com/statistics/1043366/novel-coronavirus-2019ncov-cases-worldwide-by-country/>
- <https://data.humdata.org/dataset/novel-coronavirus-2019-ncov-cases>
- <https://api.coronavirus.data.gov.uk>
- <https://data.gov.ie/blog/coronavirus-covid-19>
- <https://www.nidirect.gov.uk/campaigns/coronavirus-covid-19>
- <https://www.gov.scot/publications/coronavirus-covid-19-trends-in-daily-data/>
- <https://thl.fi/en/web/infectious-diseases-and-vaccinations/what-s-new/coronavirus-covid-19-latest-updates/situation-update-on-coronavirus>
- <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/communicable-disease-control/covid-19/>
- <https://www.regjeringen.no/en/topics/koronavirus-covid-19/id2692388/>
- <https://corona.fo/statistics>
- <https://www.covid.is/data>
- <https://visitgreenland.com/articles/corona-virus-status/>
- <https://opendata.ecdc.europa.eu/covid19/testing/csv/>
- <https://www.regjeringen.no/en/topics/koronavirus-covid-19/id2692388/>

In addition, verified information from news articles, consultancy documents and other national and regional reports was used to draw on the most up-to-date information available on the NPA regions and countries at the time of writing this report. The number of cases and deaths associated with COVID-19 refers to those known and reported at the end of February 2021.

### 1.3 Population profiles of NPA Region

COVID-19 is an infectious disease caused by the SARS-CoV-2 coronavirus and is dependent on close contact between people for transmission. The conditions for maximum transmission rates can be summarised with the “5Ps” rule: People in Prolonged, Poorly ventilated Proximity without adequate Protection<sup>1,2</sup>. As was observed with the original SARS coronavirus (SARS-CoV-1) in 2003/04, urban areas are prone to more rapid viral spread<sup>3,4</sup>. Accordingly, it is reasonable to hypothesize that the low population density of many NPA regions may confer some benefit in halting spread of this pathogen.

Table 1 outlines relevant features of the countries examined herein, ranked by population density. As age has significant relevance to relative risk of serious illness due to COVID-19<sup>5</sup>, population proportion over the age of 60yrs is also highlighted. Obesity, which increases risk of severe complications and death from COVID-19 by 40-50%<sup>6-7</sup>, expressed as a percentage of the overall population, is also included.

Table 1- Country Profiles

COUNTRY (by Population density)	Area (km2)	Population (persons)	Population density (persons/km2)	Proportion Female (%)	Median Age (yrs)	Population > 60yrs (%) [GRADED]	Population < 25yrs (%)	Obesity (%)	Life Expectancy (yrs)
		(projected 2020)	(projected 2020)	(projected 2020)	(projected 2020)	(projected 2020)	(projected 2020)	(2019)	(2018)
<b>Greenland</b>	2,166,086	57,616	0.1	46.0%	34.3	10.4%	35.3%	28.0%	73.4
<b>Iceland</b>	100,450	367,158	3.6	48.6%	37.1	14.5%	34.3%	18.3%	82.9
<b>Norway</b>	309,158	5,385,544	17.2	49.6%	39.5	17.7%	30.6%	12.8%	82.8
<b>Finland</b>	304,316	5,538,335	18.1	50.6%	42.8	22.5%	27.8%	17.9%	81.8
<b>Sweden</b>	407,300	10,371,764	25.1	49.7%	41.1	20.0%	30.5%	13.7%	82.6
<b>Faroe Islands</b>	1,393	52,123	35.0	45.6%	37.2	17.4%	33.6%	13.0%	80.8
<b>Scotland</b>	77,903	5,454,240	70.0	51.3%	42.0	19.0%	27.5%	28.0%	79.3
<b>Ireland</b>	68,655	4,871,772	71.4	50.5%	37.8	14.6%	32.3%	18.2%	82.3
<b>Northern Ireland</b>	13,798	1,885,190	136.6	50.8%	38.9	16.6%	31.9%	27.0%	80.9

## 1.4 Testing strategies

Assessment of burden of COVID-19 in each country will depend on how effectively countries can detect COVID-19 infection and spread. The standard method for diagnosis of SARS-CoV-2 infection remains a nucleic acid real-time polymerase chain reaction (PCR) test performed on a nasopharyngeal swab sample<sup>8</sup>.

Table 2 describes the process involved when citizens from each country require testing for SARS-CoV-2. All countries have recognised the necessity to provide testing free-of-charge to citizens, although there are some differences in how citizens from each country can obtain a test.

While many countries early in the pandemic applied relatively strict testing criteria surrounding foreign travel (e.g. only testing people with a history of travel to Northern Italy)<sup>9</sup>, the approach quickly changed to detecting regional and community spread within a country.

Given the emergence of newer, more infectious strains of COVID-19 with origins in Brazil, South Africa and England<sup>10,11</sup>, the importance of reducing importation, while also reducing regional and community spread, cannot be overstated. However, border control strategies have varied greatly from region to region during the pandemic to date.

Table 2- Testing Strategies and Systems

COUNTRY (alphabetical order)	Who organises the test?	Testing criteria	Cost
Faroe Islands	GP referral (March to Aug), Online Booking since Aug	Symptomatic & Asymptomatic	Free to patient, Charge of DK 312 to travellers upon arrival since Oct 2020
Finland	GP referral/Referral through remote online GP (Omaolo service)	Symptomatic as per assessment in Omaolo service or GP	Free to patient
Greenland	Self-referral online	Anyone over > 2 years old. Can be symptomatic or symptoms-free.	Free to patient
Iceland	Self referral online	Symptomatic and asymptomatic people. Travellers from abroad.	Free to patient
Ireland	GP referral	Initially quite tight criteria (foreign travel etc). Since April 2020 "any cough, fever > 38, loss taste/smell, shortness of breath".	Free to patient
Northern Ireland	Self-referral online for at home testing kit or in-person testing site	Symptomatic (high temp, new continuous cough, loss of or change in sense of smell or taste) Asked by local authorities Taking part in government pilot project Test to confirm positive result	Free to patient
Norway	The local municipalities are responsible for testing. Self referral online, coronavirus hotline, GP referral etc	Symptomatic Travellers from high risk countries Infection tracing/Requested by the municipalities in connection with ongoing outbreaks	Free to patient
Scotland	Self-referral online for at home testing kit or in-person testing site	Symptomatic (high temp, new continuous cough, loss of or change in sense of smell or taste) Asked by local authorities Taking part in government pilot project Test to confirm positive result	Free to patient
Sweden	Region specific. Some regions require referral from health centre, others provide online self-referral services	Symptomatic adults or children >6 years old	Free to patient

## 1.5 COVID-19 Death definitions

Assessment of COVID-19 mortality in each country will depend on how each country defines and records deaths from COVID-19. While this may appear obvious, there are a number of ways that countries have decided to define a death from COVID-19. The World Health Organisation has advocated for a broad definition where deaths from probable COVID-19 are included in official statistics<sup>12</sup>.

Table 3 outlines how the various countries define a death from COVID-19 infection. These definitions are important since differing methods of counting cases will lead to differing assessments of healthcare system impact of the pandemic.

Table 3- COVID-19 Deaths Definition

COUNTRY (alphabetical order)	Death Definition	Date Applied
Faroe Islands	Confirmed COVID-19 case followed by clinically compatible illness.	Aug-20
Finland	Confirmed COVID-19 case followed by clinically compatible illness.	Aug-20
Greenland	Confirmed COVID-19 case followed by clinically compatible illness.	Aug-20
Iceland	Confirmed COVID-19 case followed by clinically compatible illness.	Aug-20
Ireland	Death data includes death in confirmed/probable/possible cases of COVID-19.	Apr-20
Northern Ireland	Death with positive COVID-19 PCR test within previous 28 days.	Mar-20
Norway	Confirmed COVID-19 case followed by clinically compatible illness.	Aug-20
Scotland	Death with first positive COVID-19 PCR test within previous 28 days.	Jul-20
Sweden	Confirmed COVID-19 case followed by clinically compatible illness.	Aug-20

Ireland is something of an outlier amongst the countries examined, and since April 2020 official figures have featured “probable” deaths from COVID-19 in accordance with WHO guidelines. These deaths can be registered without a history of a COVID-19 positive PCR result. Nursing home outbreaks where patients and their families decided against hospital-based care and/or confirmatory swabbing make up the majority of these probable deaths.

On the other hand, Northern Ireland and Scotland (and indeed England and Wales) have employed a stricter definition of a COVID-19 death only being recorded if a positive swab result was obtained in the preceding 28 days. This has led to a significant underreporting of mortality from COVID-19 in the UK, particularly early in the pandemic, when testing systems were being established<sup>13</sup> (see Section 5 - “Excess Deaths”).

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