# COVID-19 Data Hub using SDG Reporting Framework

**UNECE – 5th Expert Meeting on statistics for SDGs   29 Mar- 1 April 2021, Virtual Meeting**

**Covid-19 impact on SDGs LNOB perspective – Session 31st March 2021**

**Presenters: Dr Kevin McCormack and Dr Mary Smyth**

Sustainable Development Goals & Indicator Reports,
Central Statistics Office, Ireland

# UNSD/Esri Research Exercise

- Irish Central Statistics Office (**CSO),** Ordnance Survey Ireland (**OSi**) and **Esri Ireland**, participated in the **UNSD/Esri Research Exercise.**

- Commenced in May 2017 - develop and deploy a new approach for monitoring the UN SDGs using GIS

- "Geospatial potential of statistical data."

- Result: Ireland's official Government **SDG Data Hub**

- **Ireland's Institute for SDGs (IIS) –**- the CSO, OSi and Department of Environment, Climate and Communications (DECC) - formalise SDG work

# SDG Platform

- http://irelandsdg.geohive.ie/

- **SDG indicators**

- **Geospatial datasets** (NUTS 3, county and census local area geography).

- Built to host UN, EU and National SDG Indicators

- Official Government SDG initatives

- Academic, Private Sector Civil Society SDG Activities

# Ireland's COVID-19 Data Hub

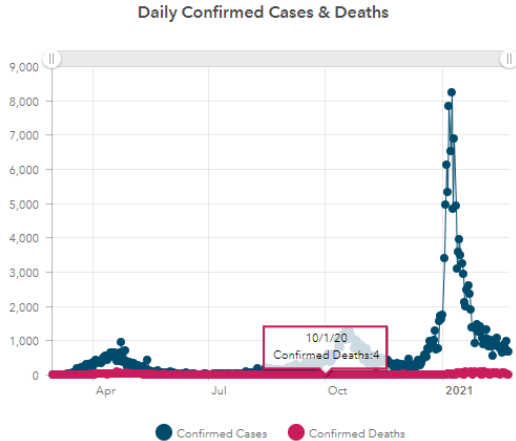In response to the Coronavirus disease (COVID-19) outbreak,

- Rapidly developed a National Covid-19 Data Hub on the GeoHive platform.

- GeoHive – the State's geospatial data platform in the Public Service Data Strategy 2019 – 2023.

- Developed by:

  - Central Statistics Office (CSO) in collaboration with

  - Ordnance Survey Ireland (OSI),

  - Department of Housing, Planning & Local Government (DHPLG)

  - All Island Research Observatory (AIRO) in Maynooth University, along with Esri Ireland as technical partners,

# Ireland's COVID-19 Data Hub

Ireland's COVID-19 geostatistical reporting ecosystem

https://covid19ireland-geohive.hub.arcgis.com/



Daily Confirmed Cases & Deaths

10/1/20
Confirmed Deaths:4

Confirmed Cases   Confirmed Deaths

Data last Updated: Monday, February 22, 2021



COVID-19 Ireland    Vaccinations    ICU, Hospital & Testing    Detailed Profile of Cases    Detailed County Statistics    Data & Services    More

Rialtas na hÉireann
Government of Ireland

Coronavirus COVID-19 Public Health Advice

## Ireland's COVID-19 Data Hub

## National Statistics, Information & Data

The information presented in this site is based on official figures provided by the Health Protection Surveillance Centre (HPSC) and the Health Service Executive (HSE). Datasets, charts and maps will be updated on an on-going basis and in line with newly published data. This site is built using the GeoHive platform, Ireland's Geospatial Data Hub.
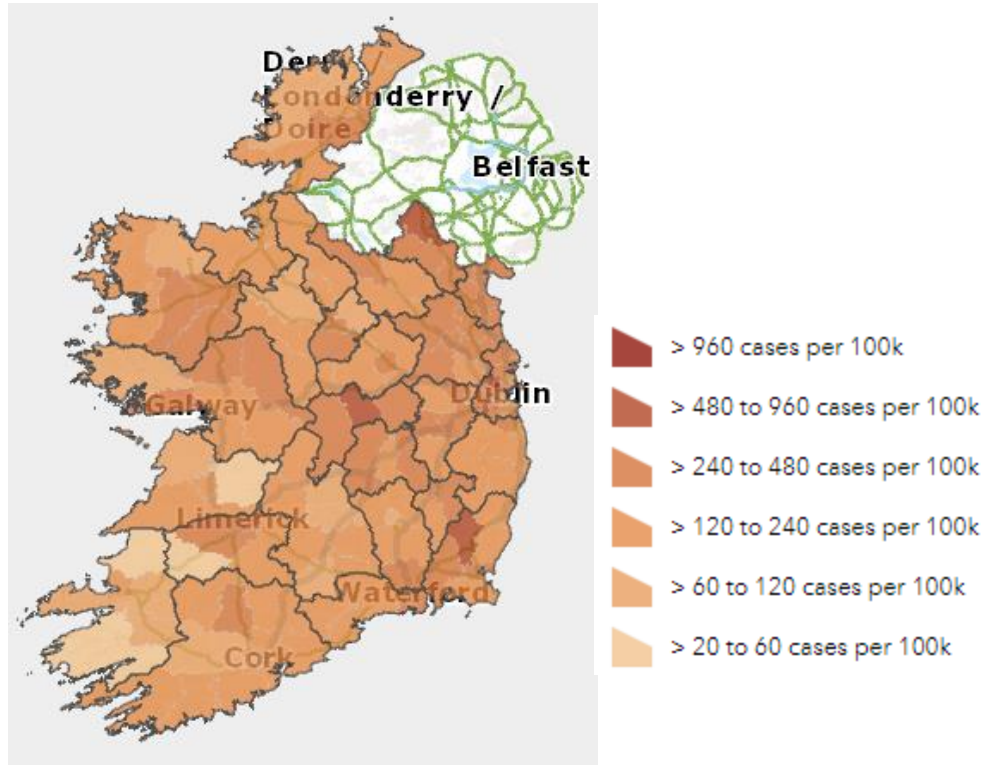
## Confirmed Headline Figures
Click for more information

2/22/2021
Data last Updated

| Total Confirmed Cases (HPS... | Total Deaths (HPSC) | Latest Daily Cases (HPSC) | Latest Daily Deaths (HPSC) |
|---|---|---|---|
| 215,743 | 4,137 includes probable and possible | 686 | 1 |

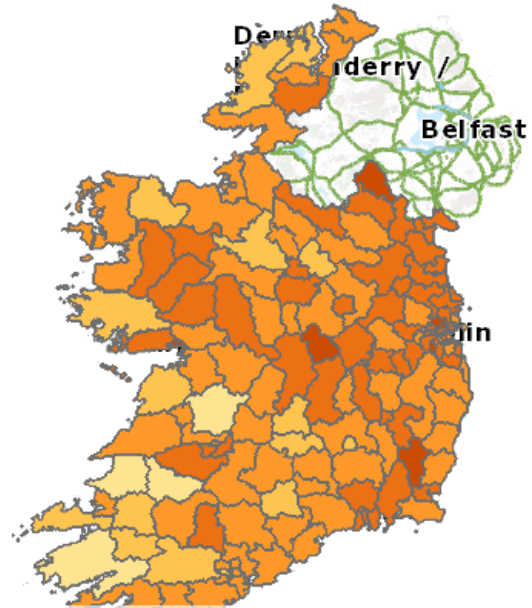Confirmed Cases in ICU    Confirmed Cases in Hospital    Tests Completed    Positive Rate (%)

# Ireland's COVID-19 Data Hub

COVID-19 14-day incidence rates per
100,000 population by Local Electoral Area
(LEA), Ireland 02/02/2021 to 15/02/2021



> 960 cases per 100k

> 480 to 960 cases per 100k

> 240 to 480 cases per 100k

> 120 to 240 cases per 100k

> 60 to 120 cases per 100k

> 20 to 60 cases per 100k

# Time series of COVID-19 incidence rate per 100k of the population

# Pages

## Detailed Statistics, Graphs & Information

Click on links below to get more detailed information related to COVID-19 in Ireland.

### Vaccinations

Detailed statistics, graphs and information on COVID-19 Vaccination Figures

Explore

### ICU, Hospitals & Testing Data

Detailed statistics, graphs and information on ICU, Acute Hospital, and Testing Data.

Explore

### Detailed Profile of Cases

Detailed statistics, graphs and information on confirmed COVID-19 cases.

Explore

### Help/FAQs

View Frequently Asked Questions (FAQs) & supporting information on this Hub.

Explore

## Vaccines Administered

Click for more information

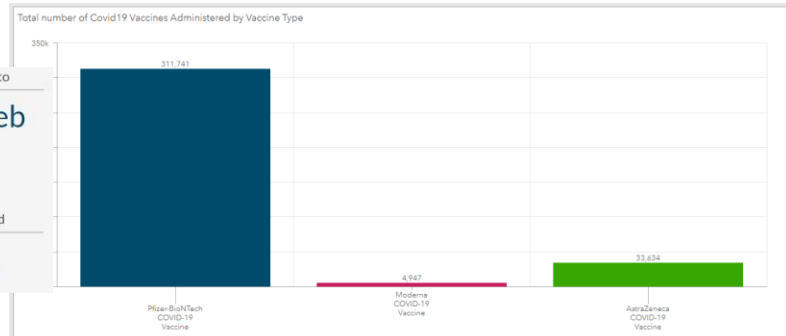| Vaccine Data up to |
| --- |
| Sat, 20 Feb 2021 |

| Total 1st Dose Vaccines Administered | Total 2nd Dose Vaccines Administered | Total Vaccines Administered |
| --- | --- | --- |
| 219,899 | 130,423 | 350,322 |

Total number of Covid19 Vaccines Administered by Vaccine Type

350k

311,741

Pfizer-BioNTech COVID-19 Vaccine

4,947
Moderna COVID-19 Vaccine

33,634
AstraZeneca COVID-19 Vaccine
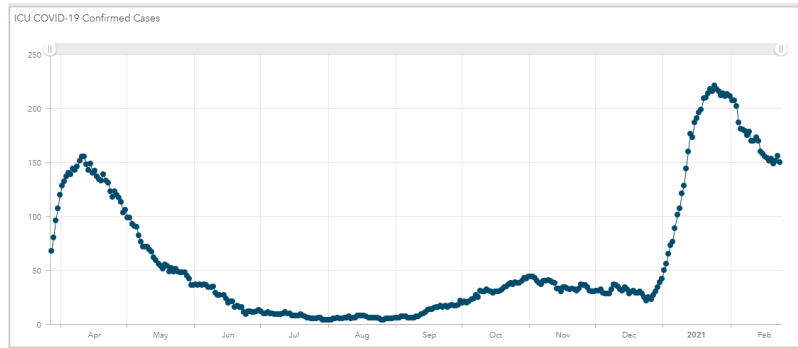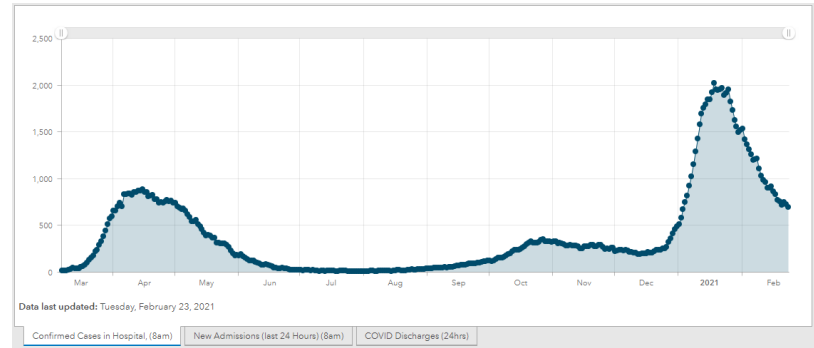
# ICU, Acute Hospital & Testing Data

## ICU COVID-19 Confirmed Cases



## Acute Hospitals Confirmed Cases, Admissions and Discharges

# Ireland's COVID-19 geostatistical reporting ecosystem

**Model**

UNECE's Generic Statistical Business Process Model (GSBPM)

UN-GGIM's Integrated Geospatial Information Framework (IGIF)

The Global Statistical Geospatial Framework (GSGF)

# Role of the CSO

**Data Infrastructure**

- HSE collecting data on Hospital and ICU beds, Testing, Cases and Patients

- NPHET bringing together Data Modelling Experts from Academia, Department of Health, etc

- CSO could provide the infrastructure to bring them together safely and quickly, via the ADC and RCU

# Data Processing

- Data encrypted and transferred to CSO by secure SFTP

- Data read into SAS and on to ADC Source Tier

- Identifiable variables, such as Name, Address, removed,
  Id Numbers, eg IHI, MRN hashed. Put on Analysis Tier where
  CSO linkable identifiers, eg CSOPPSN added where possible

- File converted to csv and put on RCU server for researcher access

# Data Governance

- Paperwork was done in parallel with data collection

- Data was collected under Section 30 of the Statistics Act

- A Section 11 partnership was put in place

- Researchers were appointed as Officers of Statistics

- A Data Protection Impact Assessment (DPIA) and associated documents were prepared

# Research and Statistical Outputs

- Epidemiological research by members of the Irish Epidemiological Modelling Advisory Group

- Modelling of pandemic data by this group, including calculation of the 'R' rate

- Development and evaluation of the success of policy responses via support for policy analysts

- Tracking the incidence levels nationally and locally, via support for the COVID 19 Data Hub on the Ordnance Survey Ireland Geohive platform

- Information on capacity issues in hospitals, testing, contact tracing and referrals

- Official statistics and public information on all aspects of the COVID crisis in subsequent CSO analysis

# Thank you

**Any Questions?**

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