# **F** COVID-19 Vaccination Uptake in Ireland Weekly Report

Week 16 2023 (week ending Sunday 23<sup>rd</sup> April 2023)

#### Key highlights of % uptake to date:

Primary Course Completed (PCC): 65+ years: 99.9% as % of population, excluding deaths\*\* 12+ years: 93.8% \*\*Based on revised formula, 23/04.2023, see slide #6 5+ years: 86.2% 1<sup>st</sup> Booster as % of PCC popln: 65+ years: 97.9% 12+ years: 77.6% 2<sup>nd</sup> Booster as % of PCC popln: 65+ years: 80.7% 12+ years: 31.9% 65+ years: 49.7% 3<sup>rd</sup> Booster as % of PCC popln: • 12+ vears: 10.7%

Data relating to vaccinations are continually being updated as vaccinations take place and data cleaning is undertaken.

Data presented here relate solely to data extracted from HSE COVID-19 Integrated Information Services (IIS) data lake environment at the specified time, includes dose numbers received abroad

Slides prepared by the Health Protection Surveillance Centre 26<sup>th</sup> April 2023

## Background



Authorised COVID-19 vaccines in Ireland are

- Comirnaty (Pfizer/BioNTech)
- Spikevax (formerly COVID-19 Vaccine Moderna)
- Vaxzevria (formerly COVID-19 Vaccine AstraZeneca)
- COVID-19 Vaccine Janssen
- Novavax-Nuvaxovid
- The primary vaccination programme commenced in
  - December 2020 for adults
  - August 2021 for 12-17 year olds
  - January 2022 for 5-11 year olds
- Booster doses were administered
  - 1<sup>st</sup> Booster November 2021 for adults
  - 1<sup>st</sup> Booster March 2022 for 12-17 year olds
  - 2<sup>nd</sup> Booster April 2022 for adults
  - 3<sup>rd</sup> Booster October 2022 for adults

Further information on vaccines recommended by the National Immunisation Advisory Committee (NIAC) is located at NIAC website <u>covid19.pdf (hse.ie)</u>

## **Methods for vaccination uptake calculation**

- Data were provided by HSE Office of the Chief Information Officer (OCIO) based on data in the IIS data lake environment
- Data presented includes COVAX (COVID-19 vaccination information system) registered vaccinations and GP and pharmacy administered vaccinations
- Overall population uptake is calculated based on CSO population estimates\* of 2021 (April 2021/H1)
  - n=4,963,363 total

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- n=4,634,508 for eligible 5+ year olds
- n=4,152,710 for eligible 12+ year olds
- n=3,745,527 for adults/18+ year olds
- Due to the estimated nature of the estimated total population sizes from the CSO in 2021 and some data quality issues a tolerance of + /- 2% should be applied to any age group uptake data
- Where county and/or age group calculation of estimated uptake exceeds 100% due to unidentified data quality issues or where the numerator exceeds the population estimate/denominator then the uptake will be rounded to 99.9% (unless otherwise indicated in the report)
- Booster 1, 2, and 3 uptake is based on a percentage of those who have completed their primary course treatment

## Definitions



- **Primary course completed =** The number of people over 5 years of age who have completed their primary course (fully vaccinated = two doses of two dose vaccine plan or one dose of a single Janssen vaccine, including those who are immunocompromised and have received an extra, third (primary) dose, in order to complete this course) using HSE-HIU Population Estimates as of April 2021
- **1st Booster Dose** = The number of individuals who have completed a primary course and have received a 1st booster dose (includes 5-11 year olds with weakened immune systems (from 15/08/2022))
- **2nd Booster Dose** = The number of individuals who have completed their primary course and have received their 2nd booster dose i.e. those who are
  - $\circ$  aged 65 years or older
  - $_{\odot}$   $\,$  immunocompromised and are 12 years of age or older  $\,$
  - o aged 60-64 years (from 15/08/2022)
  - pregnant women at 16 weeks or later who have not already received a booster vaccine in their current pregnancy (from 15/08/2022)
  - aged 55-59 years (from 22/08/2022)
  - aged 50-54 years (from 29/08/2022)
  - aged 12-49 years who have an underlying medical condition or are residents of long-term care facilities (from 01/09/2022)
  - healthcare workers (from 01/10/2022)
- **3rd Booster Dose** = The number of individuals who have completed their primary course and have received their third booster dose (from 01/10/2022)

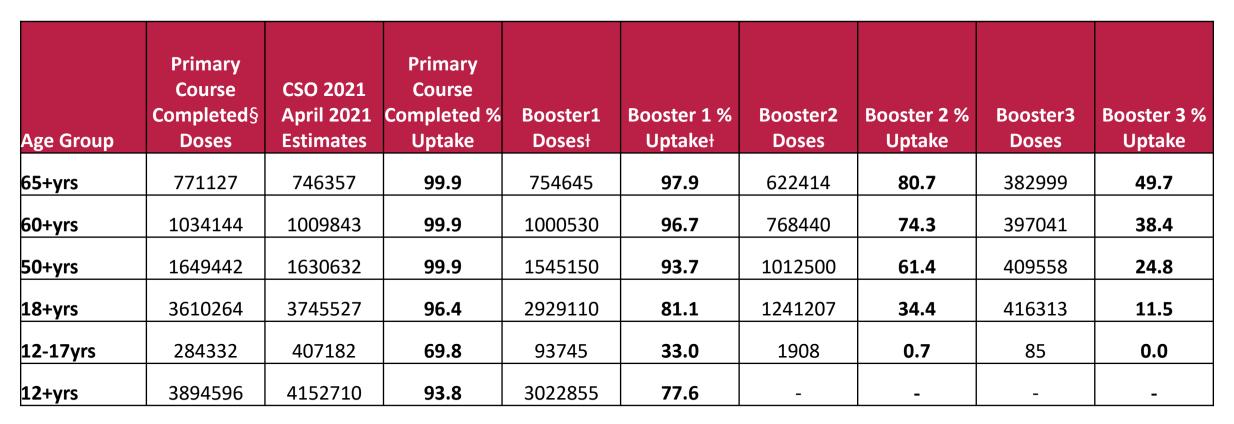
# **Calculation of Final Primary Course Completed Dose Count (PCC)**

 Total number of final primary course completed doses received - based on the following combination of doses administered to those who are and aren't immunocompromised at the time of receipt of their final primary dose or later, as of the end of Sunday, 23/04/2023, excluding deaths: 3,995,835 doses

NA – Count not applicable to PCC calculation

Immunocompromised	Immunocompromised Assessment	Single Dose	Dose 2	Additional Dose/3rd Primary Dose	Total
No	No longer Immunocompromised	33	2595	NA	2628
No	Not indicated as Immunocompromised	238873	3621993	NA	3860866
Yes	Immunocompromised after primary vaccination	211	11515	NA	11726
Yes	Immunocompromised at time of primary vaccination	NA	NA	120615	120615
Total	Total	239117	3636103	120615	3995835

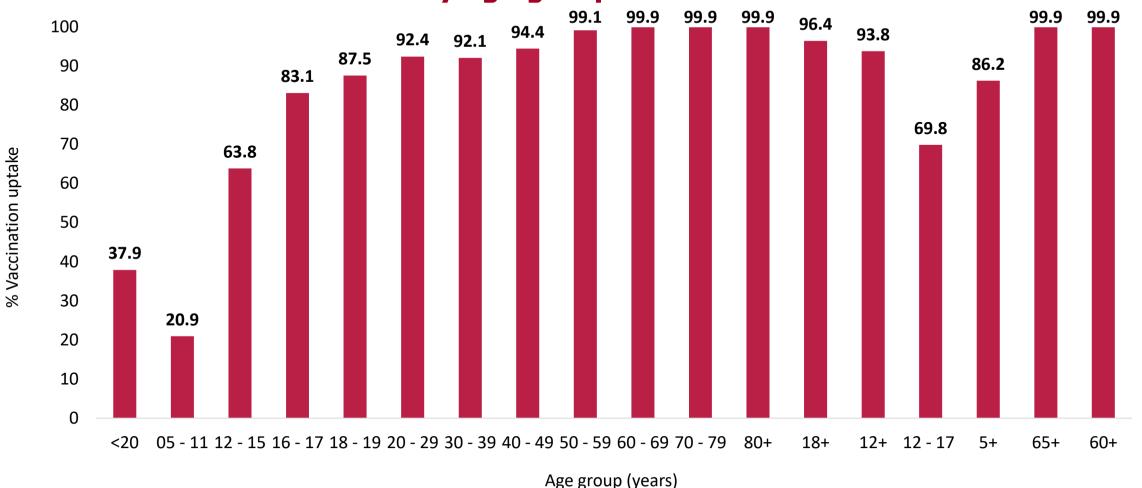
# **COVID-19 vaccination uptake of eligible population\* by age group and vaccination status**



Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues that the uptake will be rounded down to 99.9% §This is the same as the percentage of those who are fully vaccinated and is based on the HSE-HIU Population Estimates as of April 2021 \*Percentage booster uptake is based on the proportion of those who have completed their primary course treatment HBooster 1 doses not currently recommended for all 5-11 years of age unless immunocompromised and age group not currently being offered booster 2 and 3 doses

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#### Percentage primary course completed uptake of eligible population\* by age group\*\*



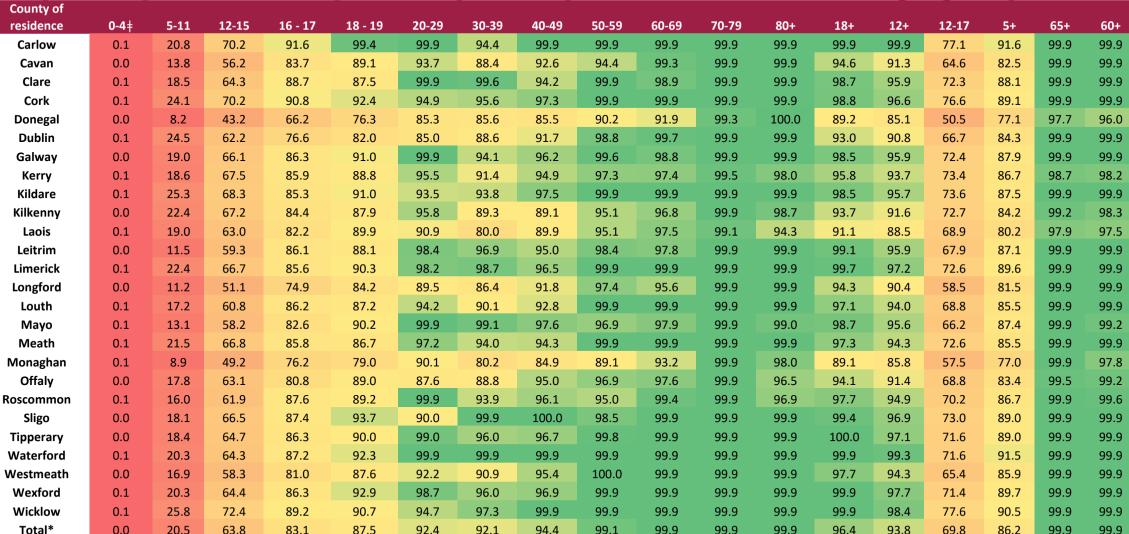
Completed Primary Course as % of population\*

\*Based on CSO/HIU 2021 April 2021/H1 estimates.

\*\*Excludes vaccinations administered where age was not reported; Includes individuals resident in Northern Ireland and where county of residence was not reported Note: Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues, the uptake will be rounded to 99.9%

## Percentage COVID-19 vaccination uptake of eligible population\*

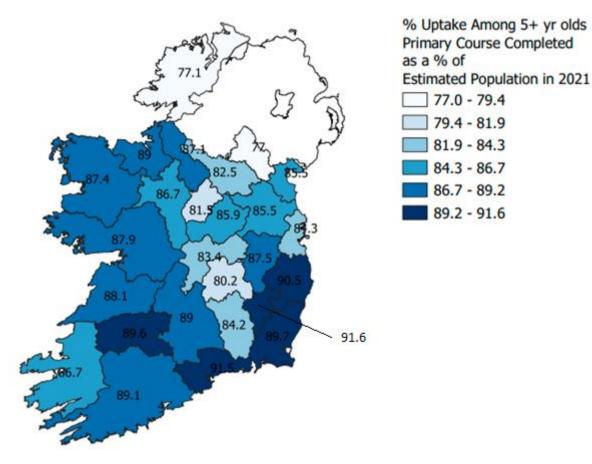
for primary course completed by county of residence\*\* and age group



\*Based on CSO/HIU 2021 April 2021/H1 estimates. + 6Months to 4 years of age

\*\*Excludes vaccinations administered where age was not reported; Includes individuals resident in Northern Ireland and where county of residence was not reported Note: Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues, the uptake will be rounded to 99.9% hpsc

#### Percentage COVID-19 vaccination uptake of eligible population\* for primary course completed by county of residence among those 5+ years of age \*\*



## Percentage COVID-19 1<sup>st</sup> booster vaccination uptake of eligible population\* by county of residence\*\* and age group



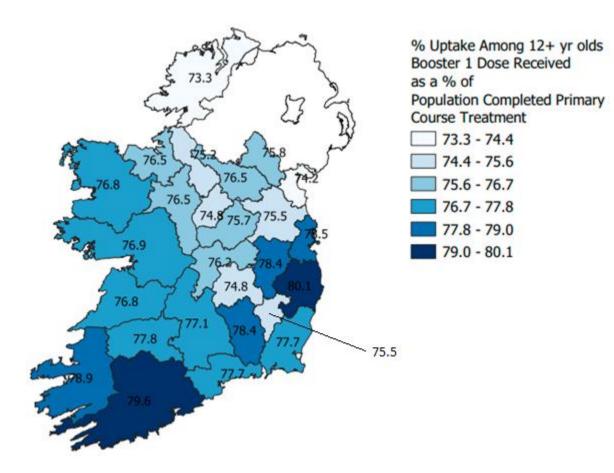
County of residence	5-11 <del> </del>	12-15	16 - 17	18 - 19	20-29	30-39	40-49	50-59	60-69	70-79	80+	18+	12+	12-17	5+	65+	60+
Carlow	0.2	20.5	45.5	58.8	59.5	66.6	77.0	87.8	94.1	98.1	97.9	79.4	75.5	30.0	73.7	97.3	96.2
Cavan	0.8	21.7	45.0	60.4	59.7	66.4	78.5	87.8	93.8	98.0	97.8	80.3	76.5	31.0	75.0	97.1	95.9
Clare	0.2	19.9	42.8	59.6	61.5	67.1	77.9	87.4	93.9	97.8	98.0	80.9	76.8	29.1	75.2	97.3	96.0
Cork	0.3	26.6	51.3	67.8	67.0	72.7	81.6	89.8	95.0	98.3	98.9	83.3	79.6	35.6	77.4	97.9	96.9
Donegal	0.5	16.7	34.3	47.4	52.1	60.3	72.8	83.7	91.5	96.4	98.1	76.6	73.3	24.0	72.5	95.9	94.6
Dublin	0.1	29.7	52.4	62.0	64.8	71.7	79.9	89.0	95.1	98.7	99.4	81.2	78.5	37.8	76.2	98.2	97.1
Galway	0.1	20.0	45.7	61.8	61.1	69.6	79.4	87.8	94.0	98.9	99.2	80.7	76.9	29.6	75.2	97.9	96.6
Kerry	0.1	25.3	47.8	60.0	61.1	69.7	79.4	88.2	94.8	98.3	98.3	82.4	78.9	33.7	77.4	97.6	96.7
Kildare	0.1	27.8	51.6	64.9	63.8	71.3	81.2	91.2	96.5	99.9	99.9	82.4	78.4	36.4	75.7	99.9	98.7
Kilkenny	0.3	21.0	47.4	62.8	64.0	69.8	80.1	89.6	95.3	99.0	99.6	82.5	78.4	30.8	76.1	98.3	97.3
Laois	0.3	20.7	44.0	58.6	60.0	66.3	77.8	87.6	94.7	98.0	98.9	79.3	74.8	29.2	72.7	97.7	96.4
Leitrim	0.3	17.3	33.5	52.3	56.0	60.5	74.8	86.9	94.1	96.4	96.0	79.2	75.2	23.9	74.2	96.4	95.3
Limerick	0.1	23.5	47.5	64.7	64.1	69.4	79.2	88.1	94.4	97.6	98.3	81.3	77.8	32.4	75.9	97.2	96.2
Longford	0.0	15.0	33.1	47.0	55.2	65.1	76.2	85.7	95.1	98.1	97.8	78.8	74.8	22.2	73.6	97.5	96.7
Louth	0.2	22.6	44.5	54.0	56.1	64.5	75.4	86.1	93.7	98.4	99.3	78.0	74.2	31.2	72.6	97.9	96.3
Мауо	0.2	16.2	38.8	54.3	58.7	65.4	77.1	86.9	93.6	98.0	98.0	80.4	76.8	25.4	75.6	97.2	96.0
Meath	0.1	24.4	46.6	58.8	59.6	66.9	78.1	89.3	95.6	99.7	99.8	79.9	75.5	32.4	73.2	98.8	97.6
Monaghan	0.0	16.4	40.8	52.4	57.2	63.2	77.9	88.4	94.8	97.3	99.3	79.6	75.8	26.3	74.8	97.4	96.5
Offaly	0.6	19.7	45.1	61.5	60.5	65.1	78.7	88.7	94.2	98.0	98.4	80.3	76.2	29.2	74.5	97.5	96.2
Roscommon	0.2	15.8	37.8	53.8	58.9	66.1	77.8	87.0	94.1	98.1	98.9	80.7	76.5	24.6	75.1	97.7	96.3
Sligo	0.7	17.4	41.6	55.7	58.9	67.6	78.0	87.0	91.3	97.5	98.5	80.3	76.5	26.4	74.9	96.2	94.7
Tipperary	0.2	21.2	43.9	58.9	60.9	66.7	77.7	87.4	94.4	98.2	98.6	80.9	77.1	30.0	75.5	97.5	96.5
Waterford	0.4	22.7	45.4	60.2	61.2	69.2	78.5	88.3	94.7	99.4	99.6	81.2	77.7	31.5	76.0	98.4	97.2
Westmeath	0.0	17.9	38.2	55.7	57.8	66.0	78.0	87.8	95.4	98.4	98.8	79.6	75.7	25.8	74.1	98.0	97.0
Wexford	0.3	20.5	45.4	61.0	61.4	67.4	79.5	88.3	95.3	98.4	98.5	81.6	77.7	30.1	75.9	97.9	97.0
Wicklow	0.2	28.5	54.3	67.2	65.2	72.4	81.9	91.1	96.7	98.6	99.2	84.0	80.1	37.7	77.6	98.5	97.8
Northern Ireland*	0.0	0.0	50.0	83.3	54.7	68.5	81.7	81.0	81.8	98.0	99.9	73.9	73.5	37.5	73.2	99.9	92.5
NULL*	-	0.0	0.0	20.0	31.5	36.4	53.9	55.1	75.0	67.1	64.4	56.2	55.8	0.0	55.8	68.7	67.4
Total incl NI, Null County*	0.2	24.4	47.4	60.9	62.5	69.6	79.2	88.5	94.7	98.5	98.9	81.1	77.6	33.0	75.7	97.9	96.7

\* Uptake is based on the proportion who have completed their primary course treatment \*\*Includes individuals resident in Northern Ireland and where county of residence was not reported; Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues or where the numerator exceeds the population estimate/denominator, the uptake has been rounded to 99.9%; §Booster doses not currently recommended for all 5-11 years of age unless immunocompromised

# Percentage COVID-19 vaccination uptake of eligible population\* for 1<sup>st</sup> booster by county of residence among those 12+ years of



age\*\*



\* Uptake is based on the proportion who have completed their primary course treatment \*\*Excludes individuals resident in Northern Ireland or where county of residence was not reported

## Percentage COVID-19 2<sup>nd</sup> booster vaccination uptake of eligible population\* by county of residence\*\* and age group

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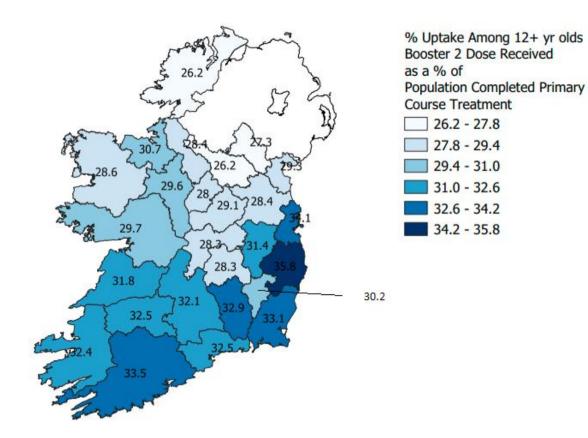
County of residence	12-15	16 - 17	18 - 19	20-29	30-39	40-49	50-59	60-69	70-79	80+	18+	12+	12-17	65+	60+
Carlow	0.4	1.6	5.8	6.0	8.9	15.2	37.0	62.0	81.3	85.2	32.7	30.2	0.9	79.0	72.8
Cavan	0.3	1.0	2.4	3.7	5.9	9.8	27.1	53.3	77.6	81.6	28.4	26.2	0.5	74.5	66.5
Clare	0.4	0.9	5.1	5.2	9.2	14.1	37.3	61.8	81.5	83.7	34.5	31.8	0.6	79.3	72.5
Cork	0.5	1.5	5.8	7.2	13.0	18.7	42.7	66.6	84.4	87.1	36.2	33.5	0.9	82.4	76.4
Donegal	0.2	0.8	2.6	3.4	5.4	8.8	25.1	48.8	70.1	76.8	27.9	26.2	0.4	68.3	61.8
Dublin	0.4	1.2	6.6	8.1	14.9	20.8	46.6	70.3	87.5	89.4	36.4	34.1	0.7	85.4	79.6
Galway	0.4	1.0	4.6	5.5	11.0	14.7	35.8	59.1	81.6	85.5	32.0	29.7	0.6	78.8	71.6
Kerry	0.3	1.2	4.1	4.8	9.7	13.2	34.4	60.4	80.8	83.3	34.9	32.4	0.6	78.3	71.7
Kildare	0.5	0.9	6.7	7.0	13.5	17.9	43.5	68.5	88.0	88.4	34.4	31.4	0.6	85.1	78.0
Kilkenny	0.4	1.0	4.9	5.8	10.4	15.3	41.5	63.5	85.7	87.4	35.7	32.9	0.6	82.4	75.2
Laois	0.2	0.6	3.7	5.2	9.6	13.9	36.3	60.7	82.7	86.2	31.0	28.3	0.4	79.4	71.9
Leitrim	0.2	0.6	4.1	4.1	6.1	9.9	29.6	50.6	72.2	72.7	30.6	28.4	0.4	68.9	62.5
Limerick	0.5	1.5	5.6	6.1	11.2	16.0	39.4	65.2	83.5	86.5	34.9	32.5	0.9	81.5	75.4
Longford	0.4	0.4	3.5	4.0	7.5	10.8	27.7	52.6	79.0	82.1	30.1	28.0	0.4	75.2	67.7
Louth	0.3	0.8	4.4	5.0	9.2	13.8	35.0	61.2	80.8	83.5	31.8	29.3	0.5	78.5	71.9
Мауо	0.4	0.8	2.5	4.1	7.2	10.3	27.6	51.1	74.9	79.4	30.6	28.6	0.6	71.9	64.7
Meath	0.4	1.3	4.6	5.6	10.2	14.1	37.6	63.5	83.1	85.9	31.2	28.4	0.7	80.4	73.6
Monaghan	0.2	0.6	2.7	3.8	5.3	10.4	29.9	52.9	75.1	81.1	29.4	27.3	0.3	72.8	65.8
Offaly	0.2	0.4	3.6	4.5	7.6	12.6	32.5	58.7	79.6	82.9	30.8	28.3	0.3	77.2	70.1
Roscommon	0.4	0.8	3.3	3.8	7.6	11.7	29.9	53.7	78.8	82.5	31.9	29.6	0.6	75.6	67.4
Sligo	0.4	1.0	4.5	5.1	9.5	14.4	32.5	54.4	78.0	81.6	33.0	30.7	0.6	74.4	67.4
Tipperary	0.4	1.4	4.4	5.1	8.5	13.4	35.6	61.2	82.9	87.2	34.6	32.1	0.8	80.5	73.4
Waterford	0.5	1.2	4.2	5.7	10.5	15.9	39.7	63.5	83.4	87.1	35.0	32.5	0.8	80.9	74.6
Westmeath	0.2	0.8	3.2	5.2	8.5	13.3	34.3	58.6	81.0	83.7	31.3	29.1	0.5	77.8	70.6
Wexford	0.5	1.1	4.3	5.1	9.0	14.1	39.7	66.0	83.6	85.7	35.7	33.1	0.7	81.5	75.6
Wicklow	0.3	1.4	7.8	8.4	14.9	19.3	46.5	69.3	86.9	88.8	39.1	35.8	0.7	84.8	78.7
Northern Ireland*	0.0	0.0	16.7	4.4	9.9	16.5	28.9	43.6	83.7	93.8	21.9	21.6	0.0	84.0	66.7
NULL*	0.0	0.0	10.0	8.9	11.2	32.8	53.5	71.3	53.7	79.6	48.6	48.3	0.0	70.5	69.3
Total incl NI, Null County*	0.4	1.1	5.2	6.4	11.9	16.6	39.7	63.7	83.1	86.0	34.4	31.9	0.7	80.7	74.3

\* Uptake is based on the proportion who have completed their primary course treatment \*\*Includes individuals resident in Northern Ireland and where county of residence was not reported Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues or where the numerator exceeds the population estimate/denominator, the uptake has been rounded to 99.9%

# Percentage COVID-19 vaccination uptake of eligible population\* for 2<sup>nd</sup> booster by county of residence among those 12+ years of



age\*\*



\* Uptake is based on the proportion who have completed their primary course treatment

\*\*Excludes individuals resident in Northern Ireland or where county of residence was not reported

## Percentage COVID-19 3<sup>rd</sup> booster vaccination uptake of eligible population\* by county of residence\*\* and age group



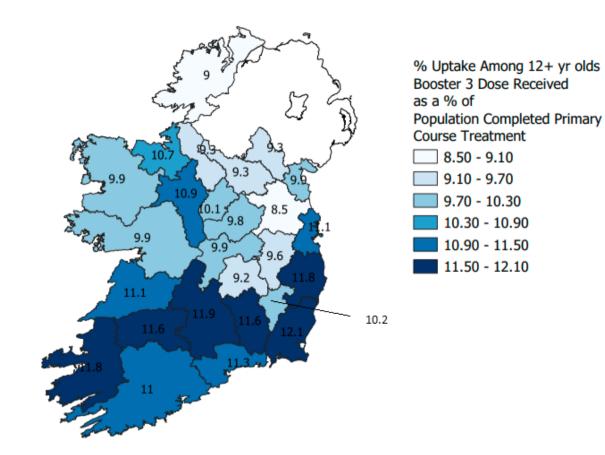
County of residence	12-15	16 - 17	18 - 19	20-29	30-39	40-49	50-59	60-69	70-79	80+	18+	12+	12-17	65+	60+
Carlow	0.0	0.1	0.0	0.1	0.3	0.4	1.8	19.6	50.9	57.9	11.1	10.2	0.0	47.9	37.1
Cavan	0.0	0.1	0.0	0.1	0.1	0.4	1.3	15.9	45.4	52.0	10.1	9.3	0.0	42.1	32.2
Clare	0.0	0.0	0.1	0.1	0.3	0.5	1.9	20.0	51.5	53.1	12.1	11.1	0.0	47.6	36.8
Cork	0.0	0.1	0.2	0.1	0.4	0.9	2.5	21.9	54.0	56.4	11.9	11.0	0.0	50.5	39.1
Donegal	0.0	0.0	0.0	0.1	0.1	0.3	1.0	14.1	37.3	43.3	9.6	9.0	0.0	35.5	28.1
Dublin	0.0	0.1	0.1	0.1	0.3	0.6	2.3	24.4	60.9	63.1	11.9	11.1	0.0	57.0	43.9
Galway	0.0	0.0	0.0	0.1	0.2	0.5	1.9	18.7	50.2	54.0	10.6	9.9	0.0	46.3	35.9
Kerry	0.0	0.0	0.1	0.2	0.5	0.7	1.9	19.4	49.1	52.2	12.7	11.8	0.0	45.6	35.7
Kildare	0.0	0.1	0.1	0.1	0.3	0.6	2.1	23.3	59.6	58.6	10.5	9.6	0.0	54.1	40.7
Kilkenny	0.0	0.0	0.0	0.2	0.3	0.5	2.1	21.1	56.2	57.8	12.6	11.6	0.0	51.2	39.4
Laois	0.0	0.0	0.0	0.2	0.3	0.5	1.7	19.0	51.4	58.2	10.1	9.2	0.0	47.7	35.8
Leitrim	0.1	0.0	0.0	0.1	0.4	0.5	1.4	13.8	37.4	39.0	10.0	9.3	0.1	34.2	27.0
Limerick	0.0	0.0	0.1	0.1	0.4	0.8	2.6	22.8	53.4	58.0	12.5	11.6	0.0	50.7	39.8
Longford	0.0	0.0	0.0	0.1	0.3	0.5	1.5	15.9	45.3	50.7	10.9	10.1	0.0	41.7	33.0
Louth	0.0	0.0	0.0	0.1	0.2	0.5	1.6	19.7	50.3	53.7	10.7	9.9	0.0	47.0	36.3
Мауо	0.0	0.1	0.0	0.1	0.2	0.5	1.6	14.4	40.0	46.0	10.6	9.9	0.0	37.2	29.3
Meath	0.0	0.1	0.1	0.2	0.3	0.3	1.6	19.3	50.6	54.5	9.3	8.5	0.0	47.0	35.2
Monaghan	0.0	0.1	0.1	0.1	0.3	0.5	1.3	15.6	40.8	47.7	10.0	9.3	0.0	38.9	30.2
Offaly	0.0	0.0	0.1	0.1	0.2	0.4	1.8	18.0	50.0	53.6	10.8	9.9	0.0	45.9	35.2
Roscommon	0.0	0.0	0.1	0.1	0.1	0.5	1.5	16.8	46.1	53.1	11.7	10.9	0.0	42.8	33.3
Sligo	0.0	0.1	0.1	0.1	0.3	0.5	1.8	16.5	46.5	50.1	11.5	10.7	0.1	42.6	32.9
Tipperary	0.0	0.0	0.1	0.1	0.3	0.6	2.0	19.7	52.6	58.1	12.8	11.9	0.0	48.8	38.0
Waterford	0.0	0.0	0.2	0.1	0.3	0.7	2.1	20.4	54.1	57.1	12.2	11.3	0.0	50.0	38.7
Westmeath	0.0	0.0	0.1	0.1	0.2	0.6	1.7	17.5	50.4	51.6	10.5	9.8	0.0	45.3	34.7
Wexford	0.0	0.1	0.2	0.1	0.2	0.5	2.0	21.5	56.0	58.7	13.1	12.1	0.0	51.9	40.1
Wicklow	0.0	0.1	0.1	0.2	0.4	0.5	2.4	23.8	58.7	59.7	12.9	11.8	0.0	54.8	42.0
Northern Ireland	0.0	0.0	0.0	0.0	0.6	0.6	0.8	9.1	44.9	62.5	5.2	5.1	0.0	48.0	30.8
NULL	0.0	0.0	0.0	0.8	1.1	4.4	10.3	27.2	31.2	31.9	17.6	17.5	0.0	33.1	30.7
Total incl NI, Null County	0.0	0.1	0.1	0.1	0.3	0.6	2.0	20.9	53.3	56.6	11.5	10.7	0.0	49.7	38.4

\* Uptake is based on the proportion who have completed their primary course treatment \*\*Includes individuals resident in Northern Ireland and where county of residence was not reported Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues or where the numerator exceeds the population estimate/denominator, the uptake has been rounded to 99.9%

## **Percentage COVID-19 vaccination uptake of eligible population**\* for 3<sup>rd</sup> booster by county of residence among those 12+ years of



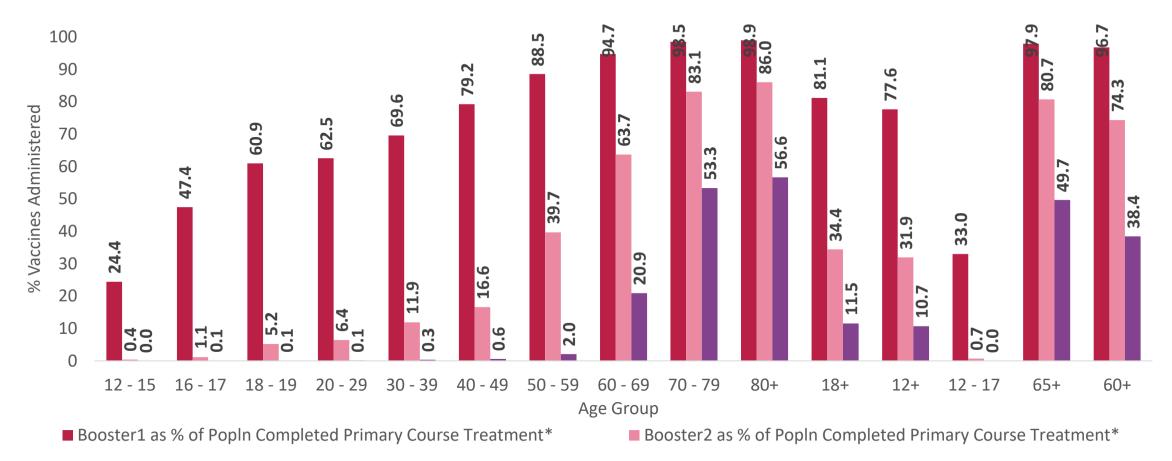
age\*\*



\* Uptake is based on the proportion who have completed their primary course treatment

\*\*Excludes individuals resident in Northern Ireland or where county of residence was not reported

#### Percentage booster 1, 2 and 3 uptake of primary course completed population\* by age group\*\*



■ Booster3 as % of PopIn Completed Primary Course Treatment\*

\*\*Excludes vaccinations administered where age was not reported; Includes individuals resident in Northern Ireland and where county of residence was not reported

Note: Where calculation of estimated uptake exceeds 100% due to unidentified data quality issues, the uptake will be rounded to 99.9%

\*Percentage is based on the proportion of those who have completed their primary course treatment

Booster 1 doses not currently recommended for all 5-11 years of age unless immunocompromised (not shown) and age group not currently being offered booster 2 and 3 doses

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