

Rotherham COVID-19 Surveillance Briefing for Health Select

10th June 2021

The four tests



Test 1

The vaccine deployment programme continues successfully.



Test 2

Evidence shows vaccines are sufficiently effective in reducing hospitalisations and deaths in those vaccinated.



Test 3

Infection rates do not risk a surge in hospitalisations which would put unsustainable pressure on the NHS.



Test 4

Our assessment of the risks is not fundamentally changed by new Variants of Concern.

Only when the Government is sure that it is safe to move from one step to the next will the final decision be made.

Decisions will be based on four tests.

Test 1 – Vaccine rollout

Total number of 1st vaccines given by cohort (CCG data) (as at 27 May 2021)
(also 2nd doses shown in brackets)

Total = 158,045 (2nd doses = 103,202)

Equates to 59.54% of resident population (2nd doses = 38.88%)

74.98% of eligible adult population* (2nd doses = 48.96%)

	1 st doses	(2 nd doses)
% Coverage in those aged 70+:	96.85%	(95.42%)
% Coverage in those aged 50-69:	92.04%	(66.49%)
% Coverage in those aged 40-49 :	81.80%	(28.98%)
% Coverage in those aged 30-39 :	61.79%	(20.70%)
% Coverage in those aged 18-29 :	28.11%	(14.21%)

% in the Clinically Extremely Vulnerable: **93.34%** (86.66%)

% in Moderate-risk adults aged under 65: **84.77%** (62.65%)

(all above based on “eligible population”)

*Eligible population has been expanded to include those aged between 18 and 49 (Cohorts 10-12), thus reducing the total percentage achieved.

Cohorts

- 1 Care Home Residents and Staff (Local data)
- 2a Frontline Health and Social Care workers (Local data)
- 2b All those 80 years of age and over
- 3 All those 75 years of age and over (75-79)
- 4a All those 70 years of age and over (70-74)
- 4b Clinically extremely vulnerable individuals
- 5 All those 65 years of age and over (65-69)
- 6 Moderate-risk adults under 65 years of age
- 7 All those 60 years of age and over (60-64)
- 8 All those 55 years of age and over (55-59)
- 9 All those 50 years of age and over (50-54)
- 10 All those 40 years of age and over (40-49)
- 11 All those 30 years of age and over (30-39)
- 12 All those 18 years of age and over (18-29)

Note – provisional data, includes local data and may be incomplete.

Local Data - Includes patients who work in Rotherham but are not Rotherham registered patients.

Source: INTERNAL - CCG Planning Summary.

Test 2 – Evidence of vaccines reducing hospitalisations and deaths

An effect against hospitalisation continues to be seen when linking pillar 2 testing data linked to emergency admissions. Among those who develop symptomatic infection, risk of hospitalisation is reduced by 35 to 45% after one dose of either vaccine. Combined with the reduced risk of becoming a case, this is consistent with a vaccine effectiveness against hospitalisation which is similar to previously reported value of 80%. (Public Health England vaccine effectiveness report, March 2021)

Public Health England (PHE) has submitted a [pre-print of a real-world study](#) that shows that both the Pfizer and Oxford-AstraZeneca vaccines are highly effective in reducing COVID-19 infections among older people aged 70 years and over.

Since January, protection against symptomatic COVID, 4 weeks after the first dose, ranged between 57 and 61% for one dose of Pfizer and between 60 and 73% for the Oxford-AstraZeneca vaccine.

In the over 80s, data suggest that a single dose of either vaccine is more than 80% effective at preventing hospitalisation, around 3 to 4 weeks after the jab.

There is also evidence for the Pfizer vaccine, which suggests it leads to an 83% reduction in deaths from COVID-19.” (too early for data on the Oxford-AstraZeneca vaccine)

The study also demonstrates a clear effect of vaccines against the UK (B.1.1.7/Kent) variant of concern as data in the study based on cases from a period when this variant formed the mass majority.

Source: <https://www.gov.uk/government/news/new-data-show-vaccines-reduce-severe-covid-19-in-older-adults> (1 March 2021)

Data from Public Health England's real-world study shows that both the Pfizer and Oxford/AstraZeneca vaccines are highly effective in reducing COVID-19 among older people aged 60 years and over. There has already been a significant impact of the vaccination programme on reducing hospitalisations and deaths, with more than 10,000 lives saved by vaccinations between December and March.

Source: [COVID-19 vaccines have prevented 10,400 deaths in older adults - GOV.UK \(www.gov.uk\)](#) (13 April 2021)

Test 2 – Evidence of vaccines reducing hospitalisations and deaths

Data continue to show encouraging effects from a single dose of the Pfizer vaccination on risk of mortality in symptomatic cases over 80 who have been vaccinated, where the risk of death is reduced by 54%. Combined with the reduced risk of becoming a case, this is consistent with a vaccine effectiveness against mortality which is similar to previously reported value of 85%. (Public Health England vaccine effectiveness report, March 2021)

Everybody in cohorts 1 to 9 – those aged 50 and over, the clinically vulnerable and health and social care workers – has been offered a vaccine, meeting the government's 15 April target ahead of time.

This group accounts for 99% of all COVID-19 deaths during the pandemic, so by offering them the vaccine, we are helping ensure the most vulnerable are protected from the virus.

Source: [UK moves into next phase of vaccine roll-out as government target hit early - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/uk-moves-into-next-phase-of-vaccine-roll-out-as-government-target-hit-early) (13 April 2021)

A new study by Public Health England (PHE) has shown that one dose of the COVID-19 vaccine reduces household transmission by up to half. Those who did become infected 3 weeks after receiving one dose of the Pfizer-BioNTech or AstraZeneca vaccine were between 38% and 49% less likely to pass the virus on to their household contacts than those who were unvaccinated. Protection was seen from around 14 days after vaccination, with similar levels of protection regardless of age of cases or contacts. This protection is on top of the reduced risk of a vaccinated person developing symptomatic infection in the first place, which is around 60 to 65% – 4 weeks after one dose of either vaccine. Source: [Impact of vaccination on household transmission of SARS-COV-2 in England.](https://www.phe.org.uk/news/news-detail.aspx?newsid=3828)

Dr Mary Ramsay, Head of Immunisation at PHE, said:

Vaccines are vital in helping us return to a normal way of life. Not only do vaccines reduce the severity of illness and prevent hundreds of deaths every day, we now see they also have an additional impact on reducing the chance of passing COVID-19 on to others.

Source: [One dose of COVID-19 vaccine can cut household transmission by up to half - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/one-dose-of-covid-19-vaccine-can-cut-household-transmission-by-up-to-half) (28 April 2021)

Effectiveness of COVID-19 vaccines against VOC-21APR-02 (B.1.617.2)

PHE has undertaken analysis of vaccine effectiveness against symptomatic disease with VOC21-APR-02 (B.1.617.2), using the national genomic and immunisation datasets. These findings suggest that while there is a reduction in vaccine effectiveness against VOC-21APR-02 (B.1.617.2) after one dose, any reduction in vaccine effectiveness after 2 doses of vaccine is likely to be small (Table below). These data combine all vaccines, and a breakdown by vaccine is provided in the full analysis.

Table Vaccination status and vaccine effectiveness for VOC-20DEC-01 (B.1.1.7), VOC21-APR-02 (B.1.617.2)

Vaccination status	Vaccine Effectiveness	
	VOC-20DEC-01 (B.1.1.7)	VOC21-APR-02 (B.1.617.2)
Dose 1	51.1% (47.3 to 54.7)	33.5% (20.6 to 44.3)
Dose 2	86.8% (83.1 to 89.6)	80.9% (70.7 to 87.6)

Taken from Public Health England, 'SARS-CoV-2 variants of concern and variants under investigation in England - Technical briefing 12' Published 22 May 2021

Test 3 – Infection rates do not risk surge in hospitalisations (1)

Measure	As of 20th May	As of 27th May	% change on prev week
Daily Numbers			
Confirmed Covid patients*	5	3	-40%
On Mechanical Ventilation	0	0	0%
7-day rate (per 100,000)	Previous 7 days to 13th May	Previous 7 days to 21st May	% change on prev week
Case rate (persons aged 60+)	5.9	5.9	0%
Case rate (all ages)	28.6	23	-24%
7 Day asymptomatic rate **	Previous 7 days to 13th May	Previous 7 days to 21st May	% change on prev week
Case rate (persons aged 60+)	1.5	1.5	0%
Case rate (all ages)	12.8	9.4	-27%

*Total occupied beds

**Asymptomatic positive cases .

Source: Hospitalisations : INTERNAL – TRFT (Data from TRFT up to 27/05/21)

Case rates: PUBLIC – Coronavirus dashboard – last updated 26/05/21, (Asymptomatic INTERNAL ONLY – last updated 26/05/21)

<https://coronavirus-staging.data.gov.uk/details/cases?areaType=Itla&areaName=Rotherham>

Test 3 – Infection rates do not risk surge in hospitalisations (2)

Heat Map showing 7-day case rate by age group:

(rate for 7-day period up to date in column heading reported)

Age Band	10/5/21	11/5/21	12/5/21	13/5/21	14/5/21	15/5/21	16/5/21	17/5/21	18/5/21	19/5/21	20/5/21	21/5/21	22/5/21	23/5/21	24/5/21
0 - 4 Pre School	25.7	12.9	12.9	6.4	19.3	19.3	19.3	12.9	12.9	12.9	12.9	0.0	0.0	6.4	6.4
05 - 11 Primary Age	42.3	21.2	12.7	12.7	21.2	25.4	25.4	12.7	21.2	25.4	42.3	42.3	38.1	46.6	50.8
12-17 Secondary Age	109.0	92.7	60.0	54.5	60.0	49.1	49.1	38.2	38.2	49.1	54.5	38.2	38.2	32.7	38.2
18-29	71.6	52.3	49.5	46.8	38.5	38.5	44.0	38.5	44.0	33.0	30.3	38.5	41.3	30.3	24.8
30-39	56.9	56.9	53.9	56.9	44.9	44.9	35.9	27.0	29.9	27.0	24.0	27.0	29.9	29.9	38.9
40-49	49.5	43.3	46.4	49.5	43.3	46.4	37.1	40.2	40.2	30.9	24.7	27.8	18.5	18.5	15.5
50-54	20.8	20.8	20.8	15.6	20.8	26.0	20.8	26.0	31.2	36.4	36.4	31.2	31.2	36.4	20.8
55-59	10.9	10.9	16.3	16.3	16.3	16.3	21.8	16.3	10.9	5.4	10.9	10.9	10.9	10.9	16.3
60-64	12.5	12.5	12.5	12.5	12.5	12.5	12.5	0.0	0.0	0.0	0.0	0.0	0.0	6.3	12.5
65-69	14.1	14.1	14.1	7.0	7.0	7.0	0.0	7.0	14.1	14.1	14.1	14.1	14.1	21.1	14.1
70-74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0	13.9	13.9	13.9
75-79	9.9	0.0	0.0	0.0	9.9	9.9	9.9	9.9	9.9	9.9	9.9	0.0	0.0	0.0	0.0
80+	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	0.0	0.0

The most recent rates (for the 7 days to 24 May) are highest in the 05-11 age group then those aged 30-39.

Lowest rates are in those aged 50 and over.

Rates have decreased recently in those aged 50-54.

Source: INTERNAL – PHE Covid-19 Situational Awareness Explorer (last updated 26/05/21)

Test 4 – Variants of Concern (VOC) and Variants under investigation (VUI)

National (UK) data (at 20 May)

Variant	Other names by which this variant may be known*	Lineage	Country in which first detected	Total confirmed cases^	New cases since last update (data up to 12 May)
VOC-20DEC-01	VOC-202012/01	B.1.1.7	England, UK	249,637	7,066
VOC-20DEC-02	VOC-202012/02	501Y.V2	South Africa	904	41
		B.1.351			
VUI-21JAN-01	VUI-202101/01	P.2	Brazil	60	0
VOC-21JAN-02	VOC-202101/02	P.1	Japan ex Manaus, Brazil	143	30
VUI-21FEB-01	VUI-202102/01	A.23.1 with E484K	England, UK	79	0
VOC-21FEB-02	VOC-202102/02	B.1.1.7 with E484K	England, UK	43	0
VUI-21FEB-03	VUI-202102/03	B.1.525 (previously designated UK1188)	England, UK	461	20
VUI-21FEB-04	VUI-202102/04	B.1.1.318	England, UK	226	22
VUI-21MAR-02	N/A	P.3	Philippines	6	0
VUI-21APR-01	N/A	B.1.617	India	418	50
VOC-21APR-02	N/A	B.1.617.2	India	3,424	2,111
VUI-21APR-03	N/A	B.1.617.3	India	13	2
VUI-21MAY-01	N/A	AV.1	TBC	49	Initial

* Currently, there is no agreed international naming system for variants.

^ Confirmed and probable genomic confidence categories assigned to each case have been unified into a single confirmed category. This is being done as a probable genomic confidence indicates a high confidence in variant assignment and the public health significance is the same.

‘No fundamental change in risk assessment due to circulating Variants of Concern or Variants under Investigation’.

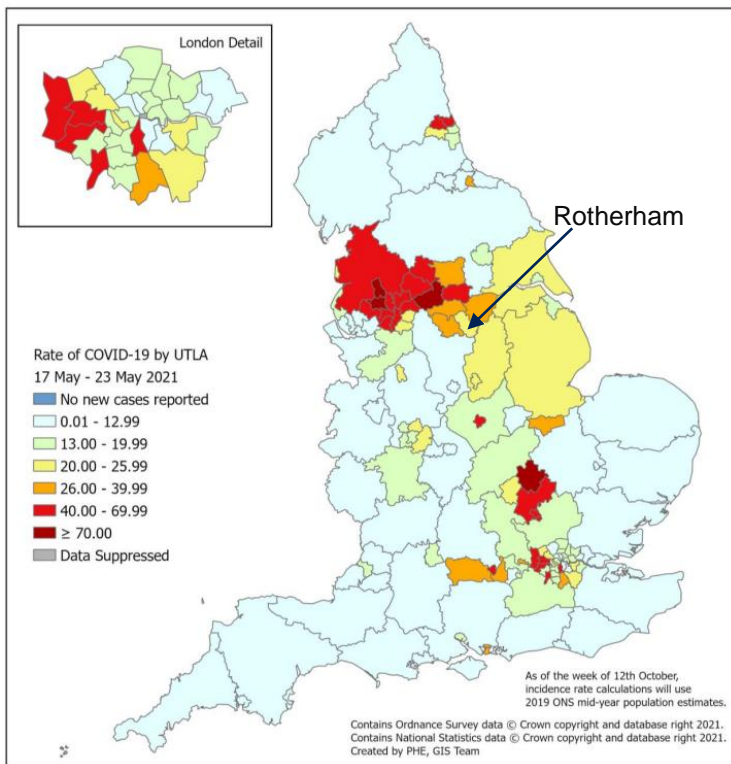
PUBLIC – GOV.UK Coronavirus data: <https://www.gov.uk/government/publications/covid-19-variants-genomically-confirmed-case-numbers/variants-distribution-of-cases-data> (last updated 27/05/21)

Infection rate headline summary

- Rotherham 7-day infection rate (to 22nd May) is 22.6 per 100,000. (England 23.6). For the second day running the rate is lower than the national average which is slightly rising.
- Rotherham currently ranks 66th highest in England (out of 314 Lower Tier Local Authorities, 7-day data to 21st May), and the lowest rate in South Yorkshire. Rest of SY local authorities are in the top 51 LTLAs.
- The 7-day infection rate for persons aged 60 (to 21st May) is currently 5.9 per 100,000 (England 6.1).
- The 7-day rate of positivity is 1.5% for Rotherham (Y&H Region 1.6%, England 0.7%) Test sites continue to have plenty of capacity. Although reduced uptake of LFDs since March, testing overall for Rotherham remains high comparative to other areas.
- Rates are highest in those aged 20-24 (49.3 for 7-day rolling rate to 22nd May).
- Postcode data suggests cases are spread out across the community.

England comparisons

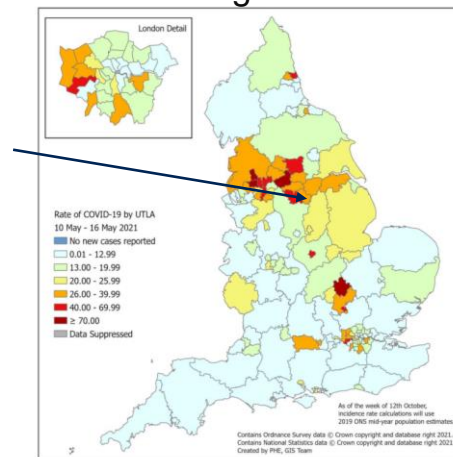
Figure 9: Weekly rate of COVID-19 cases per 100,000 population tested under Pillar 1 and Pillar 2 by upper-tier local authority, England (box shows enlarged map of London areas)



This map from the official national PHE Weekly Flu/COVID-19 Surveillance Report shows the latest weekly rate of positive cases per 100,000 population based on Week 20 data (17-23rd May)

Rotherham's rate in the map is 40.3 per 100,000 (yellow). This may differ to rates stated elsewhere due to differences in timing.

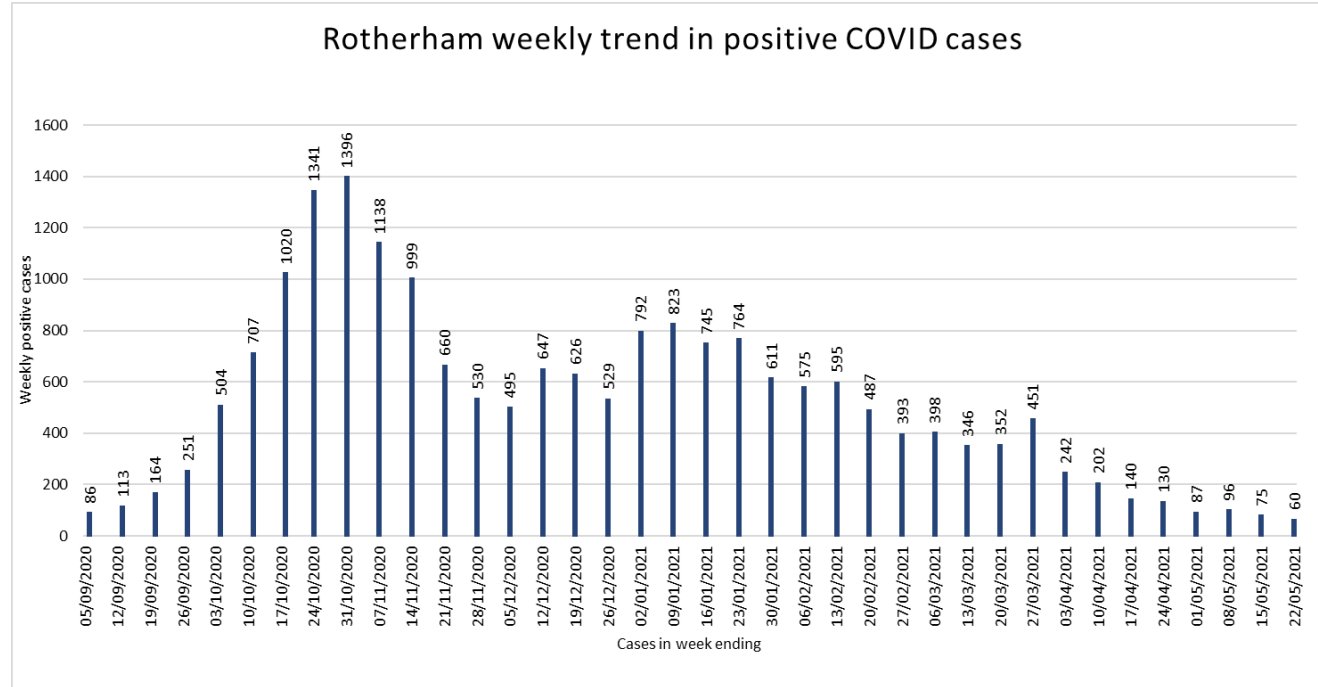
Inset map shows the previous week's data for 10-16 May (Rotherham 26.8, orange)



Data source: PUBLIC – PHE Weekly Covid19 Surveillance report
<https://www.gov.uk/government/statistics/national-flu-and-covid-19-surveillance-reports>

Current infection rate

- The 7-day infection rate is 22.6 per 100,000 (for the 7 days to 22nd May).
- This is from 60 positive cases in those 7 days.
- Data has fluctuated but generally decreased since early January.



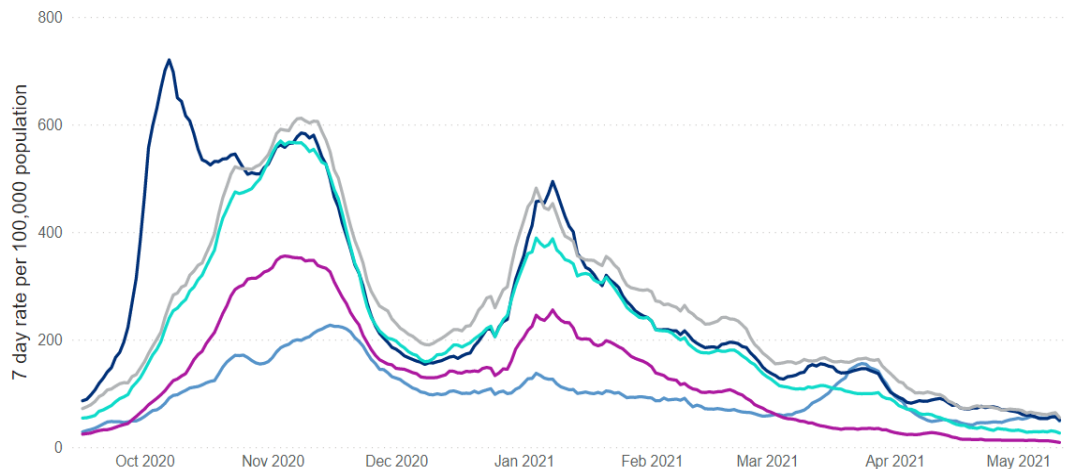
Data source: PUBLIC – Coronavirus dashboard – last updated 27/05/21

Age trends

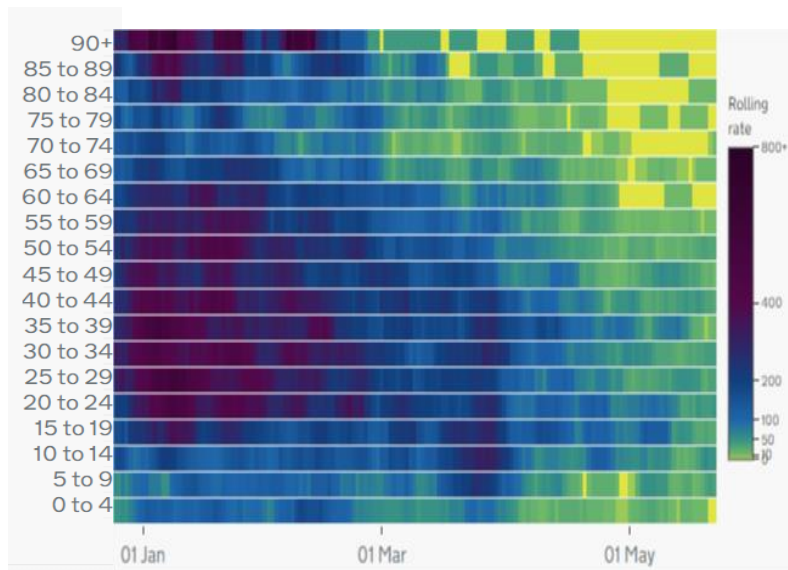
Positive samples – Rates per 100,000 (rolling 7 day averages) (broad age groups)
Data 16 September 2020 to 22 May 2021 (provisional)

7 day rate per 100,000 population by Specimen Date and Broad Age Band

● 0-15 ● 16-29 ● 30-44 ● 45-59 ● 60+



Age-specific case rates per 100,000 by 5-year age groups 15 December 2020 to 22 May 2021



After increasing recently, Rotherham's rates have levelled out. (see line chart) This appears due to an increase in the 0-15 age group offsetting decreases in all other age groups. The highest rates are currently in those aged 10-14. The lowest are in those aged 50 and over (see heat map chart)

Data source: INTERNAL – Situational Awareness Explorer (PHE) 26/05/21 (left chart)

PUBLIC – Heat map via Coronavirus dashboard <https://coronavirus.data.gov.uk/>; - last updated 27/05/21 (right chart)

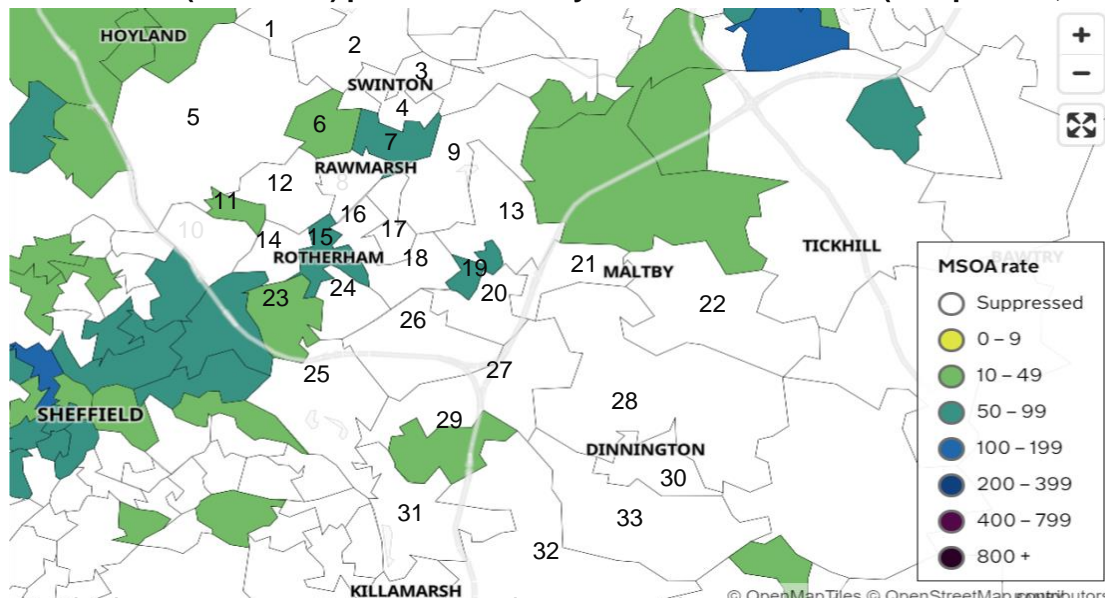
Weekly Rates and Cases by Local Area

7 days 2-8 May: Rotherham Number of cases by MSOA

The MSOAs in Rotherham with higher numbers (3 or more) are:

- | | |
|---|----------------------------|
| (1) Brampton & West Melton: 5 | |
| (2) Wath upon Dearne: 4 | |
| (3) Swinton North (<3) | (4) Swinton South (<3) |
| (5) Thorpe Hesley (<3) | |
| (6) Rawmarsh N West: 7 | (7) Rawmarsh N East: 3 |
| (8) Rawmarsh South 7 | |
| (9) Thrybergh & Hooton Roberts (<3) | |
| (10) Kimberworth 10 | (11) Kimberworth Park (<3) |
| (12) Greasbrough (<3) | |
| (13) Ravenfield & Bramley North: (<3) | |
| (14) Masbrough & Bradgate: 3 | |
| (15) Rotherham Central - Canklow, Wellgate, and St Ann's: 3 | |
| (16) Eastwood & East Dene: (<3) | |
| (17) East Herringthorpe: 3 | (18) Herringthorpe: (<3) |
| (19) Wickersley North (<3) | |
| (20) Wickersley South & Bramley South: (<3) | |
| (21) Maltby West & Hellaby (<3) | |
| (22) Maltby East 6 | |
| (23) Brinsworth 7 | |
| (24) Rotherham South - Moorgate/Broom: 3 | |
| (25) Catcliffe, Treeton & Waverley 4 | |
| (26) Whiston (<3) | |
| (27) Thurcroft (<3) | |
| (28) Laughton & Throapham (<3) | |
| (29) Aston 7 | |
| (30) Dinnington (<3) | |
| (31) Swallownest & Wales: 5 | |
| (32) Kiveton, Todwick & Harthill 3 | |
| (33) Anston & Woodsetts (<3) | |

Coronavirus (COVID-19) positive cases by MSOA – Rotherham (rate per 100,000)



Postcode data suggests cases are spread out across the community. Numbers and rates have decreased for the 7 days to 22nd May. None of Rotherham's 33 MSOAs have a rate over 100 per 100,000 resident population. The highest rate was in Rotherham Central with 71.9 per 100,000. Rawmarsh North West has the lowest at 38.8 (of 6 MSOAs with 3 or more cases) However, positions can change daily due to the small numbers involved.

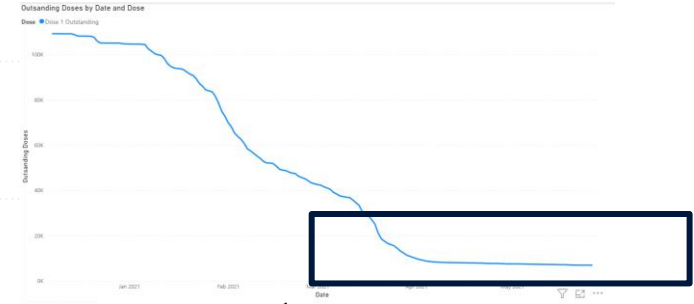
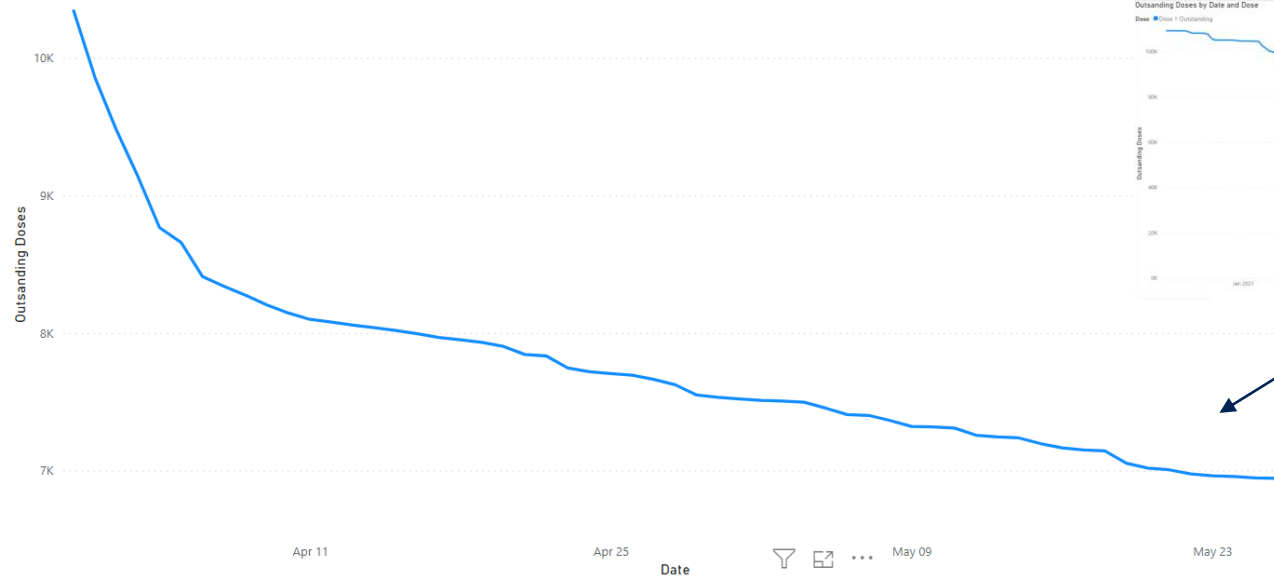
Data source: PUBLIC – Coronavirus dashboard – last updated 27/05/21

<https://coronavirus-staging.data.gov.uk/details/interactive-map>

• Contains MSOA names © Open Parliament copyright and database right 2020
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Over 50's outstanding dose 1

Dose ● Dose 1 Outstanding



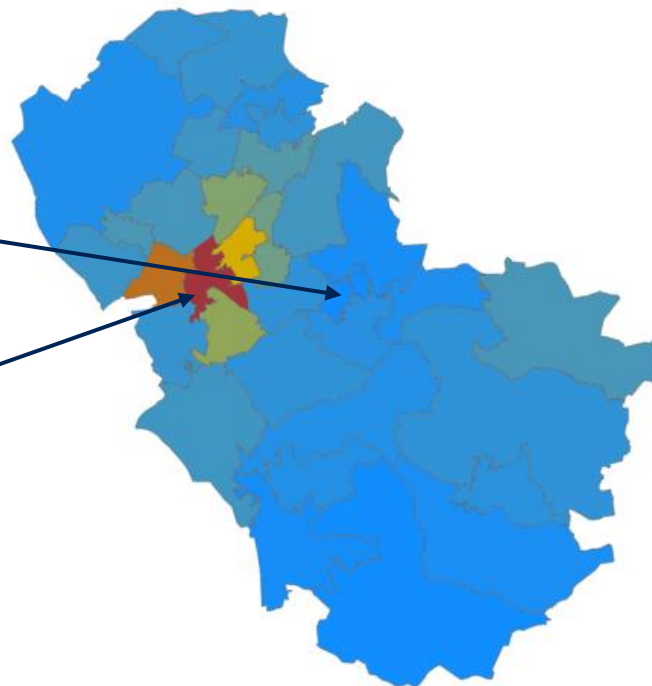
- By the end of March, a significant majority of 50+ year olds had received first dose of vaccine. Rate of uptake is reducing (3,400 completed since 1st April, 10,343 remaining) and now to be subject to additional catch-up focus.

Source: INTERNAL – PHE Covid-19 Situational Awareness Explorer (last updated 26/05/21)

Coverage over 50's of 1st vaccine

Wickersley North has the highest coverage of 1st vaccine – 96.4% have had their first dose

Rotherham Central has the lowest coverage of 1st vaccine – 75.7% have had their first dose



Vaccination Access Work with the CCG

- 71 at Ferham Primary (12th May)
 - 23 of these being teachers
 - 48 parents/relatives of the children.
- 73 at Hellaby Businesses (16th May)
- 214 at Rotherham Businesses (19th & 20th May)
- 50 (minimum) vaccines allocated for a walk in Eastwood village (22nd May) – exact figures not known at the time of writing