# OpenSAFELY COVID Vaccine coverage report

OpenSAFELY is a new secure analytics platform for electronic patient records built on behalf of NHS England to deliver urgent academic and operational research during the pandemic.

This is our regular weekly report on COVID-19 vaccination coverage in England using data from 40% of general practices that use TPP electronic health record software. The data requires careful interpretation and there are a number of caveats. Please read the full detail about our methods and discussion of our earlier results (as of January 13th) in our preprint paper available <a href="https://www.medrxiv.org/content/10.1101/2021.01.25.21250356v2">here (https://www.medrxiv.org/content/10.1101/2021.01.25.21250356v2)</a>.

The full analytical methods behind the latest results in this report are available <a href="here">here</a> (<a href="https://github.com/opensafely/nhs-covid-vaccination-uptake">here</a> (<a href="https://github.com/opensafely/nhs-covid-vaccination-uptake</a>).

#### Report last updated 03 Jun 2021

Vaccinations included up to 26 May 2021 inclusive

#### **Contents:**

- Overview
- Summary Chart
- Trends in vaccination coverage according to demographic/clinical features, for:
  - 80+ population
  - 70-79 population
  - shielding (aged 16-69) population
  - 65-69 population
  - 60-64 population
  - <u>55-59 population</u>
  - 50-54 population
- Current vaccination coverage of each eligible population group, according to demographic/clinical features
  - Includes each of the groups above, plus care home (65+) and LD (aged 16-64) populations.
- Appendix: Proportion of each population group for whom ethnicity is known

#### **Overview of Vaccination Figures to date**

first dose as at 26 May 2021 second dose as at 26 May 2021

	Group
13,100,619 8,332,71	Total vaccinated in TPP
96.3% (1,072,085 of 1,113,385) 93.6% (1,042,265 of 1,113,385	80+
95.8% (1,980,622 of 2,067,793) 93.3% (1,928,843 of 2,067,793	70-79
96.4% (81,865 of 84,896) 90.3% (76,678 of 84,896)	care home
88.5% (735,105 of 830,767) 76.9% (639,030 of 830,767)	shielding (aged 16-69)
93.1% (999,215 of 1,073,457) 86.7% (931,189 of 1,073,457)	65-69
83.1% (68,208 of 82,117) 59.1% (48,538 of 82,117)	LD (aged 16-64)
90.9% (1,163,071 of 1,279,033) 66.8% (854,504 of 1,279,033	60-64
88.6% (1,340,577 of 1,512,525) 45.6% (689,759 of 1,512,525	55-59
85.8% (1,341,263 of 1,563,674) 40.4% (631,932 of 1,563,674	50-54
4,318,615 1,489,97	16-49, not in other eligible groups shown

NB Patient counts are rounded to nearest 7

#### Vaccine types and second doses

Second doses (% of all vaccinated): 63.6% (8,332,716)

Oxford-AZ vaccines (% of all first doses): 63.6% (8,331,309)

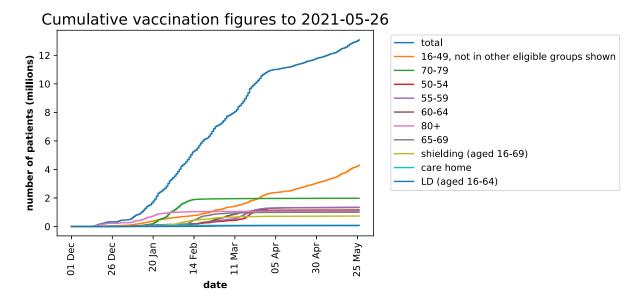
Moderna vaccines (% of all first doses): 0.9%(116,214)

#### **Group definitions**

- The **care home** group is defined based on patients (aged 65+) having one of <u>these codes</u> (https://codelists.opensafely.org/codelist/primis-covid19-vacc-uptake/longres/v1/).
- The **shielding** group is defined based on patients having one of <a href="mailto:these-codes">these-codes</a>
  <a href="mailto:(https://codelists.opensafely.org/codelist/primis-covid19-vacc-uptake/shield/v1/">https://codelists.opensafely.org/codelist/primis-covid19-vacc-uptake/nonshield/v1/</a>).

  The **shielding** group is defined based on patients having one of <a href="mailto:these-codes">these-codes</a>
  <a href="mailto:these-codes">(https://codelists.opensafely.org/codelist/primis-covid19-vacc-uptake/nonshield/v1/</a>).
- The **LD** (learning disability) group is defined based on <a href="mailto:this://codelists.opensafely.org/codelist/primis-covid19-vacc-uptake/learndis/v1/">this://codelists.opensafely.org/codelist/primis-covid19-vacc-uptake/learndis/v1/</a>) codelist and excludes people who are shielding.
- Patients are counted in their highest risk category only; e.g. a 65-year-old who is shielding is only counted in the shielding group, not in the 65-69 population

# **Summary Chart**



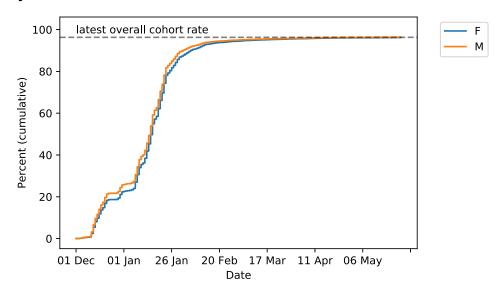
# Trends in vaccination rates of 80+ population according to demographic/clinical features, cumulatively by day.

<sup>\*</sup>Latest overall cohort rate calculated as at latest date for vaccinations recorded across all TPP practices.

# 80+ population

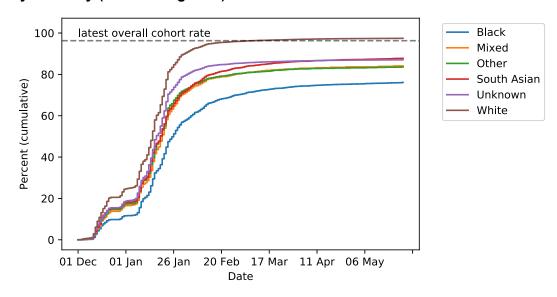
## **COVID** vaccinations among 80+ population

#### by Sex



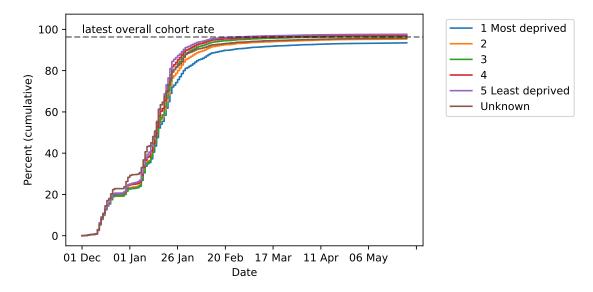
### **COVID** vaccinations among 80+ population

### by Ethnicity (broad categories)

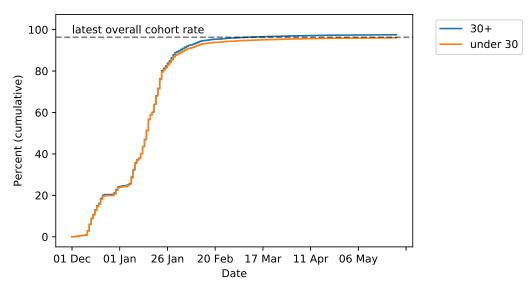


### **COVID** vaccinations among 80+ population

by Index of Multiple Deprivation (quintiles)

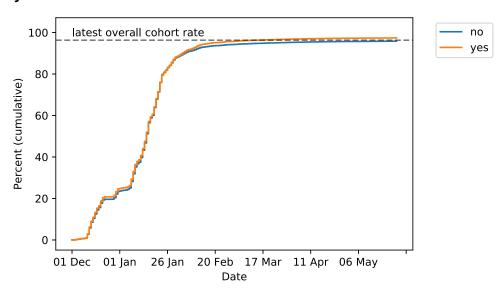


## by BMI

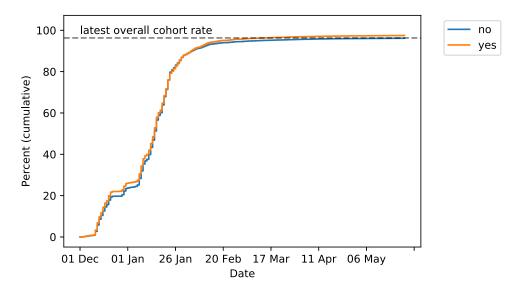


# **COVID** vaccinations among 80+ population

### by Chronic cardiac disease

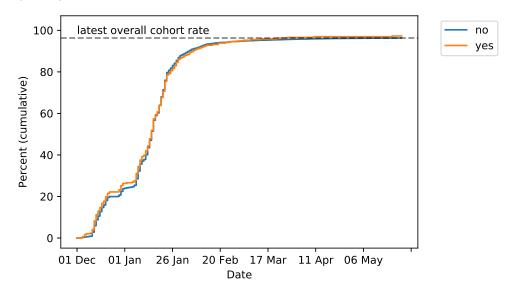


### by Current COPD



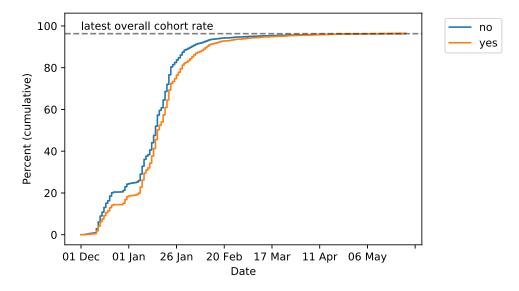
#### **COVID** vaccinations among 80+ population

## by Dialysis

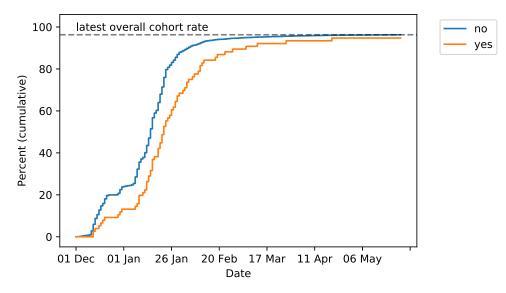


### **COVID** vaccinations among 80+ population

### by Dementia

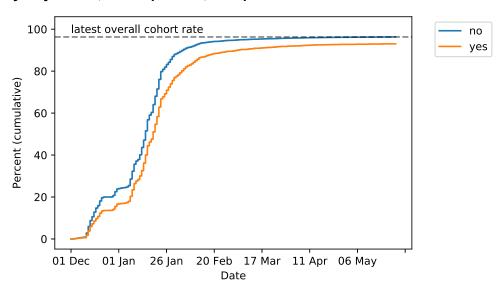


# by Learning disability

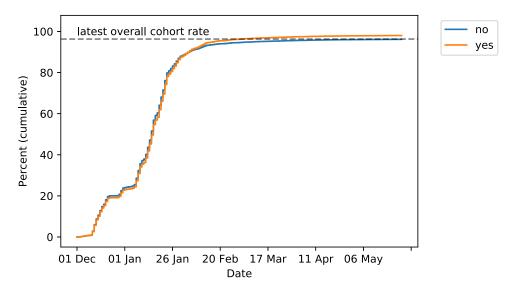


# **COVID** vaccinations among 80+ population

### by Psychosis, schizophrenia, or bipolar

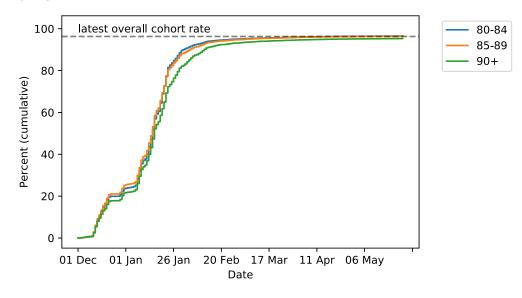


#### by SSRI (last 12 months)



#### **COVID** vaccinations among 80+ population

#### by Age band



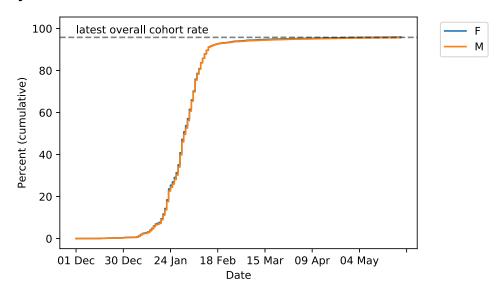
# Trends in vaccination rates of 70-79 population according to demographic/clinical features, cumulatively by day.

\*National rate calculated as at latest date for vaccinations recorded across all TPP practices.

# 70-79 population

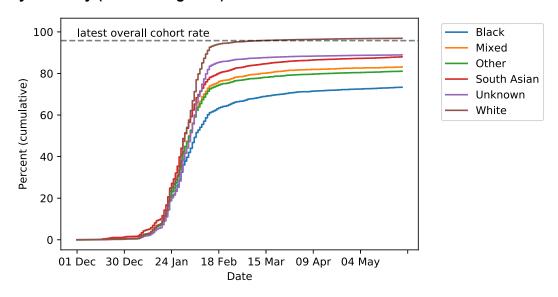
## **COVID** vaccinations among 70-79 population

#### by Sex



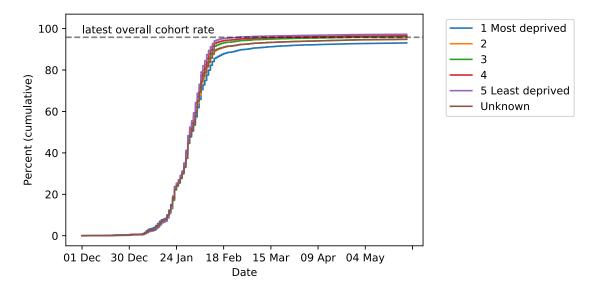
### **COVID** vaccinations among 70-79 population

### by Ethnicity (broad categories)

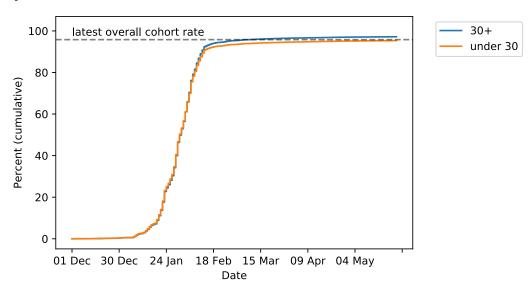


### **COVID** vaccinations among 70-79 population

by Index of Multiple Deprivation (quintiles)

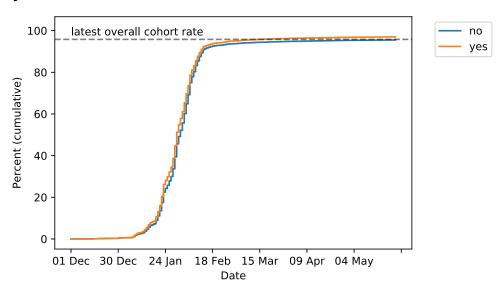


### by BMI

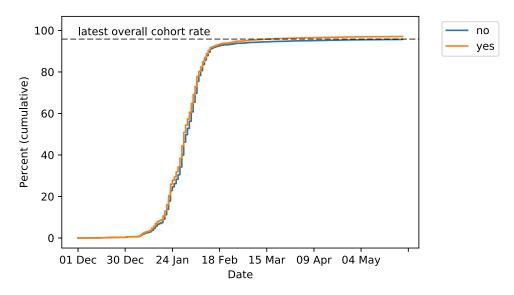


# **COVID** vaccinations among 70-79 population

### by Chronic cardiac disease

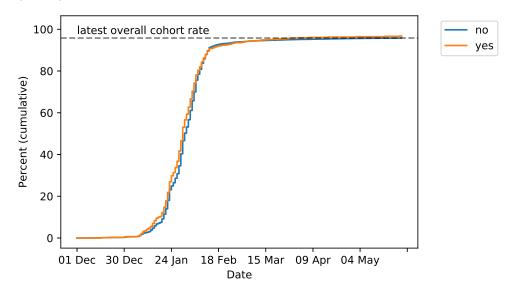


### by Current COPD



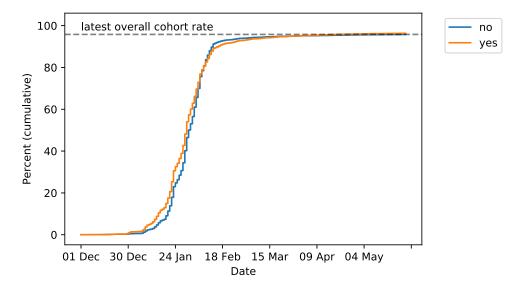
### **COVID** vaccinations among 70-79 population

### by Dialysis

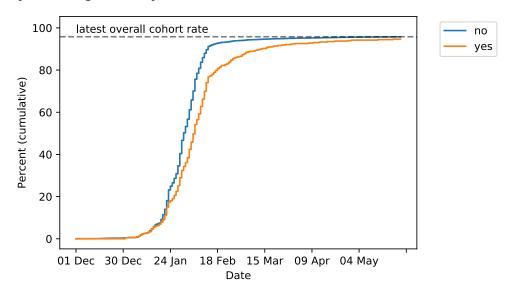


### **COVID** vaccinations among 70-79 population

### by Dementia

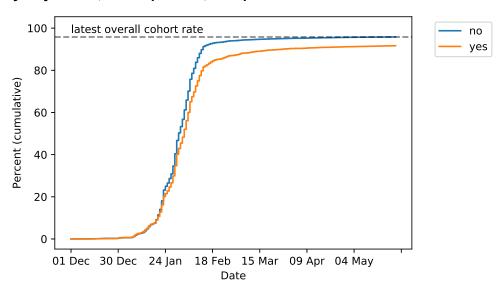


### by Learning disability

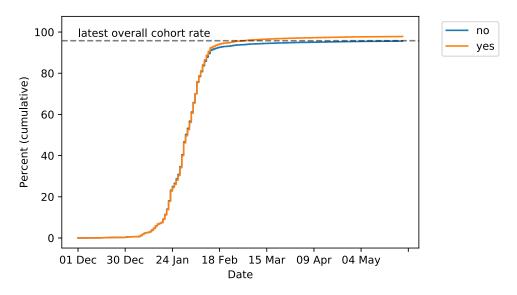


# **COVID** vaccinations among 70-79 population

### by Psychosis, schizophrenia, or bipolar

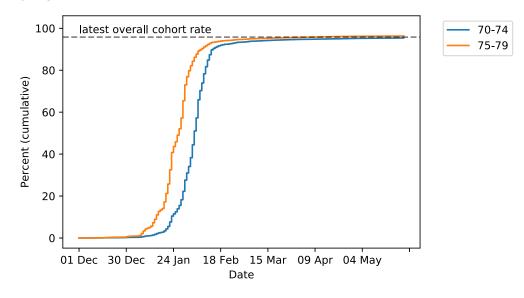


#### by SSRI (last 12 months)



### **COVID** vaccinations among 70-79 population

#### by Age band



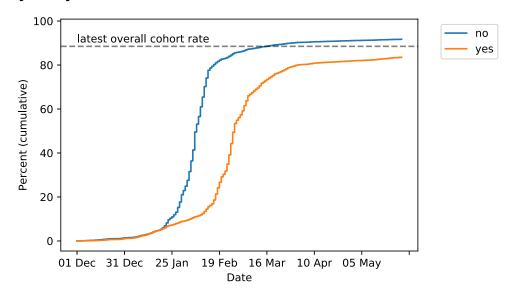
# Trends in vaccination rates of shielding population according to demographic/clinical features, cumulatively by day.

\*National rate calculated as at latest date for vaccinations recorded across all TPP practices.

# **Shielding population (aged 16-69)**

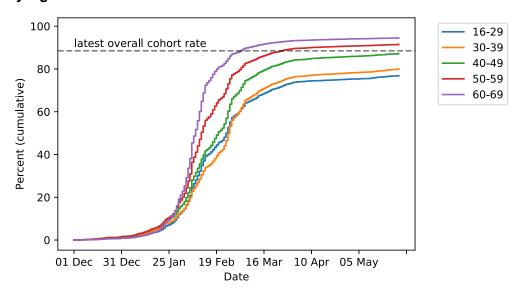
#### COVID vaccinations among shielding (aged 16-69) population

#### by newly shielded since feb 15



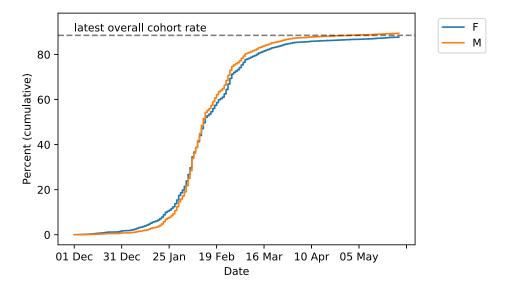
#### COVID vaccinations among shielding (aged 16-69) population

#### by Age band



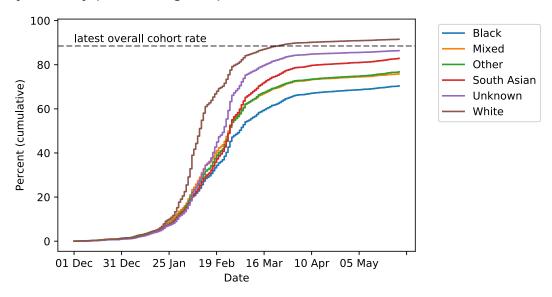
#### COVID vaccinations among shielding (aged 16-69) population

#### by Sex



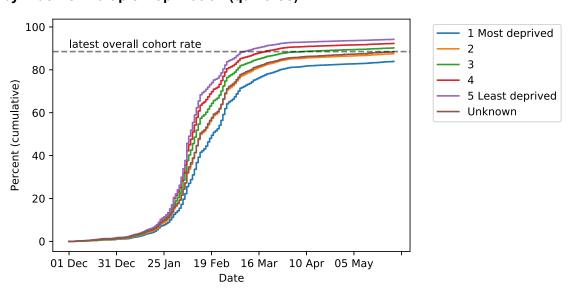
# **COVID** vaccinations among shielding (aged 16-69) population

#### by Ethnicity (broad categories)



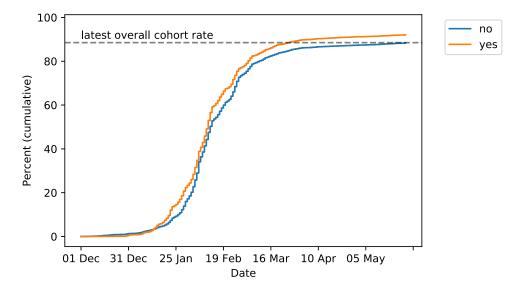
### COVID vaccinations among shielding (aged 16-69) population

#### by Index of Multiple Deprivation (quintiles)



### COVID vaccinations among shielding (aged 16-69) population

### by Learning disability



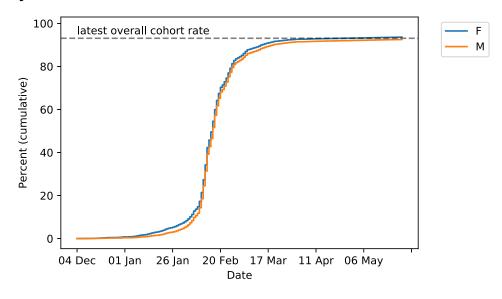
# Trends in vaccination rates of 65-69 population according to demographic/clinical features, cumulatively by day.

\*National rate calculated as at latest date for vaccinations recorded across all TPP practices.

# 65-69 population

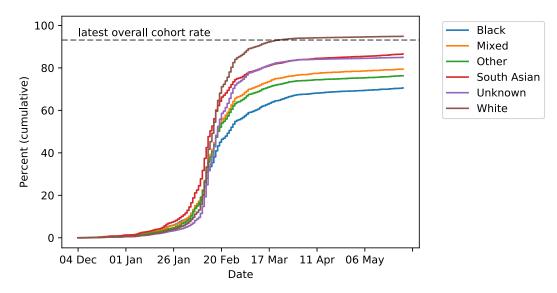
#### **COVID** vaccinations among 65-69 population

#### by Sex



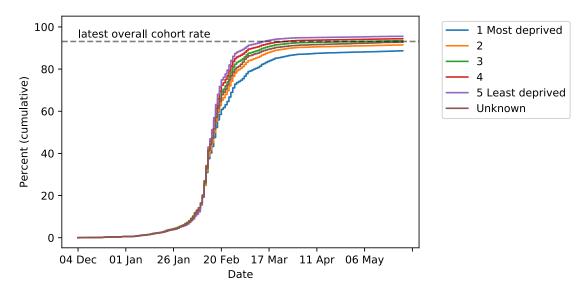
#### **COVID** vaccinations among 65-69 population

### by Ethnicity (broad categories)

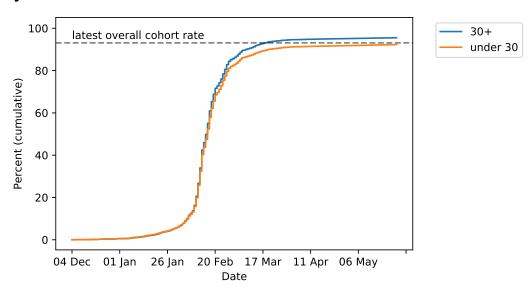


### **COVID** vaccinations among 65-69 population

by Index of Multiple Deprivation (quintiles)

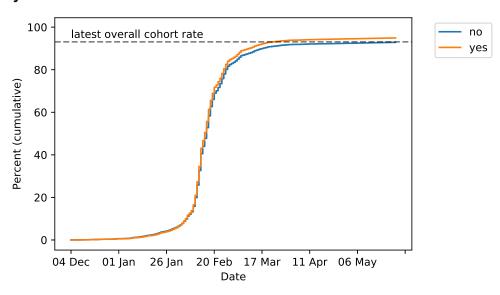


### by BMI

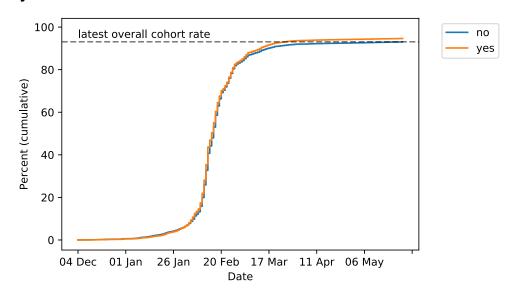


# **COVID** vaccinations among 65-69 population

### by Chronic cardiac disease

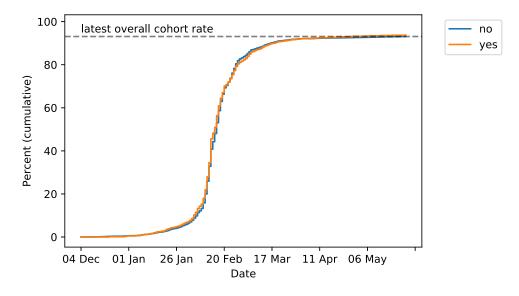


### by Current COPD



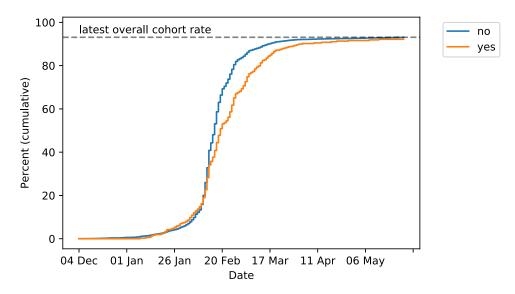
### **COVID** vaccinations among 65-69 population

### by Dementia

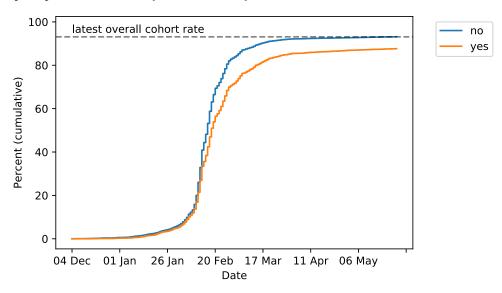


#### **COVID** vaccinations among 65-69 population

### by Learning disability

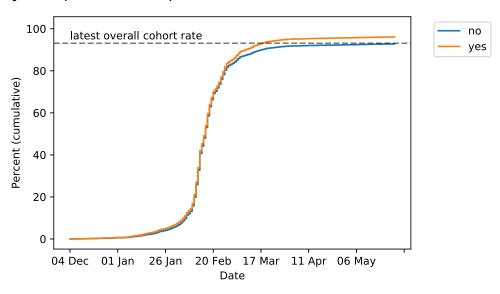


### by Psychosis, schizophrenia, or bipolar



# **COVID** vaccinations among 65-69 population

### by SSRI (last 12 months)



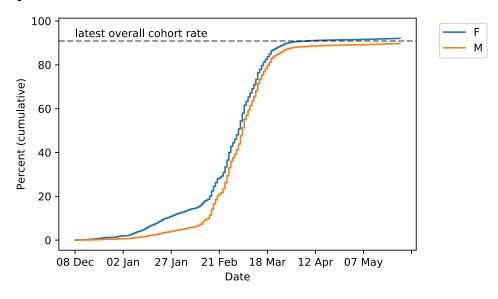
# Trends in vaccination rates of 60-64 population according to demographic/clinical features, cumulatively by day.

\*National rate calculated as at latest date for vaccinations recorded across all TPP practices.

# 60-64 population

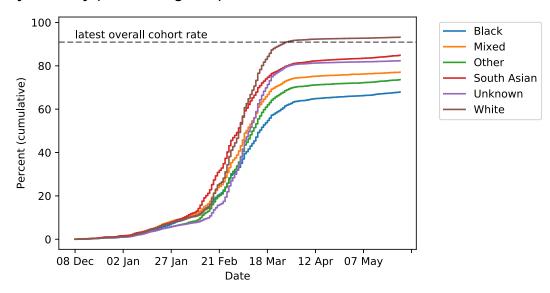
## **COVID** vaccinations among 60-64 population

#### by Sex



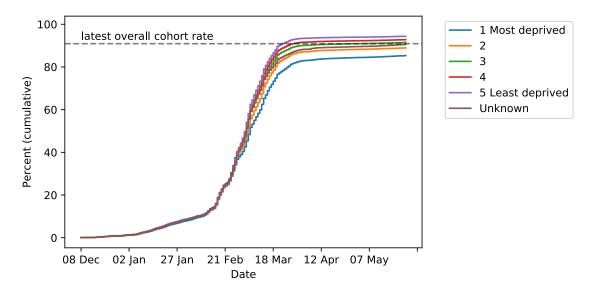
### **COVID** vaccinations among 60-64 population

### by Ethnicity (broad categories)

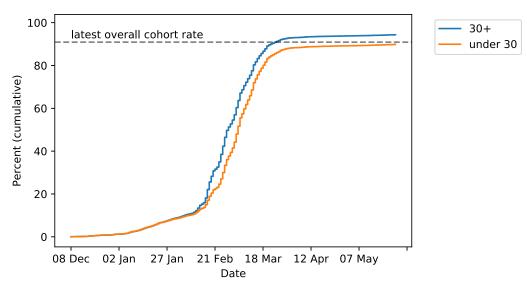


#### **COVID** vaccinations among 60-64 population

### by Index of Multiple Deprivation (quintiles)

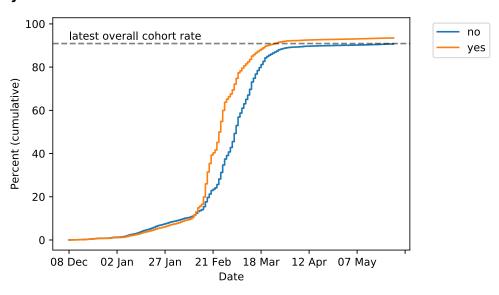


## by BMI

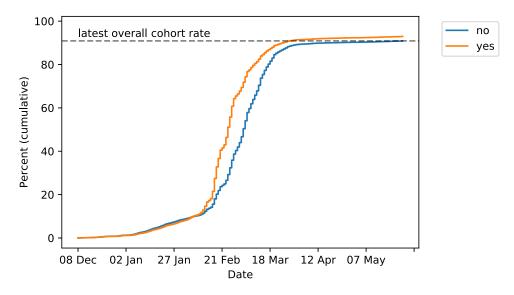


# **COVID** vaccinations among 60-64 population

### by Chronic cardiac disease

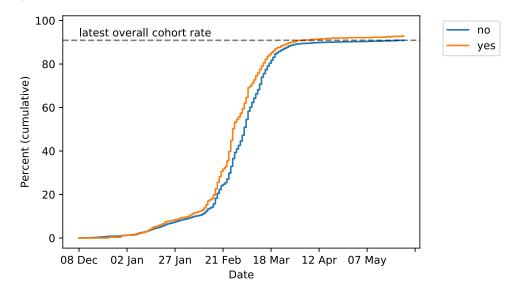


### by Current COPD



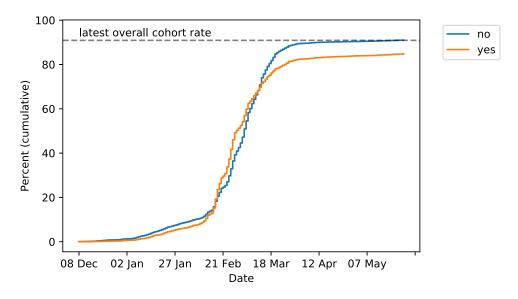
#### **COVID** vaccinations among 60-64 population

### by Dementia

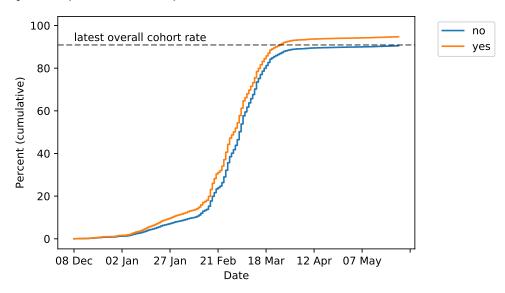


### **COVID** vaccinations among 60-64 population

by Psychosis, schizophrenia, or bipolar



#### by SSRI (last 12 months)



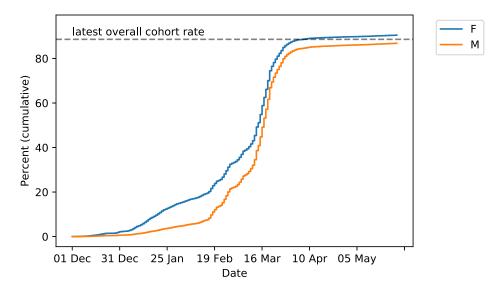
# Trends in vaccination rates of 55-59 population according to demographic/clinical features, cumulatively by day.

\*National rate calculated as at latest date for vaccinations recorded across all TPP practices.

# 55-59 population

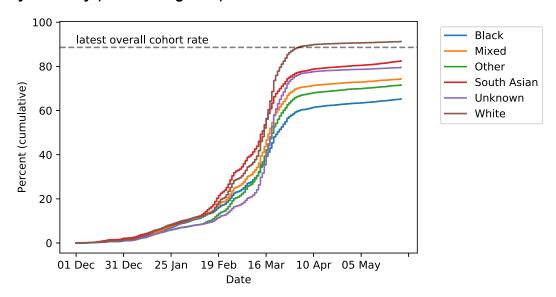
## **COVID** vaccinations among 55-59 population

#### by Sex



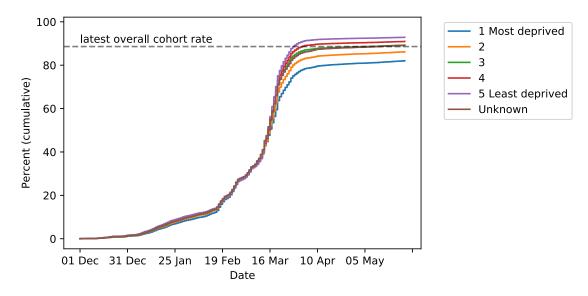
#### **COVID** vaccinations among 55-59 population

### by Ethnicity (broad categories)

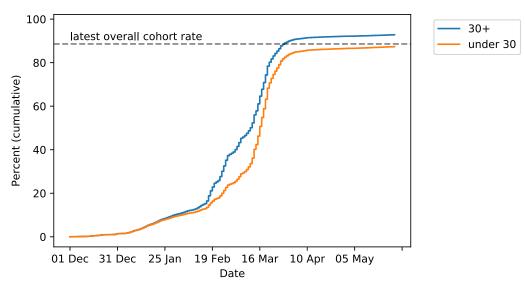


### **COVID** vaccinations among 55-59 population

# by Index of Multiple Deprivation (quintiles)

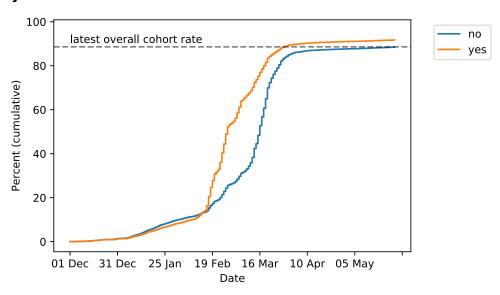


## by BMI

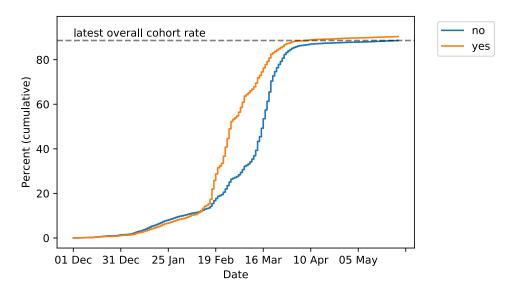


### **COVID** vaccinations among 55-59 population

### by Chronic cardiac disease

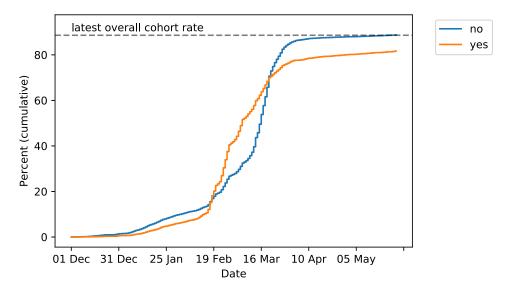


### by Current COPD



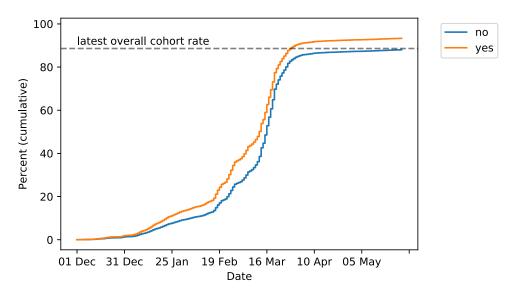
#### **COVID** vaccinations among 55-59 population

### by Psychosis, schizophrenia, or bipolar



#### **COVID** vaccinations among 55-59 population

#### by SSRI (last 12 months)



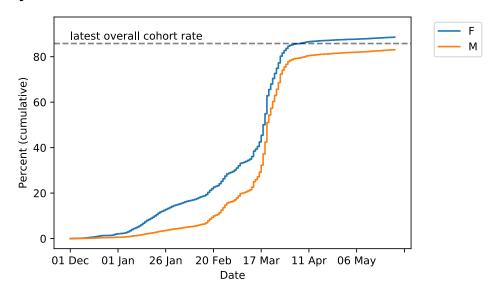
# Trends in vaccination rates of 50-54 population according to demographic/clinical features, cumulatively by day.

<sup>\*</sup>National rate calculated as at latest date for vaccinations recorded across all TPP practices.

# 50-54 population

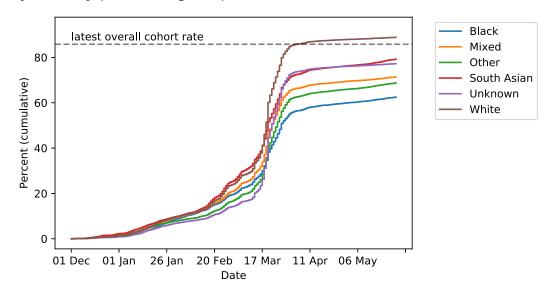
### **COVID** vaccinations among 50-54 population

#### by Sex



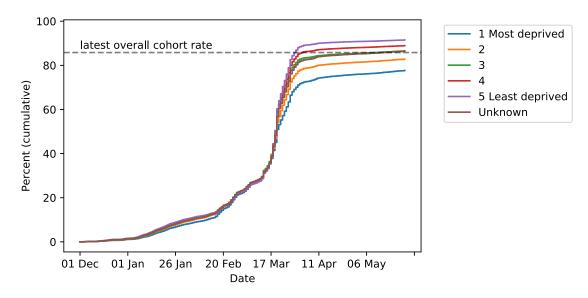
#### **COVID** vaccinations among 50-54 population

### by Ethnicity (broad categories)

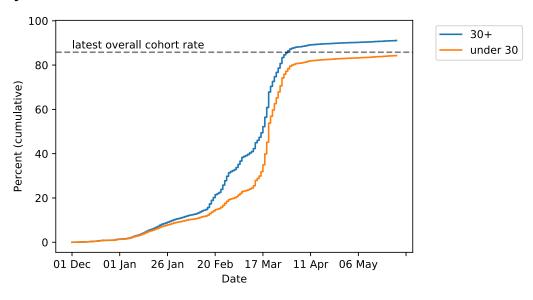


### **COVID** vaccinations among 50-54 population

by Index of Multiple Deprivation (quintiles)

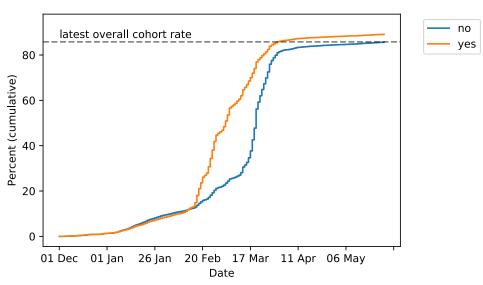


### by BMI

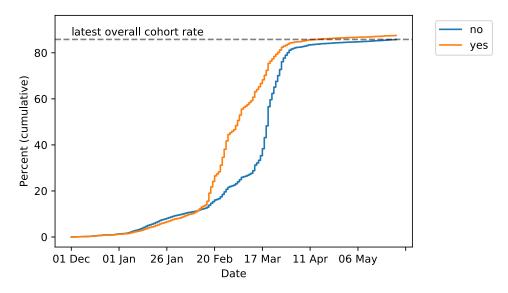


#### **COVID** vaccinations among 50-54 population

# by Chronic cardiac disease

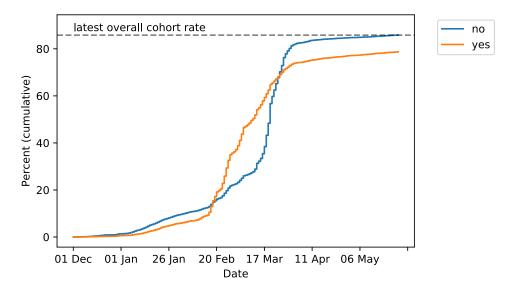


### by Current COPD



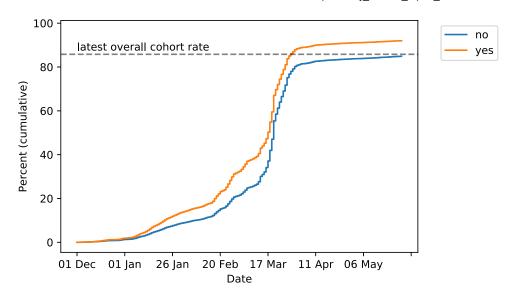
## **COVID** vaccinations among 50-54 population

### by Psychosis, schizophrenia, or bipolar



#### **COVID** vaccinations among 50-54 population

#### by SSRI (last 12 months)



Vaccination rates of each eligible population group, according to demographic/clinical features

# Cumulative vaccination figures among 80+ population

		Vaccinated at 26 May (n)	Vaccinated at 26 May (%)	Total eligible	Previous week's vaccination coverage (%)	Vaccinated over last 7d (%)
Category	Group					
overall	overall	1072084	96.3	1113385	96.3	0.0
Sex	F	621369	96.2	645799	96.2	0.0
	M	450709	96.4	467579	96.4	0.0
Age band	80-84	566776	96.5	587160	96.5	0.0
	85-89	334915	96.4	347424	96.4	0.0
	90+	170394	95.3	178794	95.3	0.0
Ethnicity (broad categories)	Black	8379	76.1	11011	75.8	0.3
outogenes,	Mixed	2737	84.1	3255	83.9	0.2
	Other	5628	83.6	6734	83.5	0.1
	South Asian	24738	87.8	28182	87.6	0.2
	Unknown	53165	87.0	61075	87.0	0.0
	White	977438	97.4	1003128	97.4	0.0
ethnicity 16 groups	African	1414	67.8	2086	67.4	0.4
	Bangladeshi or British Bangladeshi	1085	84.2	1288	83.7	0.5
	Caribbean	5985	78.8	7595	78.7	0.1
	Chinese	1351	80.4	1680	80.0	0.4
	Other	4284	84.8	5054	84.6	0.2
	Other Asian	3668	84.1	4361	83.9	0.2
	British or Mixed British	928466	97.7	950383	97.7	0.0
	Indian or British Indian	13664	91.9	14868	91.8	0.1
	Irish	9170	95.3	9618	95.3	0.0
	Other Black	980	73.3	1337	73.3	0.0
	Other White	39774	92.3	43099	92.2	0.1
	Other mixed	1015	88.4	1148	87.8	0.6
	Pakistani or British Pakistani	6321	82.4	7672	81.9	0.5
	Unknown	53179	87.1	61089	87.0	0.1
	White + Asian	483	89.6	539	88.3	1.3
	White + Black African	273	73.6	371	73.6	0.0
	White + Black Caribbean	973	81.3	1197	81.3	0.0
Index of Multiple Deprivation (quintiles)	1 Most deprived	134120	93.5	143514	93.4	0.1
Deprivation (quintiles)	2	177247	95.3	185990	95.3	0.0
	3	240009	96.6	248535	96.5	0.1
	4	249984	97.0	257586	97.0	0.0
	5 Least deprived	251496	97.6	257670	97.6	0.0
	Unknown	19222	95.7	20083	95.7	0.0
ВМІ	30+	188825	97.5	193641	97.5	0.0
	under 30	883253	96.0	919737	96.0	0.0
Chronic cardiac disease	no	746235	95.8	778799	95.8	0.0
uisease	yes	325850	97.4	334586	97.4	0.0
Current COPD	no	958832	96.2	997192	96.1	0.1
	yes	113246	97.5	116186	97.4	0.1

		Vaccinated at 26 May (n)	Vaccinated at 26 May (%)	Total eligible	Previous week's vaccination coverage (%)	Vaccinated over last 7d (%)
Category	Group					
Dialysis	no	1070090	96.3	1111327	96.3	0.0
	yes	1995	97.3	2051	96.9	0.4
DMARDs	no	1038296	96.2	1078952	96.2	0.0
	yes	33782	98.1	34433	98.1	0.0
Dementia	no	981351	96.3	1019340	96.2	0.1
	yes	90734	96.5	94045	96.4	0.1
Psychosis,	no	1064063	96.3	1104768	96.3	0.0
schizophrenia, or bipolar	yes	8015	93.0	8617	93.0	0.0
Learning disability	no	1071581	96.3	1112846	96.3	0.0
	yes	504	94.7	532	94.7	0.0
SSRI (last 12 months)	no	1004682	96.2	1044624	96.1	0.1
	yes	67396	98.0	68754	98.0	0.0
Chemo or	no	1035307	96.2	1075802	96.2	0.0
radiotherapy	yes	36771	97.9	37576	97.8	0.1
Cancer (lung)	no	1064728	96.3	1105853	96.2	0.1
	yes	7350	97.6	7532	97.6	0.0
Cancer (excluding	no	876351	96.0	913143	95.9	0.1
lung/haem)	yes	195734	97.8	200235	97.7	0.1
Cancer	no	1052002	96.3	1092840	96.2	0.1
(haematological)	yes	20076	97.8	20538	97.7	0.1

- Patient counts rounded to the nearest 7
- Population excludes those known to live in an elderly care home, based upon clinical coding.
- SSRIs group excludes individuals with Psychosis/ schizophrenia/bipolar, LD, or Dementia.

# Cumulative vaccination figures among 70-79 population

		Vaccinated at 26 May (n)	Vaccinated at 26 May (%)	Total eligible	Previous week's vaccination coverage (%)	Vaccinated over last 7d (%)
Category	Group					
overall	overall	1980623	95.8	2067793	95.7	0.1
Sex	F	1040564	95.9	1084944	95.9	0.0
	М	940058	95.6	982842	95.6	0.0
Age band	70-74	1146173	95.4	1201571	95.3	0.1
	75-79	834449	96.3	866215	96.3	0.0
Ethnicity (broad categories)	Black	10780	73.4	14693	73.1	0.3
outogonios	Mixed	5355	83.2	6440	82.9	0.3
	Other	12460	81.1	15372	80.9	0.2
	South Asian	48293	88.0	54887	87.7	0.3
	Unknown	126273	88.9	142002	88.8	0.1
	White	1777454	96.9	1834392	96.9	0.0
ethnicity 16 groups	African	3577	68.2	5243	67.7	0.5
	Bangladeshi or British Bangladeshi	1575	86.2	1827	85.8	0.4
	Caribbean	5327	76.6	6958	76.5	0.1
	Chinese	3255	80.0	4067	79.9	0.1
	Other	9191	81.4	11291	81.3	0.1
	Other Asian	9485	85.2	11137	84.9	0.3
	British or Mixed British	1689856	97.3	1736315	97.3	0.0
	Indian or British Indian	27706	91.4	30310	91.2	0.2
	Irish	14336	94.2	15225	94.1	0.1
	Other Black	1876	75.5	2485	75.5	0.0
	Other White	73290	88.4	82880	88.3	0.1
	Other mixed	2128	84.9	2506	84.6	0.3
	Pakistani or British Pakistani	9520	82.0	11613	81.5	0.5
	Unknown	126266	88.9	142002	88.8	0.1
	White + Asian	1204	88.7	1358	88.1	0.6
	White + Black African	833	77.3	1078	77.3	0.0
	White + Black Caribbean	1183	79.7	1484	79.7	0.0
Index of Multiple Deprivation (quintiles)	1 Most deprived	252805	93.1	271607	93.0	0.1
Deprivation (quintiles)	2	331737	94.7	350175	94.7	0.0
	3	442218	96.0	460649	96.0	0.0
	4	460670	96.5	477288	96.5	0.0
	5 Least deprived	456218	97.3	469098	97.2	0.1
	Unknown	36974	94.9	38962	94.8	0.1
ВМІ	30+	497371	97.2	511777	97.1	0.1
	under 30	1483251	95.3	1556002	95.3	0.0
Chronic cardiac disease	no	1618855	95.5	1694735	95.5	0.0
uisease	yes	361760	97.0	373051	96.9	0.1
Current COPD	no	1789781	95.7	1871170	95.6	0.1
	yes	190834	97.1	196609	97.0	0.1
Dialysis	no	1976625	95.8	2063656	95.7	0.1

		Vaccinated at 26 May (n)	Vaccinated at 26 May (%)	Total eligible	Previous week's vaccination coverage (%)	Vaccinated over last 7d (%)
Category	Group					
	yes	3997	96.8	4130	96.6	0.2
DMARDs	no	1909684	95.7	1995329	95.7	0.0
	yes	70931	97.9	72457	97.9	0.0
Dementia	no	1937873	95.8	2023420	95.7	0.1
	yes	42742	96.3	44366	96.3	0.0
Psychosis, schizophrenia, or	no	1961855	95.8	2047311	95.8	0.0
bipolar	yes	18767	91.7	20475	91.6	0.1
Learning disability	no	1977759	95.8	2064755	95.7	0.1
	yes	2863	94.7	3024	94.4	0.3
SSRI (last 12 months)	no	1828232	95.6	1912022	95.6	0.0
	yes	152383	97.8	155757	97.8	0.0
Chemo or radiotherapy	no	1912330	95.7	1997863	95.7	0.0
radiotilerapy	yes	68285	97.7	69916	97.6	0.1
Cancer (lung)	no	1968085	95.8	2054906	95.7	0.1
	yes	12537	97.3	12880	97.3	0.0
Cancer (excluding lung/haem)	no	1699012	95.5	1779106	95.4	0.1
iung/naem)	yes	281610	97.6	288680	97.5	0.1
Cancer (haematological)	no	1950718	95.8	2037112	95.7	0.1
(naematological)	yes	29897	97.5	30667	97.4	0.1

- Patient counts rounded to the nearest 7
- Population excludes those known to live in an elderly care home, based upon clinical coding.
- SSRIs group excludes individuals with Psychosis/ schizophrenia/bipolar, LD, or Dementia.

# Cumulative vaccination figures among care home population

		Vaccinated at 26 May (n)	Vaccinated at 26 May (%)	Total eligible	Previous week's vaccination coverage (%)	Vaccinated over last 7d (%)
Category	Group					
overall	overall	81864	96.4	84896	96.4	0.0
Sex	F	58212	96.7	60200	96.6	0.1
	М	23653	95.8	24696	95.7	0.1
Age band	65-69	4529	93.9	4823	93.8	0.1
	70-74	6986	94.6	7385	94.5	0.1
	75-79	9688	96.1	10080	96.0	0.1
	80-84	14420	96.8	14896	96.7	0.1
	85-89	19187	96.6	19859	96.6	0.0
	90+	27048	97.1	27853	97.1	0.0
Ethnicity (broad	Black	413	86.8	476	86.8	0.0
categories)	Mixed	210	93.8	224	93.8	0.0
	Other	343	94.2	364	94.2	0.0
	South Asian	623	92.7	672	92.7	0.0
	Unknown	2009	93.5	2149	93.2	0.3
	White	78267	96.6	81011	96.6	0.0
Dementia	no	36939	95.5	38682	95.4	0.1
	yes	44926	97.2	46214	97.2	0.0

- Patient counts rounded to the nearest 7
- Population includes those known to live in an elderly care home, based upon clinical coding.

# Cumulative vaccination figures among shielding (aged 16-69) population

		Vaccinated at 26 May (n)	Vaccinated at 26 May (%)	Total eligible	Previous week's vaccination coverage (%)	Vaccinated over last 7d (%)
Category	Group					
overall	overall	735102	88.5	830767	88.2	0.3
newly shielded since feb	no	459907	91.7	501424	91.6	0.1
15	yes	275198	83.6	329343	83.1	0.5
Sex	F	409304	87.8	466410	87.4	0.4
	М	325787	89.4	364343	89.2	0.2
Age band	16-29	53529	76.9	69643	76.4	0.5
	30-39	101878	80.0	127372	79.4	0.6
	40-49	144970	87.2	166306	86.8	0.4
	50-59	209489	91.5	229033	91.3	0.2
	60-69	225232	94.5	238406	94.4	0.1
Ethnicity (broad	Black	31374	70.4	44562	69.8	0.6
categories)	Mixed	10899	75.8	14371	75.4	0.4
	Other	13993	76.8	18214	76.1	0.7
	South Asian	89929	82.9	108472	82.2	0.7
	Unknown	27538	86.4	31878	86.1	0.3
	White	561358	91.5	613263	91.4	0.1
Index of Multiple Deprivation (quintiles)	1 Most deprived	204967	83.9	244258	83.5	0.4
	2	164297	87.5	187698	87.2	0.3
	3	142534	90.2	158018	90.0	0.2
	4	114520	92.3	124075	92.1	0.2
	5 Least deprived	90839	94.2	96418	94.0	0.2
	Unknown	17927	88.4	20279	88.1	0.3
Learning disability	no	710304	88.4	803831	88.1	0.3
	yes	24787	92.0	26929	91.8	0.2

- Patient counts rounded to the nearest 7
- Population excludes those over 65 known to live in an elderly care home, based upon clinical coding.

# Cumulative vaccination figures among 65-69 population