Covid-19: The illusion of efficacy and safety for vaccines and other interventions

Italian Medical-Scientific Independent Commission
International Conference on Covid-19 management and the risks of the new W.H.O. binding policies

Italian Senate, Rome

19 April 2024

Norman Fenton

Overview

The definitions that shaped the narrative

The early ‘mortality by vaccination’ data

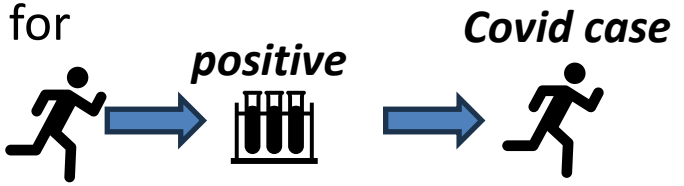
The ‘cheap trick’ illusion of vaccine effectiveness

The cheap trick in practice

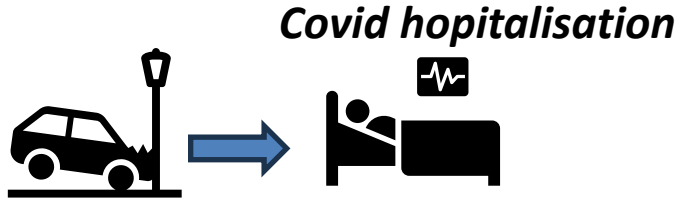
Conclusions and recommendations

The definitions that shaped the narrative

Fred, who has no Covid symptoms, tests positive in a PCR test for work.
He doesn't go on to develop any symptoms.
Fred is classified as a Covid case

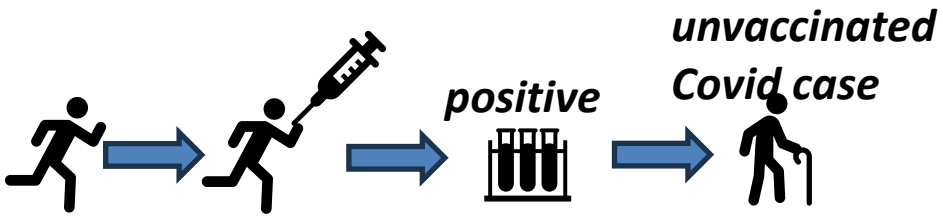


13 days after his PCR test Fred is critically injured in a car crash and rushed to hospital
Fred is classified as a Covid hospital admission

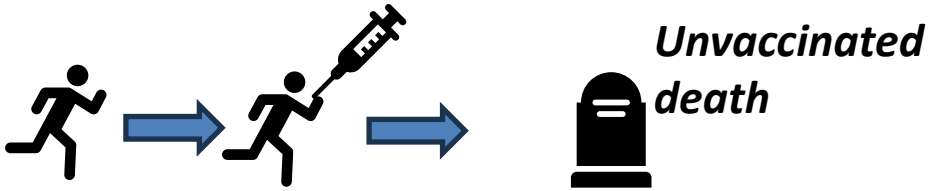


2 weeks after being taken to hospital Fred dies from his injuries
Fred is classified as a Covid death

Jim is healthy, gets a Covid vaccine
13 days later tests PCR positive with symptomatic Covid
Jim is classified as an unvaccinated Covid case

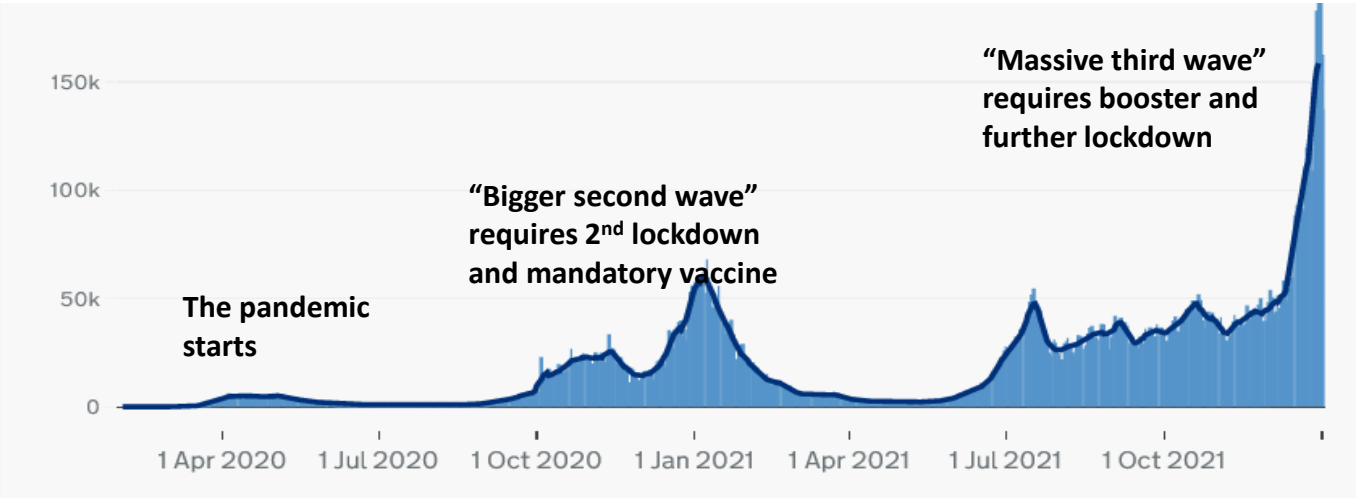


Peter is healthy, gets a Covid vaccine
dies the next day
Peter is classified as an unvaccinated death



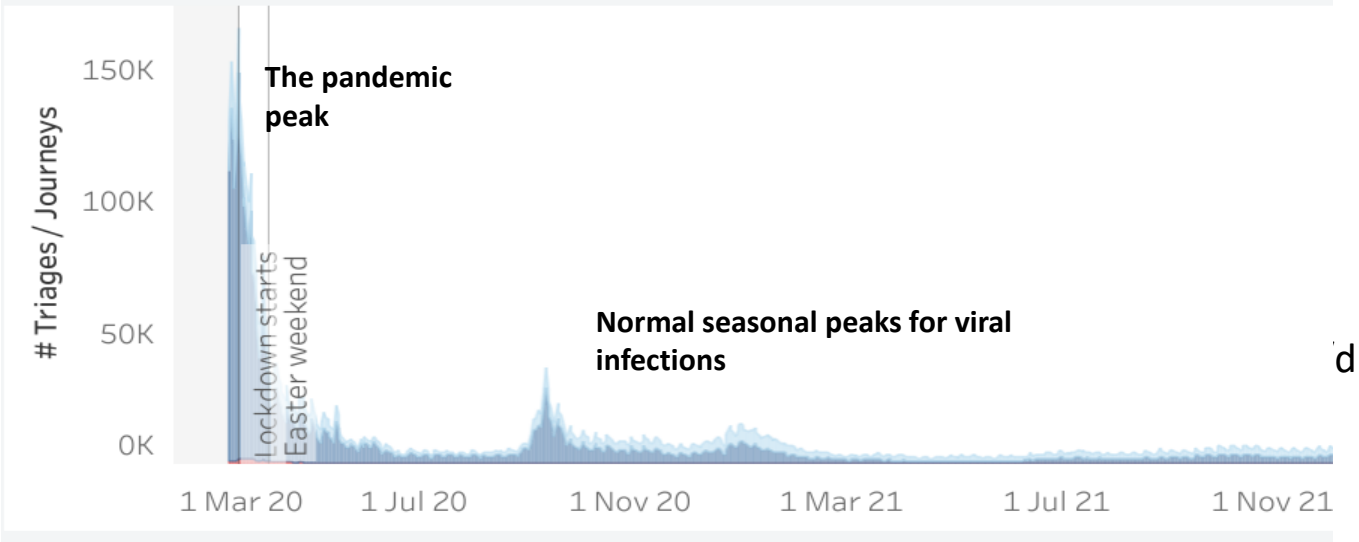
Were there really big second and third waves at the end of 2020 and 2021?

UK Covid daily ‘Cases’



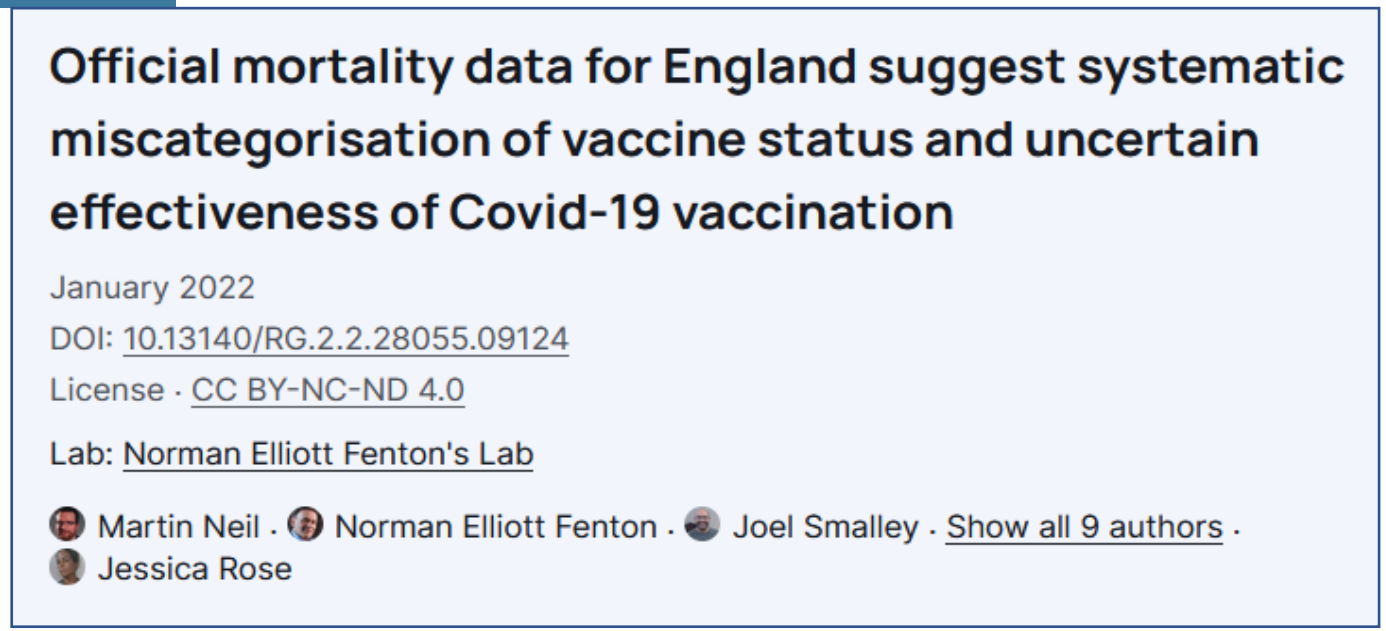
https://coronavirus.data.gov.uk/

UK daily Covid triage calls (online, 111 and 999 ambulance)

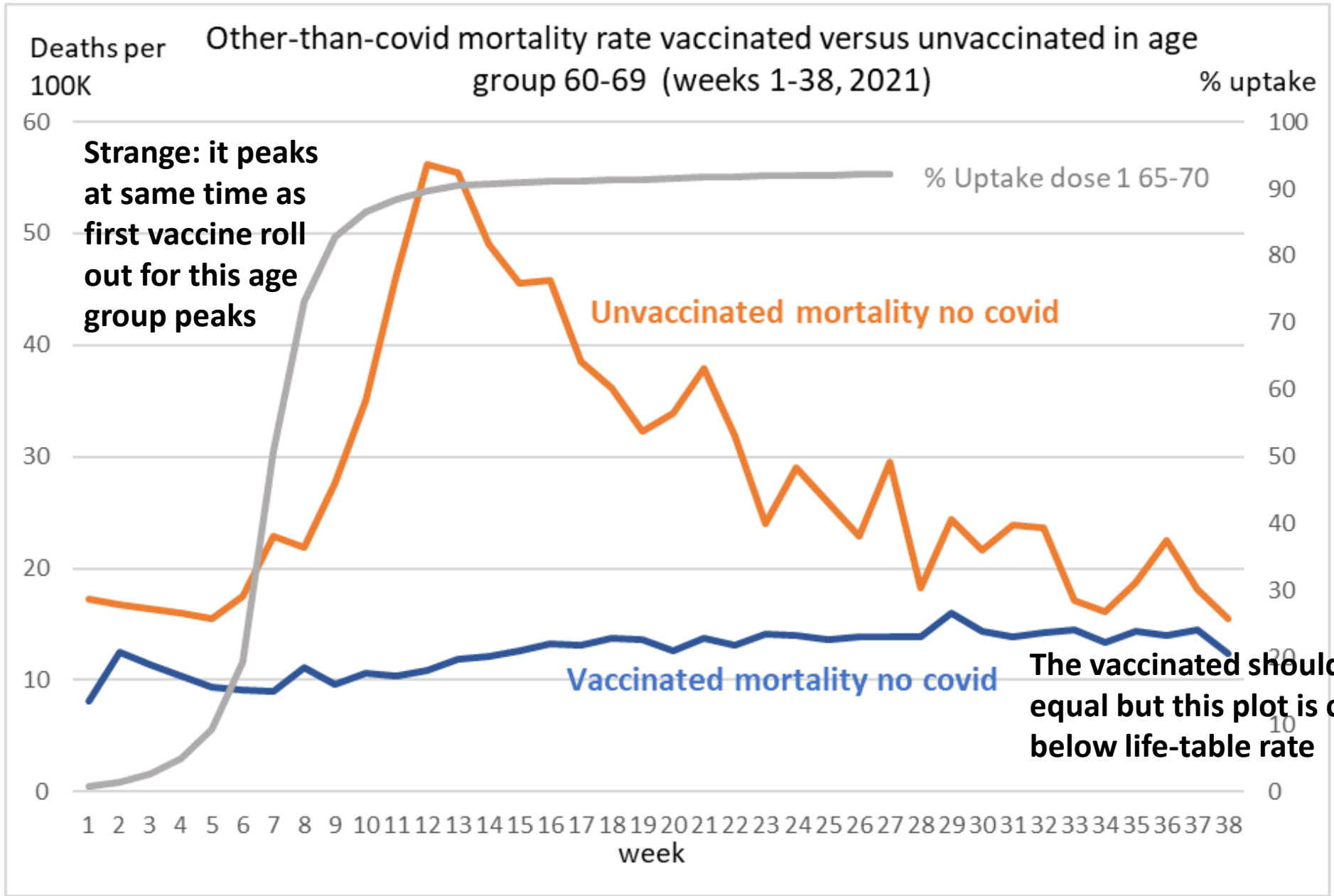


digital.nhs.uk/dashboards/nhs-pathways

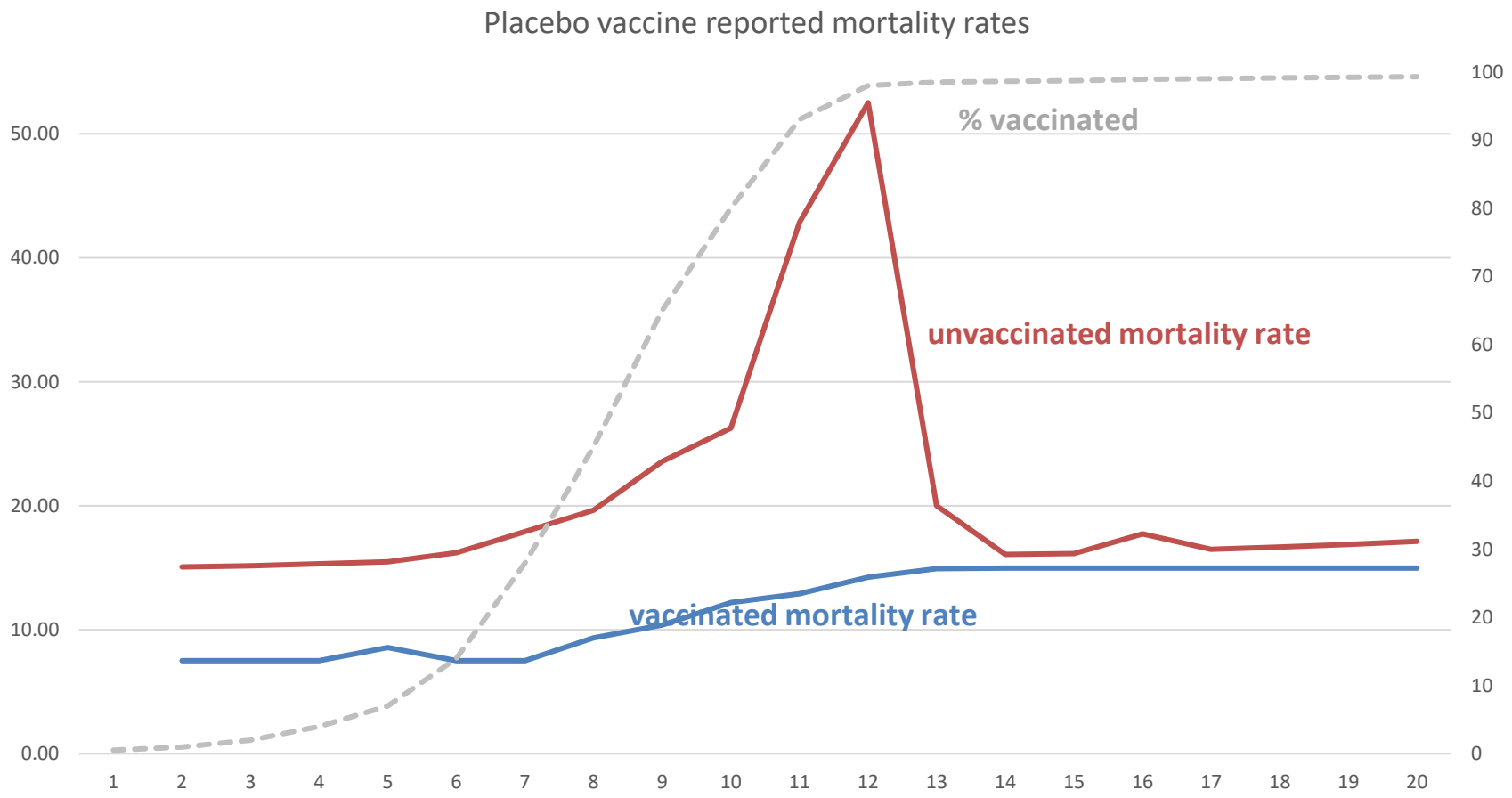
The early ‘mortality by vaccination’ data



Martin Neil, Norman Fenton, Joel Smalley, Clare Craig, Joshua Guetzkow, Scott McLachlan, Jonathan Engler, Dan Russell and Jessica Rose
http://dx.doi.org/10.13140/RG.2.2.28055.09124


Other-than-covid mortality rate vaccinated versus unvaccinated in age group 60-69 (weeks 1-38, 2021)
Deaths per 100K
% uptake
Strange: it peaks at same time as first vaccine roll out for this age group peaks
% Uptake dose 1 65-70
Unvaccinated mortality no covid
Vaccinated mortality no covid
The vaccinated should be higher or equal but this plot is consistently below life-table rate
week

Placebo apparently saves lives….



The ‘cheap trick’ illusion of vaccine effectiveness

An extreme example: the worst possible vaccine

Everybody who gets the vaccine against diseases X gets infected with disease X within the first 14 days.

Then, assuming they don't get reinfected within say 12 weeks, we would record no cases of X in in those classified as 'vaccinated'.

Vaccine efficacy is defined as

$$1 - \left(\frac{\%\ \text{vaccinated who get X}}{\%\ \text{unvaccinated who get X}} \right) \text{as a percentage}$$

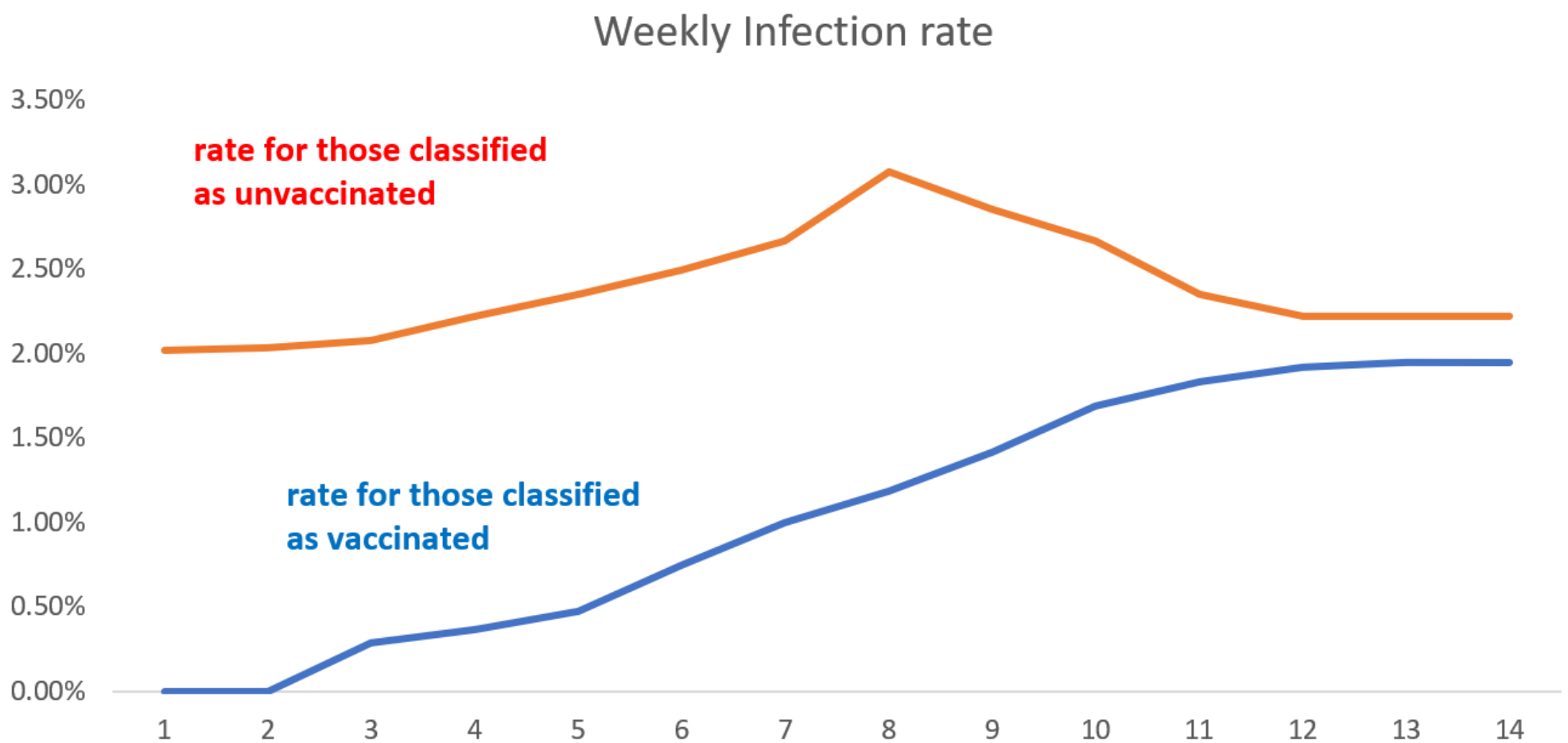
But,

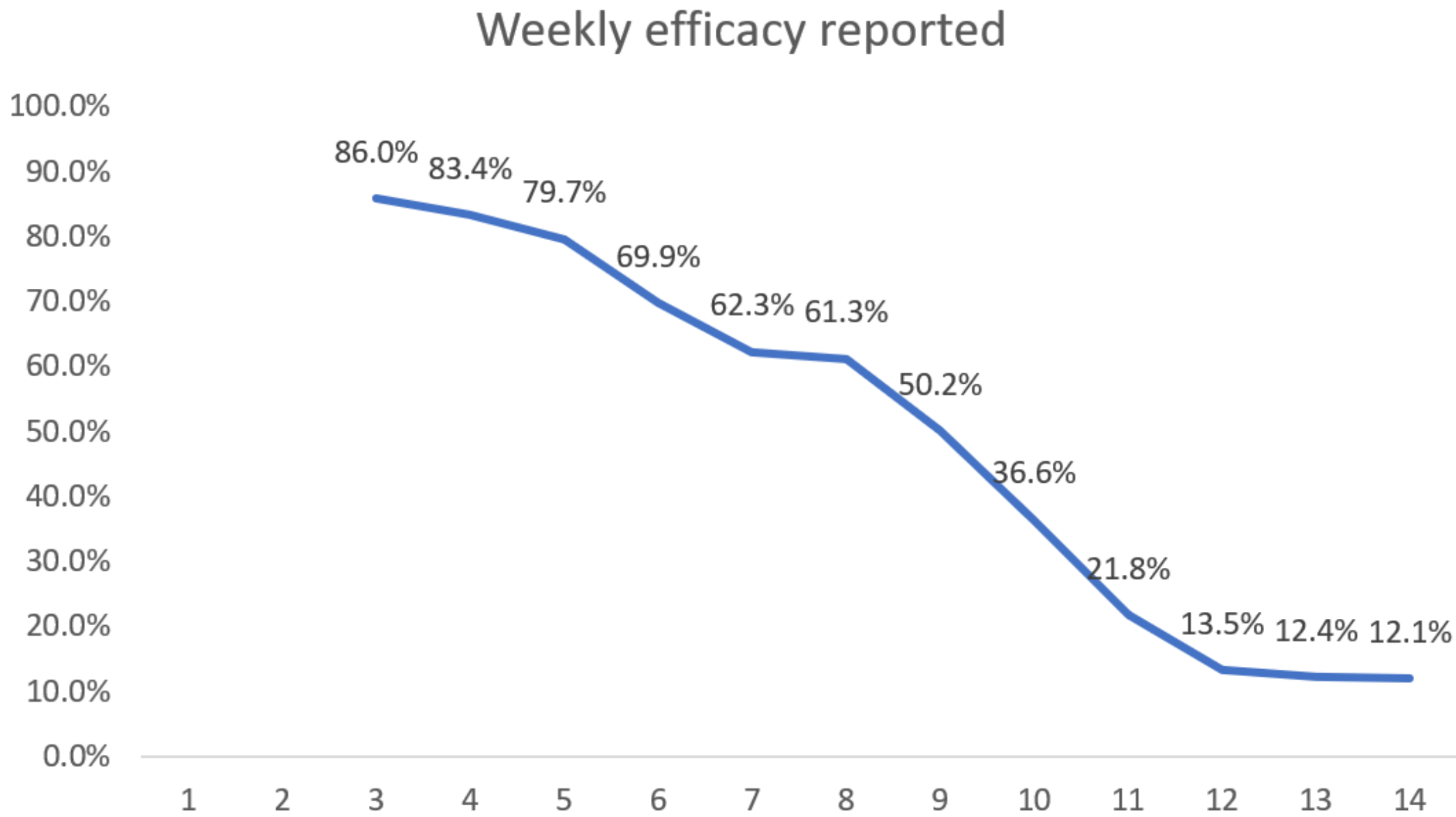
$$\%\ \text{vaccinated who get X} = 0$$

So, vaccine is 100% effective.

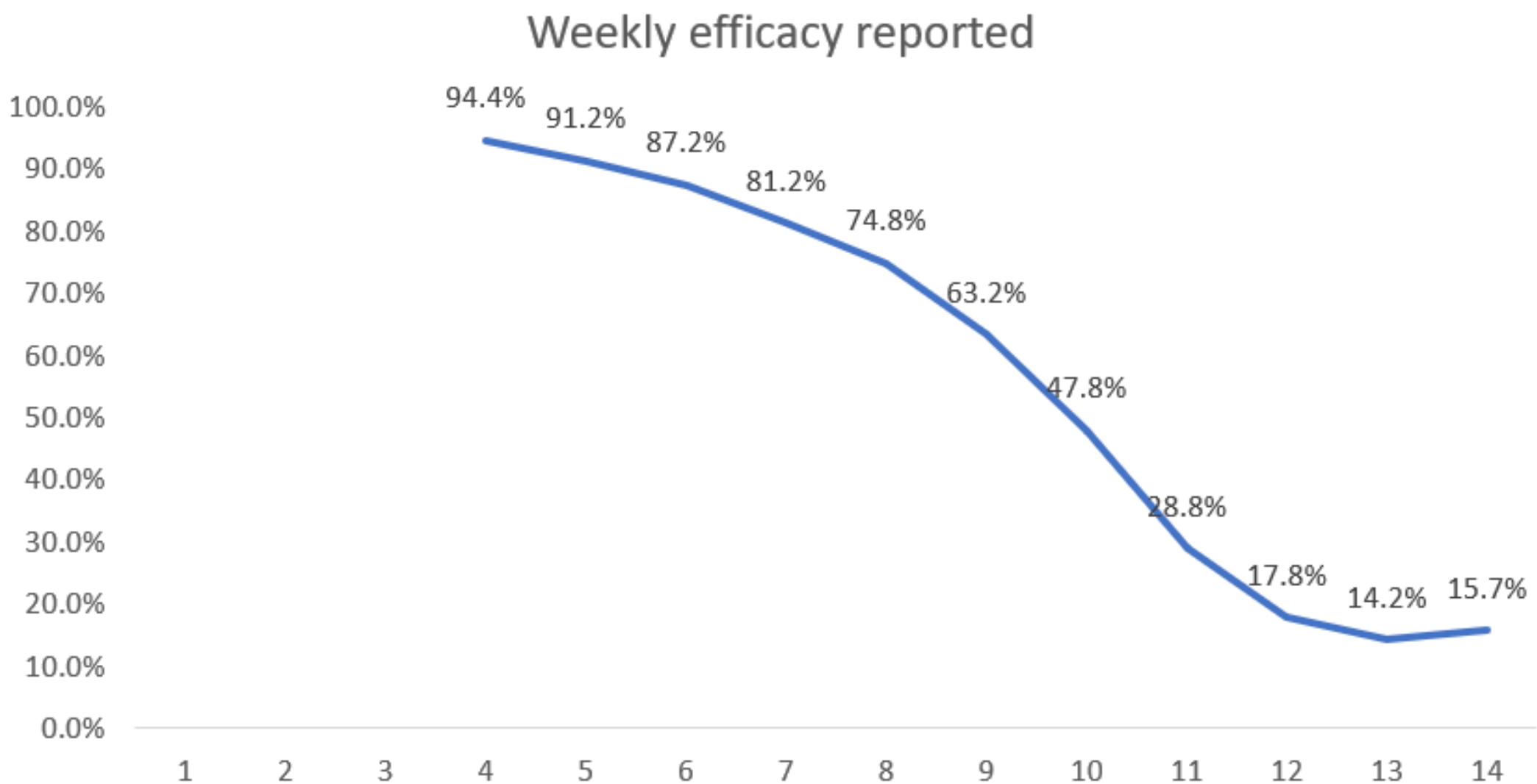
https://wherearethenumbers.substack.com/p/the-illusion-of-vaccine-efficacy

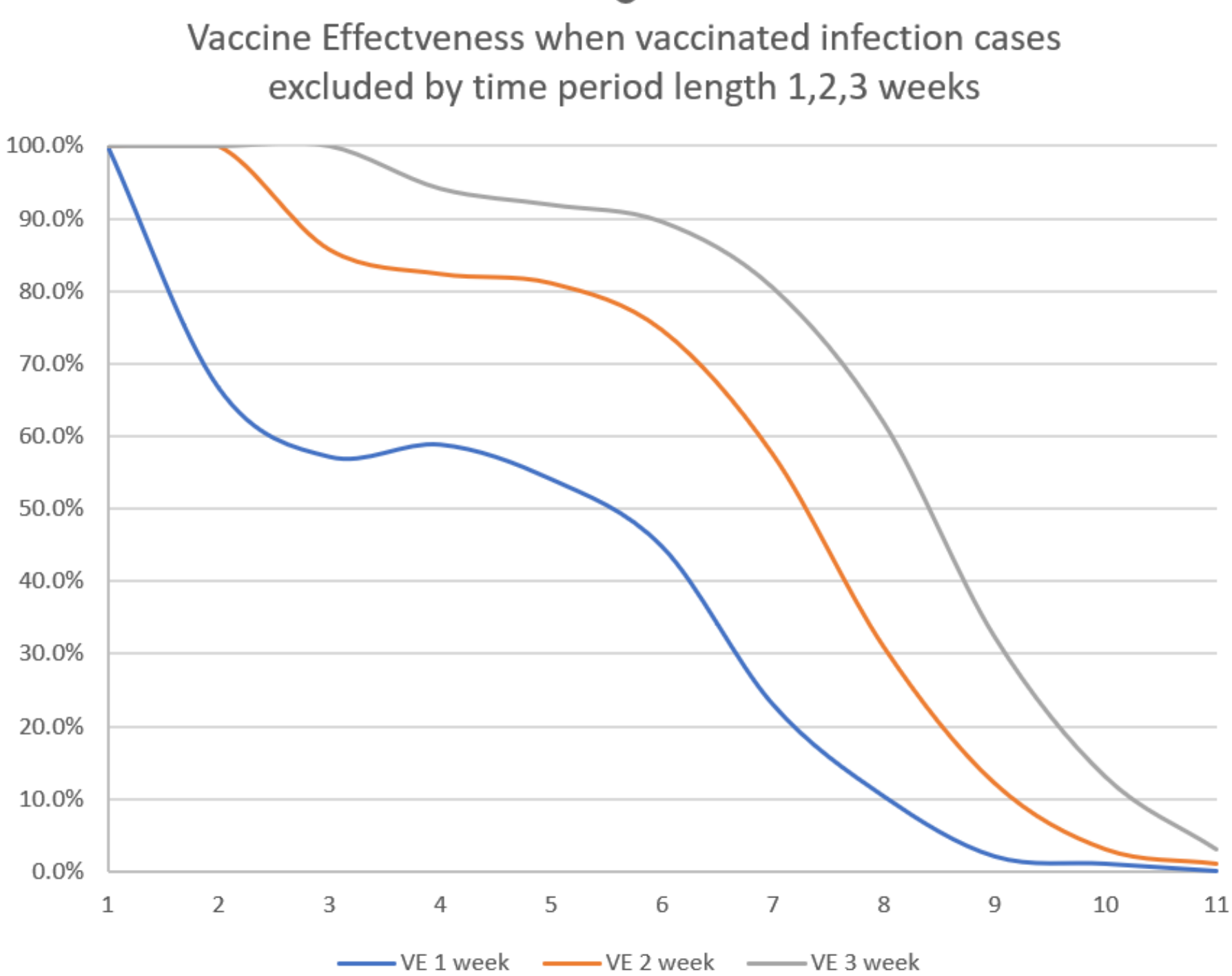
14-days rule




Weekly efficacy reported
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
86.0%
83.4%
79.7%
69.9%
62.3%
61.3%
50.2%
36.6%
21.8%
13.5%
12.4%
12.1%
1
2
3
4
5
6
7
8
9
10
11
12
13
14

21-day rule

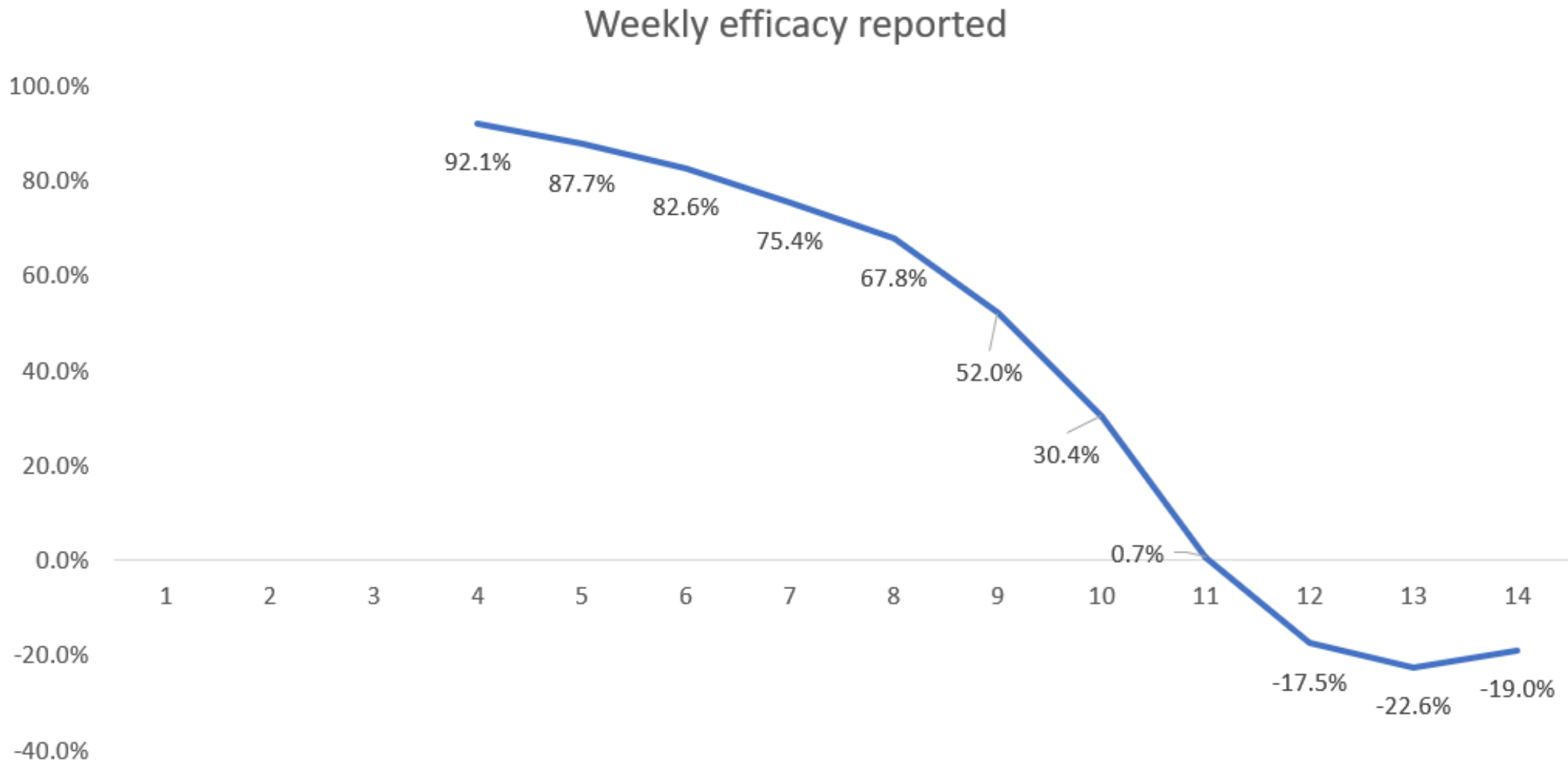

Weekly efficacy reported
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
94.4%
91.2%
87.2%
81.2%
74.8%
63.2%
47.8%
28.8%
17.8%
14.2%
15.7%
1
2
3
4
5
6
7
8
9
10
11
12
13
14

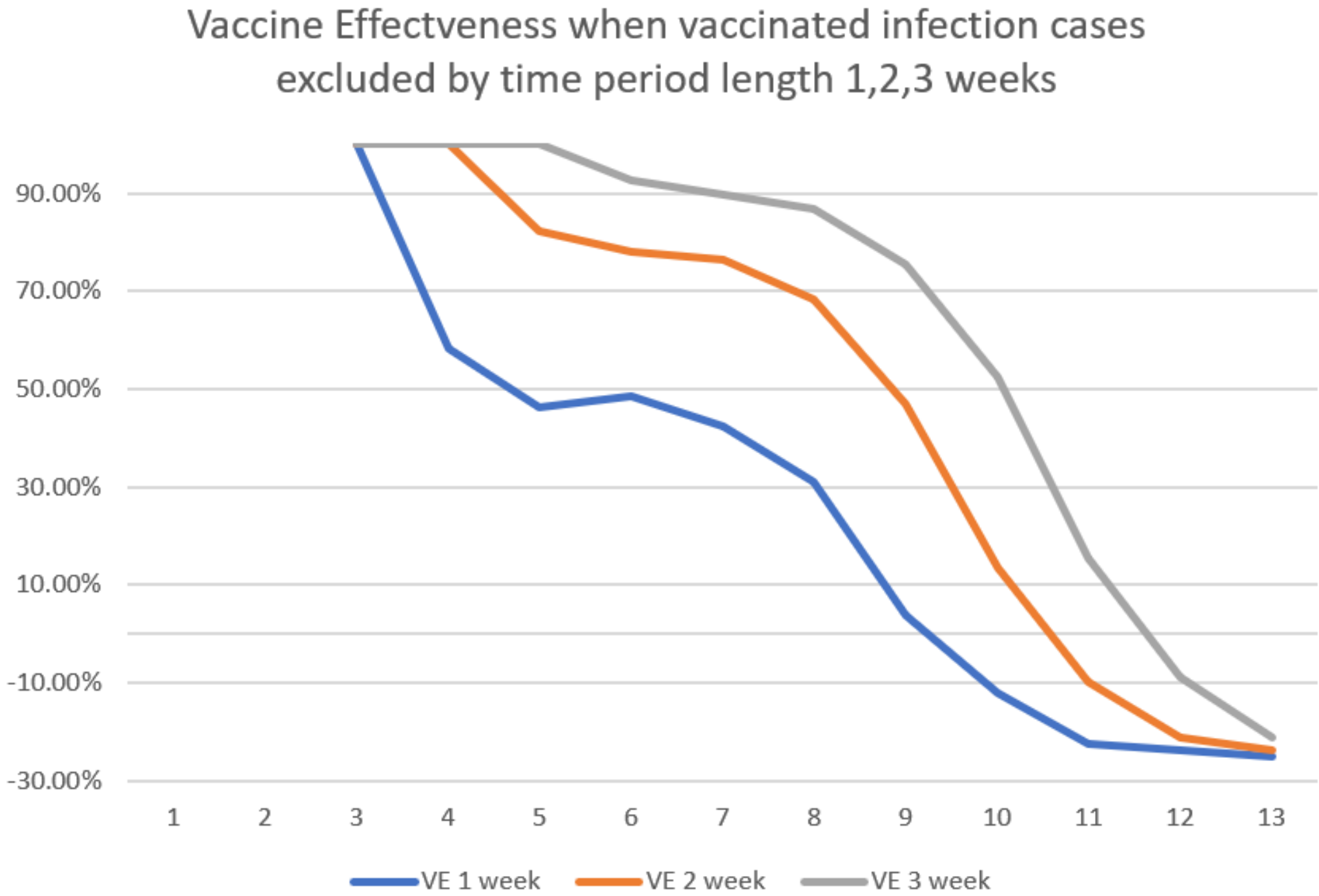

Vaccine Effectveness when vaccinated infection cases excluded by time period length 1,2,3 weeks
100.0%
90.0%
80.0%
70.0%
60.0%
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
1
2
3
4
5
6
7
8
9
10
11
VE 1 week
VE 2 week
VE 3 week

Negative efficacy vaccine

Simulation when the vaccine induces a slightly high rate of infection (1.25%) than those unvaccinated (1%)

Assuming the 21 day delay period




Vaccine Effectveness when vaccinated infection cases excluded by time period length 1,2,3 weeks
90.00%
70.00%
50.00%
30.00%
10.00%
-10.00%
-30.00%
1
2
3
4
5
6
7
8
9
10
11
12
13
VE 1 week
VE 2 week
VE 3 week

The ‘cheap trick’ illusion in practice

ONS definition of who is ‘vaccinated’ for calculating vaccine efficacy

We calculated vaccine effectiveness for different doses (first, second and third dose or booster) and time since dose, to observe how the effectiveness changes over time. The vaccination statuses used were:

- unvaccinated (those with no vaccination or who were vaccinated with a first dose less than 21 days ago)
- first dose (those who were vaccinated with a first dose at least 21 days ago to earliest of less than 91 days after first dose or less than 21 days after second dose)

https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/covid19vaccineeffectivenessestimatedusingcensus2021variablesengland/31march2021to20march2022

https://www.health.nsw.gov.au/Infectious/covid-19/Documents/in-focus/covid-19-vaccination-case-surveillance-051121.pdf

NSW Health

Report

IN FOCUS

Vaccination among COVID-19 cases in the NSW Delta outbreak
Reporting period: 16 June to 7 October 2021

Methods

All individuals with locally-acquired confirmed SARS-CoV-2 infection, reported in the NSW Notifiable Conditions Information Management System (NCIMS) referred to here as 'COVID-19 cases' to 8pm on 7 October 2021 with a disease onset date from 16 June 2021 were extracted.

Vaccination status was initially determined based on what was reported in NCIMS (this information is collected at interview or on case review by the public health response teams). Vaccination data was then enhanced by matching to an extract of vaccination status from the Australian Immunisation Register (AIR). The AIR data was extracted on 7 October 2021 and included all people who were NSW residents and had any record of a COVID-19 vaccine. Individuals from the AIR extract were matched to NCIMS cases using an exact match on first name, last name and date of birth. If there were data on vaccination from both sources, AIR data was used as the source of information for analysis. Where data on vaccination existed in one system only, data from that system was used, if it was sufficiently complete. In the analyses, vaccination status was classified based on the following definitions:

- **None**: Reported as either: a) no vaccine record in NCIMS and unable to link to a record of any COVID-19 vaccination in AIR, or b) interval from receipt of first vaccine dose was too short to be effective (<21 days);
- **One**: One dose of vaccine at least 21 days prior to onset date;
- **Two**: Two doses of vaccine with the second dose at least 14 days prior to diagnosis and a minimum of 14 days between the two doses;
- **Unknown**: Information on vaccination (or vaccination date) unknown in NCIMS and unable to link to an AIR record of COVID-19 vaccination.

For analyses of rates of infections (described below) the group who had received one dose of vaccine, but the interval from vaccine receipt to case diagnosis was too short to be effective (<21 days), were classified separately from those not vaccinated.

The rate of infections amongst vaccinated and unvaccinated populations was estimated in fortnightly intervals since the outbreak began (to 30 June, 14 July, 28 July, 11 August, 25 August, 8 September, 22 September and 6 October) and by age group. For this estimate, the population was restricted to those aged 12 years and older and resident in the Greater Sydney region based on Statistical Local Area. Vaccination coverage data were extracted at the median date in each fortnightly interval. Rates of infection in the unvaccinated population were estimated by dividing the number of confirmed cases who had not received a COVID-19 vaccine, or who had unknown vaccination status, by the number of individuals in AIR reported with no doses in each interval. People with unknown vaccination status were included in the no vaccine category following a detailed review of the AIR records of a sample (see below). Rates of infection in those with 2 doses of COVID-19 vaccine were estimated in a similar manner although taking into account a 14-day interval since receipt of dose 2 of the vaccine for it to be effective.

To determine the presence of comorbidities or residence in aged care among COVID-19 cases who were admitted to ICU or died and had two doses of vaccine, health records were manually reviewed.

The extent and impact of vaccine status miscategorisation on covid-19 vaccine efficacy studies

Martin Neil, Norman Fenton, Scott McLachlan

doi: https://doi.org/10.1101/2024.03.09.24304015

Abstract

It is recognised that many studies reporting high efficacy for Covid-19 vaccines suffer from various selection biases. Systematic review identified thirty-eight studies that suffered from one particular and serious form of bias called miscategorisation bias, whereby study participants who have been vaccinated are categorised as unvaccinated up to and until some arbitrarily defined time after vaccination occurred. Simulation demonstrates that this miscategorisation bias artificially boosts vaccine efficacy and infection rates even when a vaccine has zero or negative efficacy. Furthermore, simulation demonstrates that repeated boosters, given every few months, are needed to maintain this misleading impression of efficacy. Given this, any claims of Covid-19 vaccine efficacy based on these studies are likely to be a statistical illusion.

https://doi.org/10.1101/2024.03.09.24304015

Systematic Review

Searched the 2 main literature Databases: PubMed and Scopus

Initial search returned over 2200 of which nearly 500 were duplicates.

Removed duplicates and looked at abstracts to see whether the paper described a novel trial

Only 34 presented a relevant novel study of vaccine efficacy or safety

A further 4 papers were identified through citation mining of included papers

These 38 include all the key well cited studies

Findings

Every one of the 38 papers involved the miscategorisation selection bias (delay of at least 7 days).

Also found other categories of selection bias:

- **Excluded**: Participants who are vaccinated but who become infected or died during the arbitrarily defined period are neither categorised as unvaccinated or vaccinated but are instead simply removed from analysis
- **Unverified**: Participants whose vaccination status is unknown or unverified are categorised as unvaccinated
- **Uncontrolled**: Participants are allowed to self-administer or self-report their vaccination or infection status, became unblinded or sought vaccination outside the study
- **Undefined**: The authors of the study fail to provide definitions for either or both vaccinated and unvaccinated cohorts

Research studies containing miscategorisation selection bias

Citation	(a)	(b)	(c)	(d)	(e)	Defined Period
Dagan et al (2021)	X					14 days
Haas et al (2021)	X					7 days
Rosenberg et al (2021)	X	X				14 days
Thomas et al (2021)	X					7 days
Angel et al (2021)	X		X			7 days
NSW Health (2021)	X	X				14 days
Ali et al (2021)	X					14 days
Pilishvili et al (2021)	X		X			14 days / 7 days
Andrews et al (2022)	X					28 days
Buam et al (2022)	X					21 days / 14 days
Buchan et al (2022)	X					7 days
Carazo et al (2022)	X					14 days
Chung et al (2022)	X					7 days
Palinkas et al (2022)	X					7 days
Ferdinands et al (2022)	X	X		X		14 days
Lyngse et al (2022)	X					7-15 days
Lyngse et al (2022b)	X	X				7-15 days
Nordstrom et al (2022)	X			X	X	14 days
Petras et al (2022)	X					14 days
Robles-Fontan et al (2022)	X					14 days
Arbel et al (2022)	X					7 days
Paternina et al (2022)	X					14 days
Stock et al (2022)	X					21 days / 14 days
Bermingham et al (2023)	X					21 days
Yau et al (2023)	X					Until fully vaccinated
Mitchell et al (2023)	X					14 days
Tan et al (2023)	X					7 days
Al Kaabi et al (2023)	X					14 days
Tabarsi et al (2023)	X		X	X		14 days
Heath et al (2023)	X		X			7 days
Nadeem et al (2023)	X					14 days
Anez et al (2023)	X					7 days
Munoz et al (2023)	X					7 days
Wu et al (2023)	X		X			28 days
Bermingham et al (2023b)	X				X	21 days
Liu et al (2023)	X					7 days
Kitano et al (2023)	X					7 days / 14 days
Polack et al (2020)	X			X		7 days
Khairullin et al (2022)	X					14 days
	39	4	5	4	2	

nature communications

Article | Open Access | Published: 30 September 2022

Household transmission of SARS-CoV-2 Omicron variant of concern subvariants BA.1 and BA.2 in Denmark

Frederik Plesner Lyngse, Carsten Thure Kirkeby, Matthew Denwood, Lasse Engbo Christiansen, Kåre Mølbak, Camilla Holten Møller, Robert Leo Skov, Tyra Grove Krause, Morten Rasmussen, Raphael Niklaus Sieber, Thor Bech Johannesen, Troels Lillebaek, Jannik Fonager, Anders Fomsgaard, Frederik Trier Møller, Marc Stegger, Maria Overvad, Katja Spiess & Laust Hvas Mortensen

Nat

730

[a]Unvaccinated includes individuals with partial vaccination (24 primary cases and 18 contacts). [b]Fully vaccinated includes unvaccinated individuals with previous infection.

Abstract

SARS coronavirus 2 (SARS-CoV-2) continues to evolve and new variants emerge. Using nationwide Danish data, we estimate the transmission dynamics of SARS-CoV-2 Omicron subvariants BA.1 and BA.2 within households. Among 22,678 primary cases, we identified 17,319 secondary infections among 50,588 household contacts during a 1–7 day follow-up. The secondary attack rate (SAR) was 29% and 39% in households infected with Omicron BA.1 and BA.2, respectively. BA.2 was associated with increased susceptibility of infection for unvaccinated household contacts (Odds Ratio (OR) 1.99; 95%−CI 1.72-2.31), fully vaccinated contacts (OR 2.26; 95%−CI 1.95–2.62) and booster-vaccinated contacts (OR 2.65; 95%−CI 2.29–3.08), compared to BA.1. We also found increased infectiousness from unvaccinated primary cases infected with BA.2 compared to BA.1 (OR 2.47; 95%−CI 2.15–2.84), but not for fully vaccinated (OR 0.66; 95%−CI 0.57–0.78) or booster-vaccinated primary cases (OR 0.69; 95%−CI 0.59–0.82). Omicron BA.2 is inherently more transmissible than BA.1. Its immune-evasive properties also reduce the protective effect of vaccination against infection, but do not increase infectiousness of breakthrough infections from vaccinated individuals.

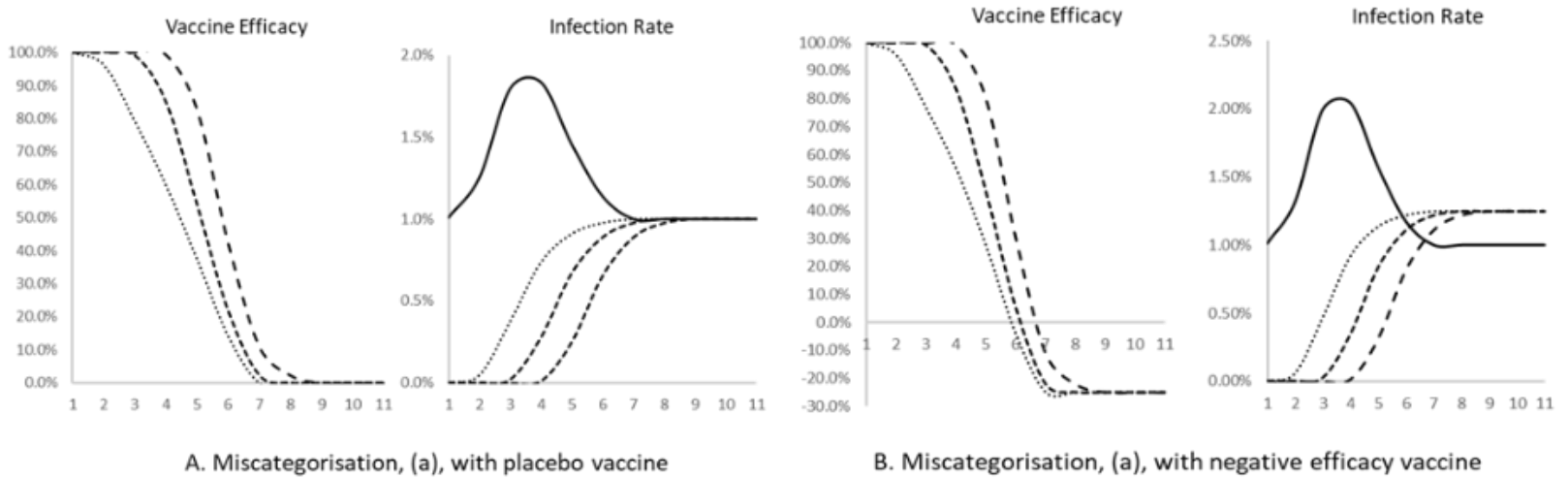
Table 1 Summary Statistics (primary cases and contacts reported separately)

From: Household transmission of SARS-CoV-2 Omicron variant of concern subvariants BA.1 and BA.2 in Denmark

	Omicron - BA.2				Omicron - BA.1			
	Primary cases	Household contacts	Secondary cases	SAR (%)	Primary cases	Household contacts	Secondary cases	SAR (%)
Total	11,348	25,859	10,102	39	11,330	24,729	7217	29
Sex								
Male	5504	13,040	4778	37	5487	12,450	3454	28
Female	5844	12,819	5324	42	5843	12,279	3763	31
Age								
0–9 years	2018	4922	1946	40	1123	4619	1457	32
								27
								29
								42
								27
								21
60–69 years	477	864	296	34	520	913	230	25
70+ years	279	414	144	35	300	439	122	28
Household size								
2 persons	3675	3675	1529	42	4087	4087	1278	31
3 persons	2674	5348	1961	37	2756	5512	1491	27
4 persons	3438	10,314	4180	41	3053	9159	2830	31
5 persons	1283		1975	38	1199	4796	1329	28
6 persons	278	1390	457	33	235	1175	289	25
Vaccination status								
Unvaccinated[a]	3285	6837	2839	42	2497	6683	2240	34
Fully vaccinated[b]	4667	7975	3293	41	5844	9458	2949	31
Booster vaccinated	3396	11,047	3970	36	2989	8588	2028	24

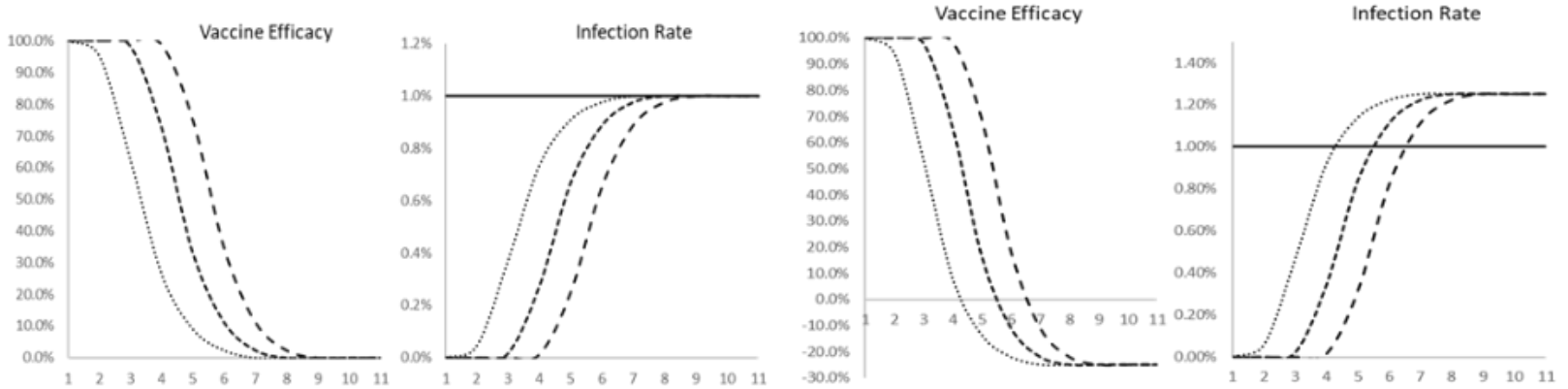
[a]Unvaccinated includes individuals with partial vaccination (24 primary cases and 18 contacts). [b]Fully vaccinated includes unvaccinated individuals with previous infection.

Simulations in our paper



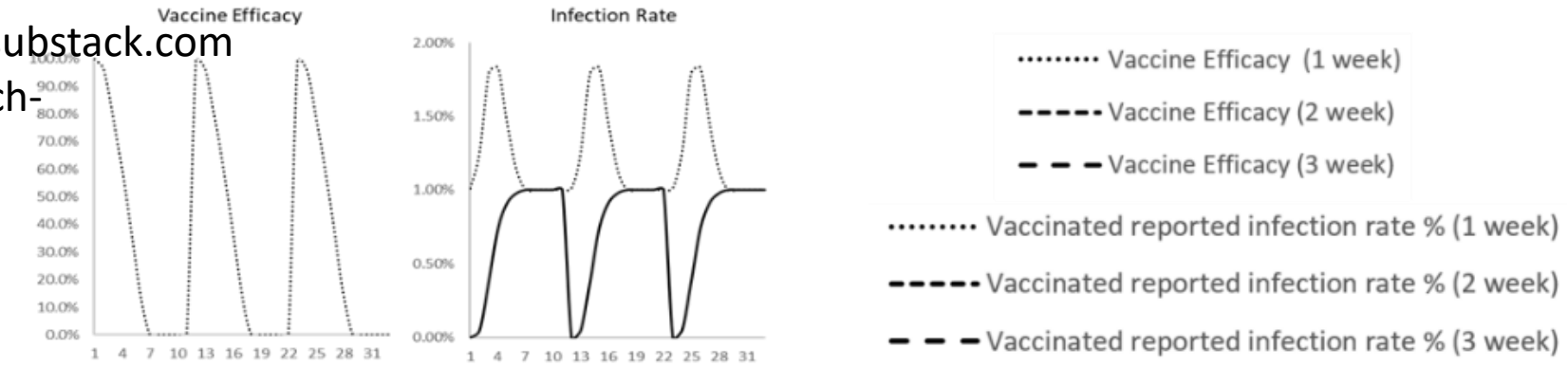
A. Miscategorisation, (a), with placebo vaccine

B. Miscategorisation, (a), with negative efficacy vaccine



C. Exclusion, (c), with placebo vaccine

D. Exclusion, (c), with negative efficacy vaccine

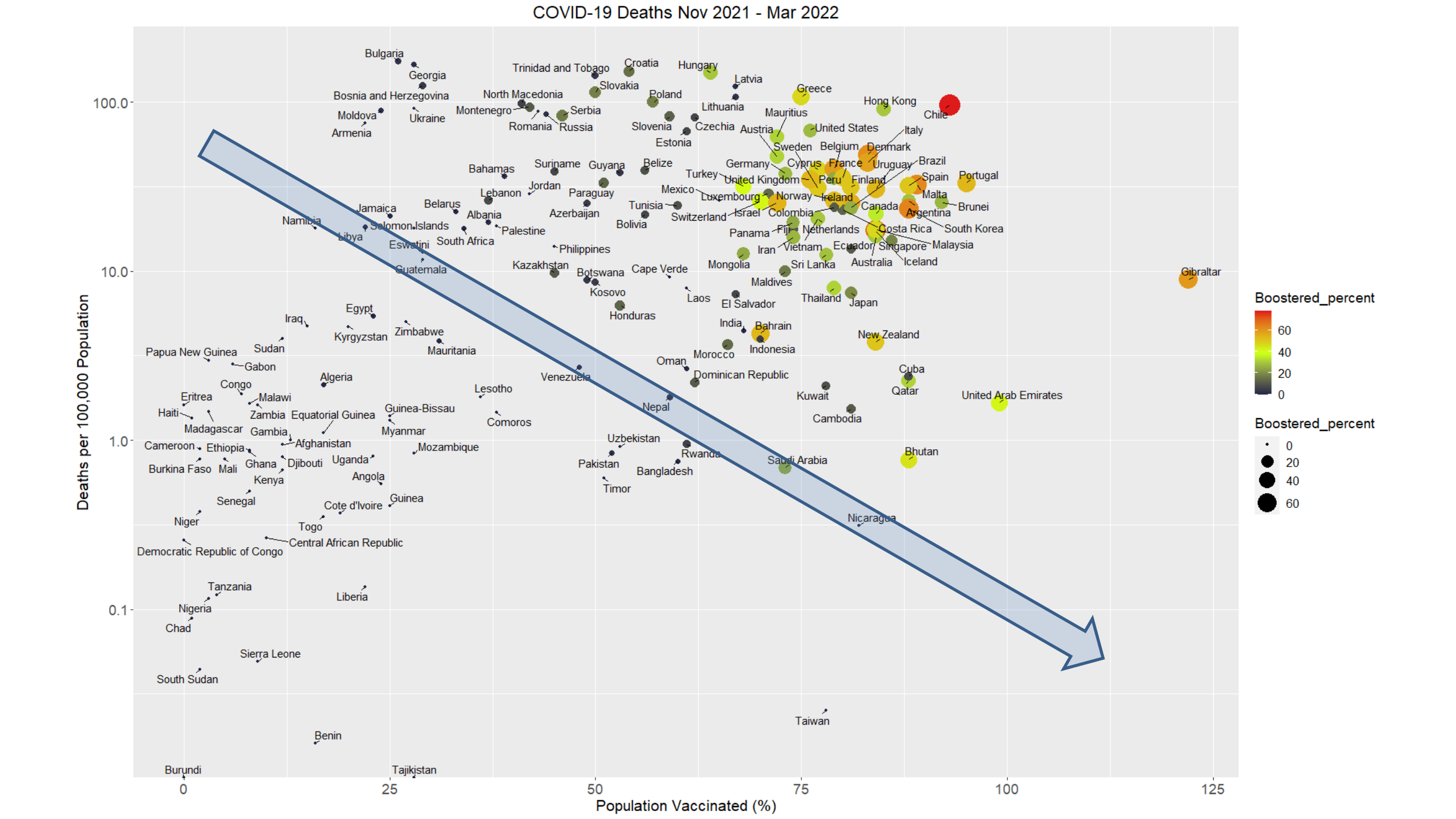


E. Boosting with miscategorisation, (a), with placebo vaccine

All available for download:

https://wherearethenumbers.substack.com/p/is-the-censorship-of-research-questioning

The failure of the vaccine and other interventions


COVID-19 Deaths Nov 2021 - Mar 2022
Deaths per 100,000 Population
Population Vaccinated (%)
100.0
10.0
1.0
0.1
0
25
50
75
100
125
Boostered_percent
60
40
20
0
Boostered_percent
0
20
40
60
Bulgaria
Georgia
Bosnia and Herzegovina
Moldova
Ukraine
Armenia
Trinidad and Tobago
Croatia
Hungary
Slovakia
Poland
Latvia
Greece
North Macedonia
Montenegro
Serbia
Romania
Russia
Lithuania
Hong Kong
Chile
Mauritius
Slovenia
Czechia
Estonia
Austria
United States
Italy
Sweden
Belgium
Denmark
Germany
Cyprus
France
Uruguay
Brazil
Bahamas
Suriname
Guyana
Belize
Turkey
United Kingdom
Peru
Finland
Spain
Portugal
Lebanon
Jordan
Paraguay
Mexico
Luxembourg
Norway
Ireland
Malta
Jamaica
Belarus
Albania
Azerbaijan
Tunisia
Switzerland
Israel
Colombia
Canada
Argentina
Brunei
Namibia
Solomon Islands
Libya
Palestine
Bolivia
Panama
Fiji
Netherlands
Costa Rica
South Korea
Eswatini
South Africa
Philippines
Iran
Vietnam
Ecuador
Singapore
Malaysia
Kazakhstan
Guatemala
Botswana
Cape Verde
Mongolia
Sri Lanka
Australia
Iceland
Maldives
Gibraltar
Kosovo
Laos
El Salvador
Thailand
Japan
Honduras
Egypt
Iraq
Kyrgyzstan
Zimbabwe
India
Bahrain
New Zealand
Papua New Guinea
Sudan
Mauritania
Indonesia
Morocco
Oman
Gabon
Venezuela
Dominican Republic
Cuba
Algeria
Qatar
Congo
Lesotho
Kuwait
United Arab Emirates
Eritrea
Malawi
Nepal
Haiti
Zambia
Equatorial Guinea
Guinea-Bissau
Cambodia
Comoros
Madagascar
Gambia
Myanmar
Uzbekistan
Cameroon
Ethiopia
Afghanistan
Mozambique
Rwanda
Bhutan
Pakistan
Saudi Arabia
Burkina Faso
Mali
Ghana
Djibouti
Uganda
Bangladesh
Kenya
Angola
Timor
Senegal
Guinea
Cote d'Ivoire
Nicaragua
Niger
Togo
Central African Republic
Democratic Republic of Congo
Tanzania
Liberia
Nigeria
Chad
Sierra Leone
South Sudan
Taiwan
Benin
Burundi
Tajikistan

Journal of
Clinical Medicine

MDPI

Article

Influence of Seasonality and Public-Health Interventions on the COVID-19 Pandemic in Northern Europe

Gerry A. Quinn [1,*], Michael Connolly [2], Norman E. Fenton [3], Steven J. Hatfill [4], Paul Hynds [5,6], Coilín ÓhAiseadha [5,7], Karol Sikora [8], Willie Soon [9,10] and Ronan Connolly [2,10]

1 Centre for Molecular Biosciences, Ulster University, Coleraine BT52 1SA, UK
2 Independent Researcher, D08 Dublin, Ireland
3 School of Electronic Engineering and Computer Science, Queen Mary University of London, London E1 4NS, UK
4 London Center for Policy Research, New York, NY 10004, USA
5 Spatiotemporal Environmental Epidemiology Research (STEER) Group, Environmental Sustainability & Health Institute, Technological University Dublin, D07 H6K8 Dublin, Ireland
6 Irish Centre for Research in Applied Geoscience, University College Dublin, D04 F438 Dublin, Ireland
7 Department of Public Health, Health Service Executive, Dr Steevens' Hospital, D08 W2A8 Dublin, Ireland
8 Department of Medicine, University of Buckingham Medical School, Buckingham MK18 1EG, UK
9 Institute of Earth Physics and Space Science (ELKH EPSS), H-9400 Sopron, Hungary
10 Center for Environmental Research and Earth Sciences (CERES), Salem, MA 01970, USA
* Correspondence: g.quinn@ulster.ac.uk

Abstract: Background: Most government efforts to control the COVID-19 pandemic revolved around non-pharmaceutical interventions (NPIs) and vaccination. However, many respiratory diseases show distinctive seasonal trends. In this manuscript, we examined the contribution of these three factors to the progression of the COVID-19 pandemic. Methods: Pearson correlation coefficients and time-lagged analysis were used to examine the relationship between NPIs, vaccinations and seasonality (using the average incidence of endemic human beta-coronaviruses in Sweden over a 10-year period as a proxy) and the progression of the COVID-19 pandemic as tracked by deaths; cases; hospitalisations; intensive care unit occupancy and testing positivity rates in six Northern European countries (population 99.12 million) using a population-based, observational, ecological study method. Findings: The waves of the pandemic correlated well with the seasonality of human beta-coronaviruses (HCoV-OC-43 and HCoV-HKU-1). In contrast, we could not find clear or consistent evidence that the stringency of NPIs or vaccination reduced the progression of the pandemic. However, these results are correlations and not causations. Implications: We hypothesise that the apparent influence of NPIs and vaccines might instead be an effect of coronavirus seasonality. We suggest that policymakers consider these results when assessing policy options for future pandemics. Limitations: The study is limited to six temperate Northern European countries with spatial and temporal variations in metrics used to track the progression of the COVID-19 pandemic. Caution should be exercised when extrapolating these findings.

Keywords: COVID-19 pandemic; seasonal variation; public health; vaccination; epidemiology; Northern Europe

Citation: Quinn, G.A.; Connolly, M.; Fenton, N.E.; Hatfill, S.J.; Hynds, P.; ÓhAiseadha, C.; Sikora, K.; Soon, W.; Connolly, R. Influence of Seasonality and Public-Health Interventions on the COVID-19 Pandemic in Northern Europe. *J. Clin. Med.* **2024**, *13*, 334. https://doi.org/10.3390/jcm13020334

Academic Editor: Davide Alberto Chiumello

Received: 16 November 2023
Revised: 22 December 2023
Accepted: 3 January 2024
Published: 6 January 2024

Table 1. Influence on progression of pandemic in terms of lagged deaths.

Northern European Countries	NPIs	Vaccination	Seasonality
Ireland	x	x	✓
UK	x	x	✓
Sweden	x	x	✓
Denmark	x	x	✓
Finland	x	x	✓
Norway	x	x	✓

✓ in green background indicates that a clear, consistent and physically plausible influence of the factor on the progression of the pandemic was identified for this country while x in red background indicates that an influence was not identified for this country.

Table 2. Influence on progression of pandemic in terms of cases.

Northern European Countries	NPIs	Vaccination	Seasonality
Ireland	x	x	✓
UK	x	x	✓
Sweden	x	x	✓
Denmark	x	x	✓
Finland	x	x	✓
Norway	x	x	✓

✓ in green background indicates that a clear, consistent and physically plausible influence of the factor on the progression of the pandemic was identified for this country while x in red background indicates that an influence was not identified for this country.

Conclusions and Recommendations

None of the ‘official data’ on covid ‘cases’, ‘hospitalisations’ and ‘deaths’ can be trusted. Much of it was geared towards framing a narrative of the need for a vaccine

All of the published empirical studies claiming vaccine efficacy and safety suffer from one or more types of misclassification bias

This type of misclassification will inevitably show even a useless vaccine as highly effective in the early weeks of a vaccine roll-out

Hence even if there were some genuine efficacy in the vaccines, the results claimed in the studies would be massively exaggerated.

Overwhelming anecdotal evidence from our everyday lives indicates that the vaccines were not effective.

Since, increasingly, unbiased evidence is showing that all-cause mortality in the vaccinated may well be higher than the unvaccinated in each age group, **we recommend that any further rollout of the covid vaccines should be terminated**

For more information

NormanFenton.com
twitter.com/profnfenton
wherearethenumbers.substack.com
youtube.com/@NormanFenton81