NATIONAL CITIZENS INQUIRY

Ottawa

17 May 2023

DENIS RANCOURT, PHD

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https://doi.org/10.5281/zenodo.22821173

When I review scientific articles, in particular, in relation to COVID-19, my personal knowledge and ability to evaluate the facts in the said scientific articles are grounded in my education, research, training and experience, as follows:

i. *Regarding environmental nanoparticles.* Viral respiratory diseases are transmitted by the smallest size-fraction of virion-laden aerosol particles, which are reactive environmental nanoparticles. Therefore, the chemical and physical stabilities and transport properties of these aerosol particles are the foundation of the dominant contagion mechanism through air. My extensive work on reactive environmental nanoparticles is internationally recognized, and includes: precipitation and growth, surface reactivity, agglomeration, surface charging, phase transformation, settling and sedimentation, and reactive dissolution. In addition, I have taught the relevant fluid dynamics (air is a compressible fluid), and gravitational settling at the university level, and I have done industrial-application research on the technology of filtration (face masks are filters).

ii. *Regarding molecular science, molecular dynamics, and surface complexation.* I am an expert in molecular structures, reactions, and dynamics, including molecular complexation to biotic and abiotic surfaces. These processes are the basis of viral attachment, antigen attachment, molecular replication, attachment to mask fibers, particle charging, loss and growth in aerosol particles, and all such phenomena involved in viral transmission and infection, and in protection measures. I taught quantum mechanics at the advanced university level for many years, which is the fundamental theory of atoms, molecules and substances; and in my published research I developed X-ray diffraction theory and methodology for characterizing small material particles.

iii. *Regarding statistical analysis methods.* Statistical analysis of scientific studies, including robust error propagation analysis and robust estimates of bias, sets the limit of what reliably can be inferred from any observational study, including randomized controlled trials in medicine, and including field measurements during epidemics. I am an expert in error analysis and statistical analysis of complex data, at the research level in many areas of science. Statistical analysis methods are the basis of medical research.

iv. *Regarding mathematical modelling.* Much of epidemiology is based on mathematical models of disease transmission and evolution in the population. I have research-level knowledge and experience with predictive and exploratory mathematical models and simulation methods. I have expert knowledge related to parameter uncertainties and parameter dependencies in such models. For example, my 2006 co-authored model of biogeochemical cycling of nutrients in lakes is highly cited (from my laboratory, lead researcher). I have recently made extensive simulations of epidemiological dynamics, using standard compartmental models and new models.

v. *Regarding measurement methods.* In science there are five main categories of measurement methods: (1) spectroscopy (including nuclear, electronic and vibrational spectroscopies), (2) imaging (including optical and electron microscopies, and resonance imaging), (3) diffraction (including X-ray and neutron diffractions, used to elaborate molecular, defect and magnetic structures), (4) transport measurements (including reaction rates, energy transfers, and conductivities), and (5) physical property measurements (including specific density, thermal capacities, stress response, material fatigue…). I have taught these measurement methods in an interdisciplinary graduate course that I developed and gave to graduate (M.Sc. and Ph.D.) students of physics, biology, chemistry, geology, and engineering for many years. I have made fundamental discoveries and advances in areas of spectroscopy, diffraction, magnetometry, and microscopy, which have been published in leading scientific journals and presented at international conferences. I know measurement science, the basis of all sciences, at the highest level.

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- Jérémie Mercier, PhD
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- Christian Linard, PhD

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NATIONAL CITIZENS INQUIRY

COMMISSION D'ENQUÊTE NATIONALE CITOYENNE

BOOK OF EXHIBITS OF EXPERT WITNESS DENIS RANCOURT, PHD

April 25, 2023

Denis Rancourt, PhD
https://denisrancourt.ca/

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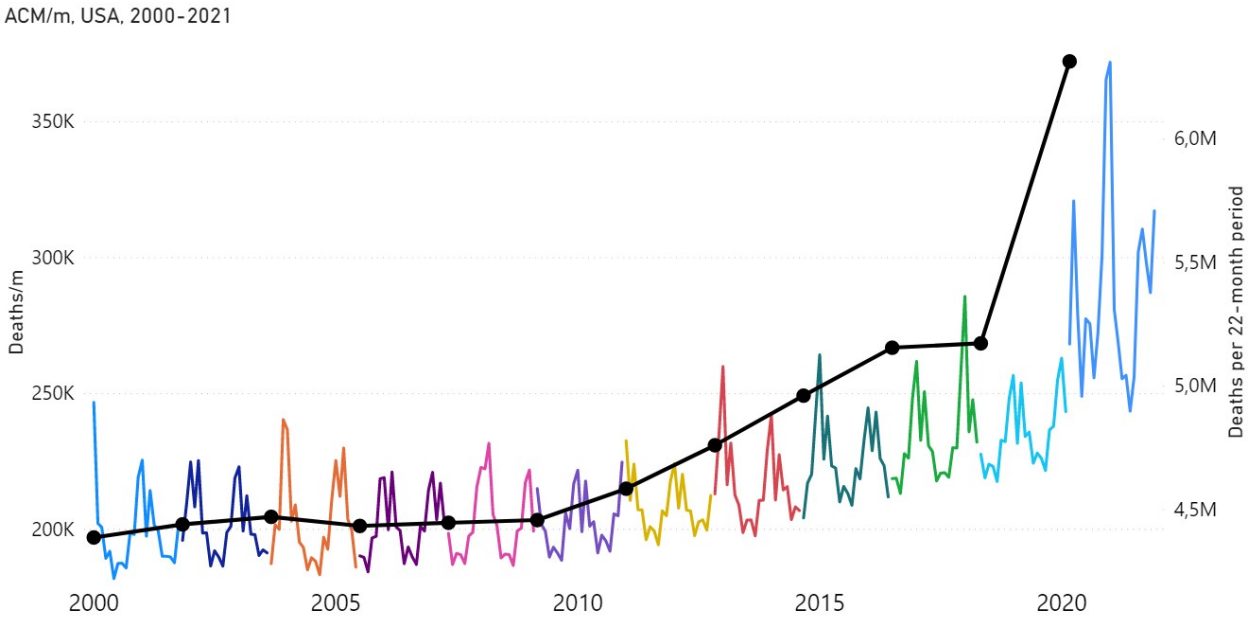
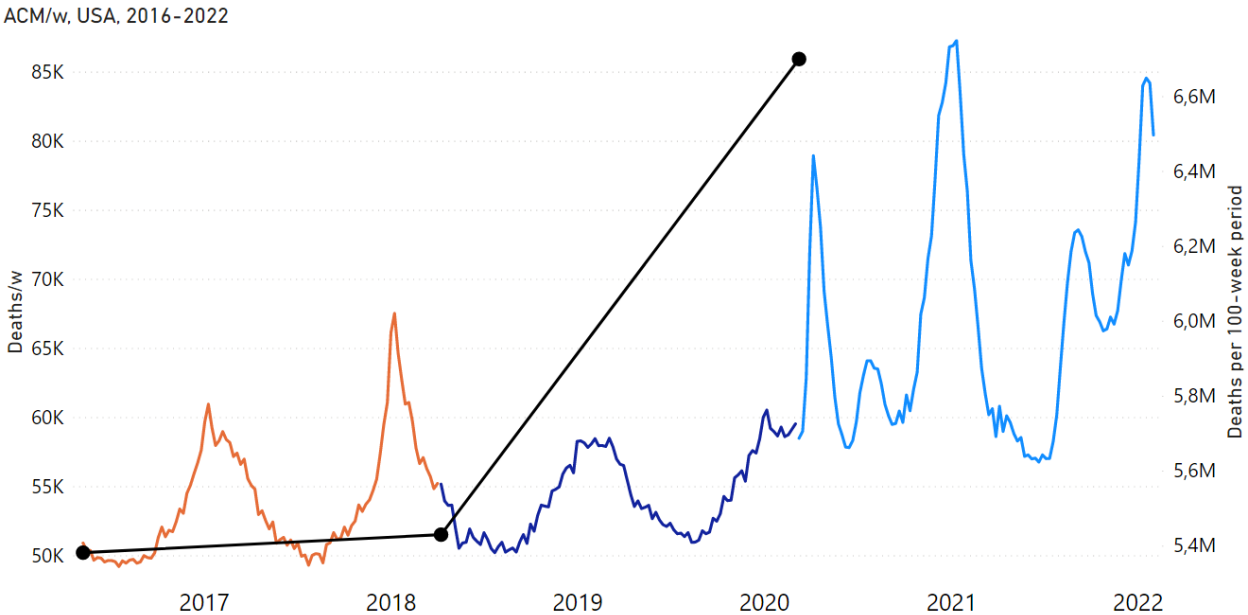
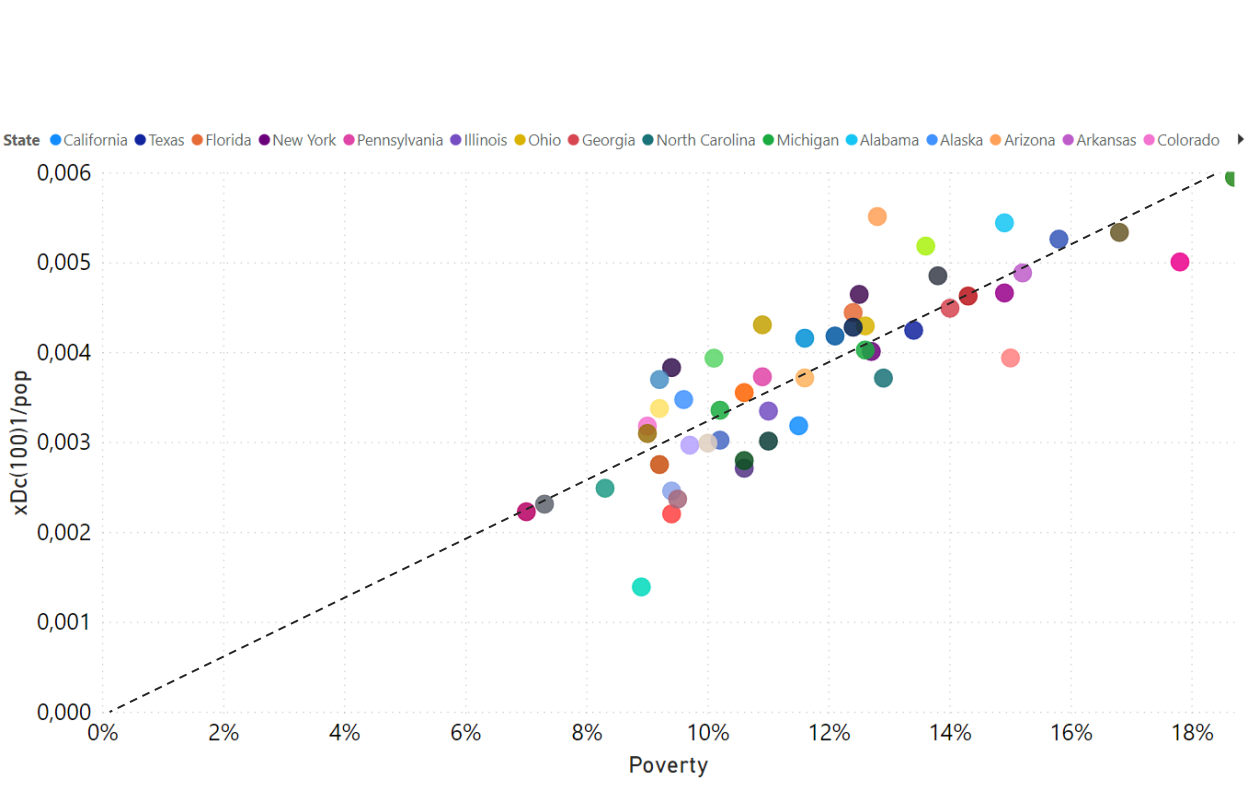
NCI NATIONAL CITIZENS INQUIRY
CANADA'S RESPONSE TO COVID-19

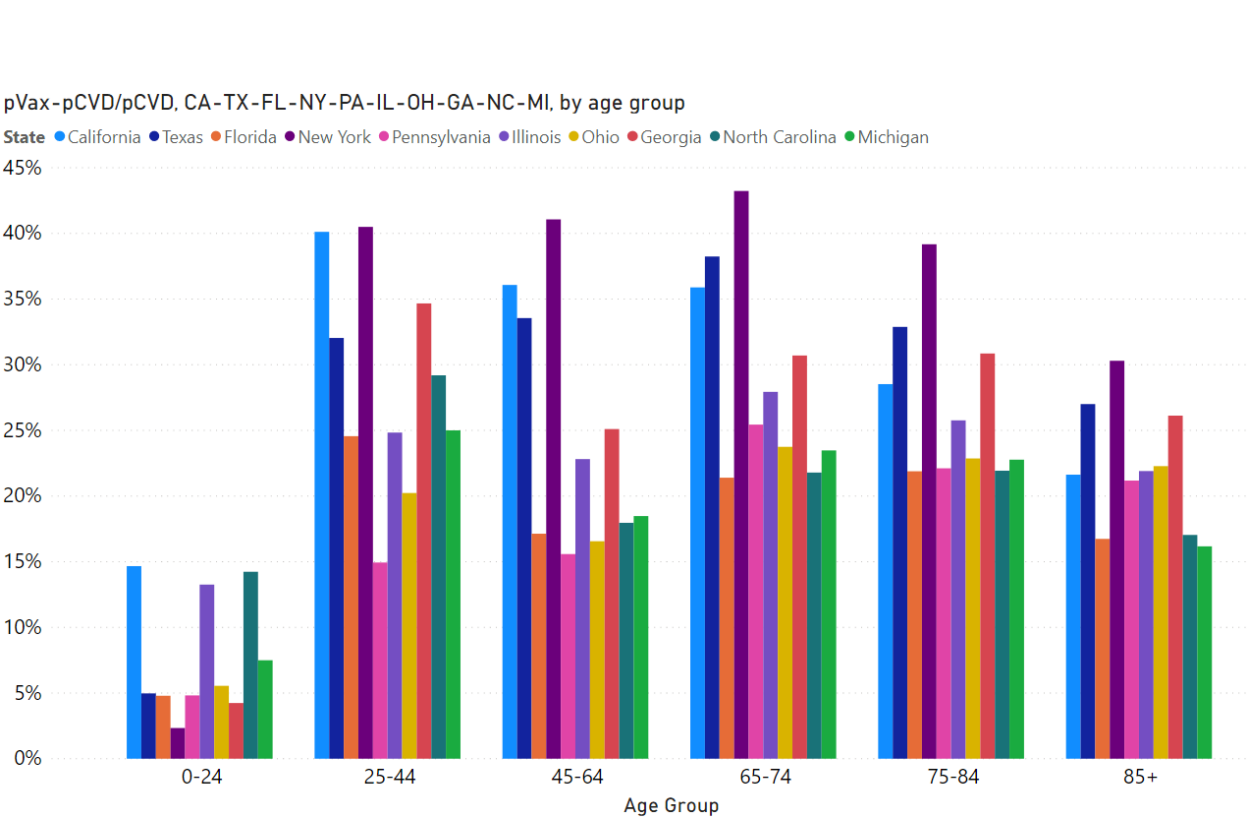
Study of all-cause mortality shows that:

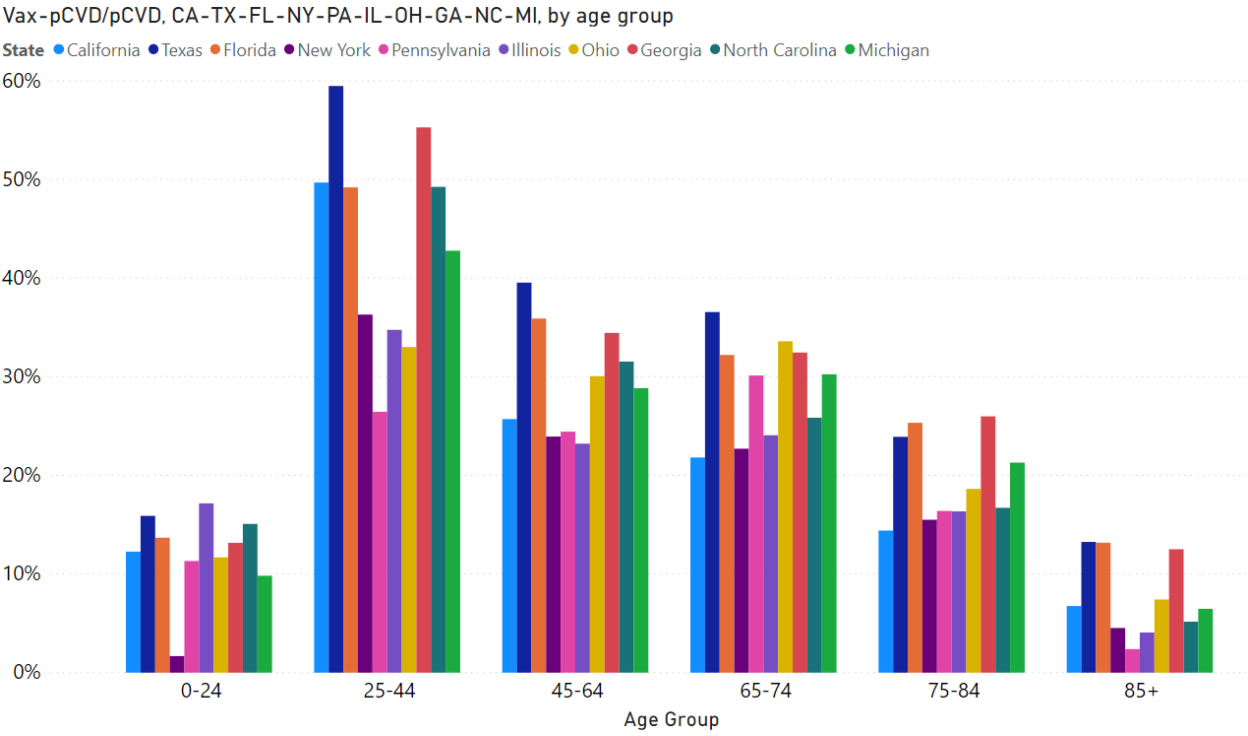
- there was no pandemic causing excess mortality
- measures caused excess mortality
- COVID-19 vaccination caused excess mortality

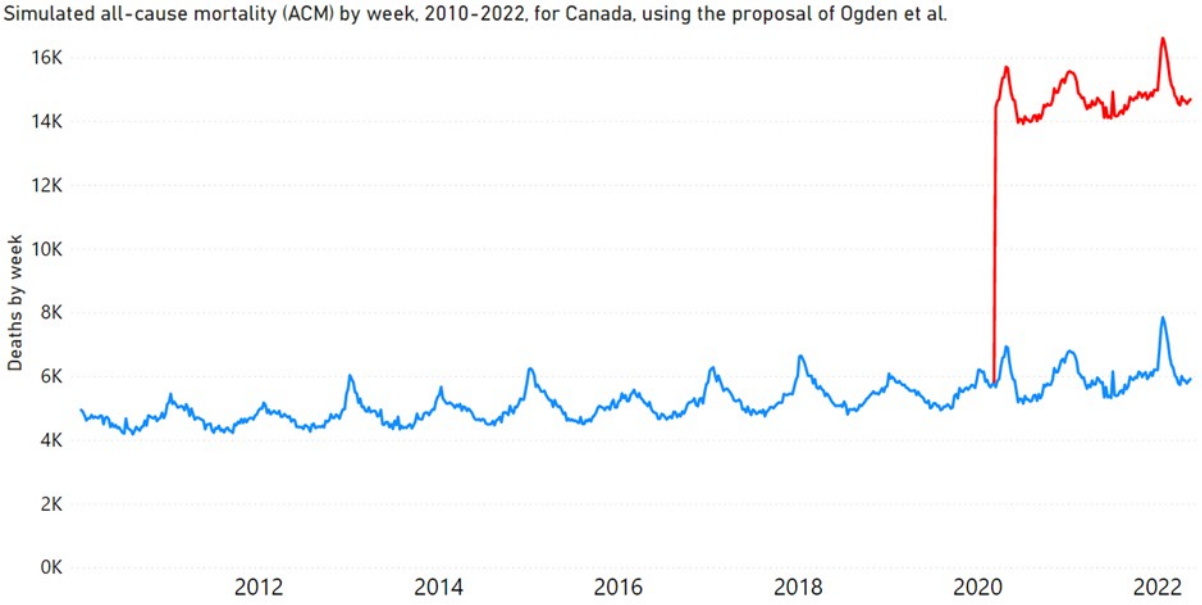

ACM/m, USA, 2000-2021
350K
300K
250K
200K
Deaths/m
6,0M
5,5M
5,0M
4,5M
Deaths per 22-month period
2000
2005
2010
2015
2020

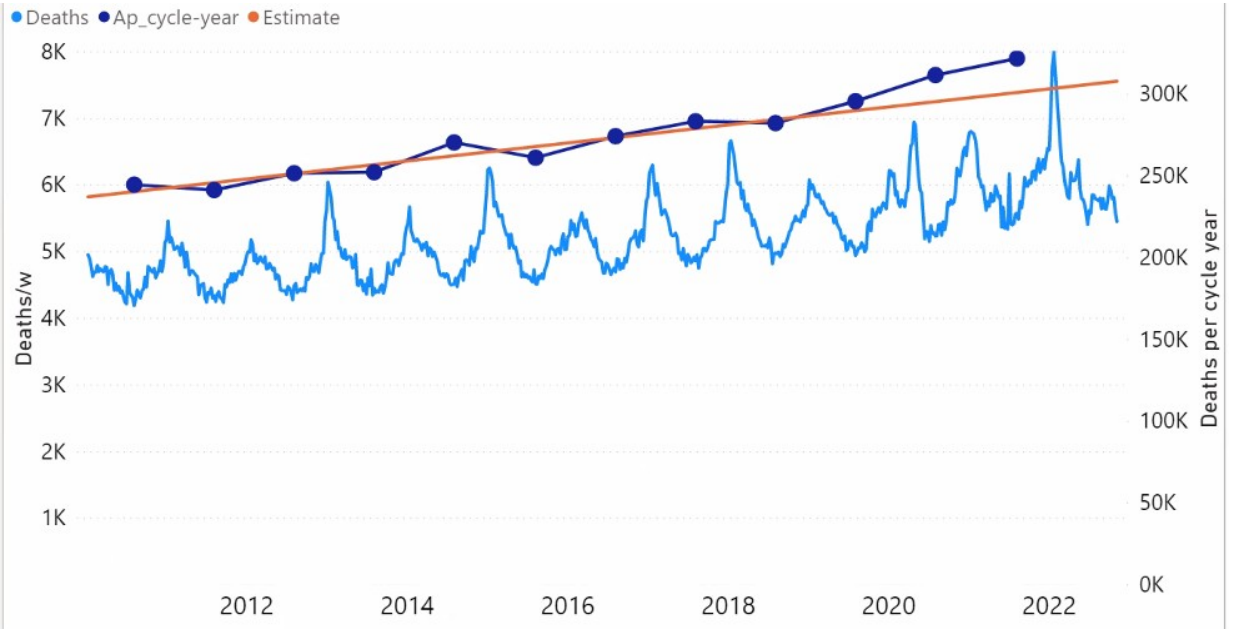

ACM/w, USA, 2016-2022
85K
80K
75K
70K
65K
60K
55K
50K
Deaths/w
6,6M
6,4M
6,2M
6,0M
5,8M
5,6M
5,4M
Deaths per 100-week period
2017
2018
2019
2020
2021
2022

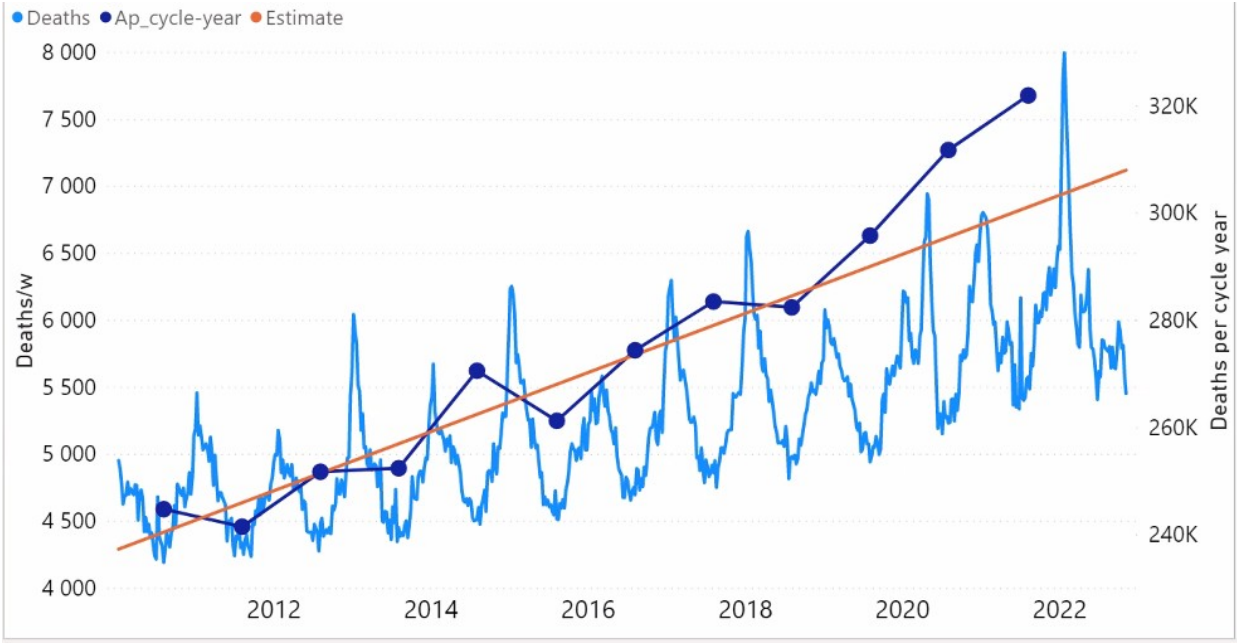

State
California
Texas
Florida
New York
Pennsylvania
Illinois
Ohio
Georgia
North Carolina
Michigan
Alabama
Alaska
Arizona
Arkansas
Colorado
0,006
0,005
0,004
0,003
0,002
0,001
0,000
xDc(100)1/pop
0%
2%
4%
6%
8%
10%
12%
14%
16%
18%
Poverty

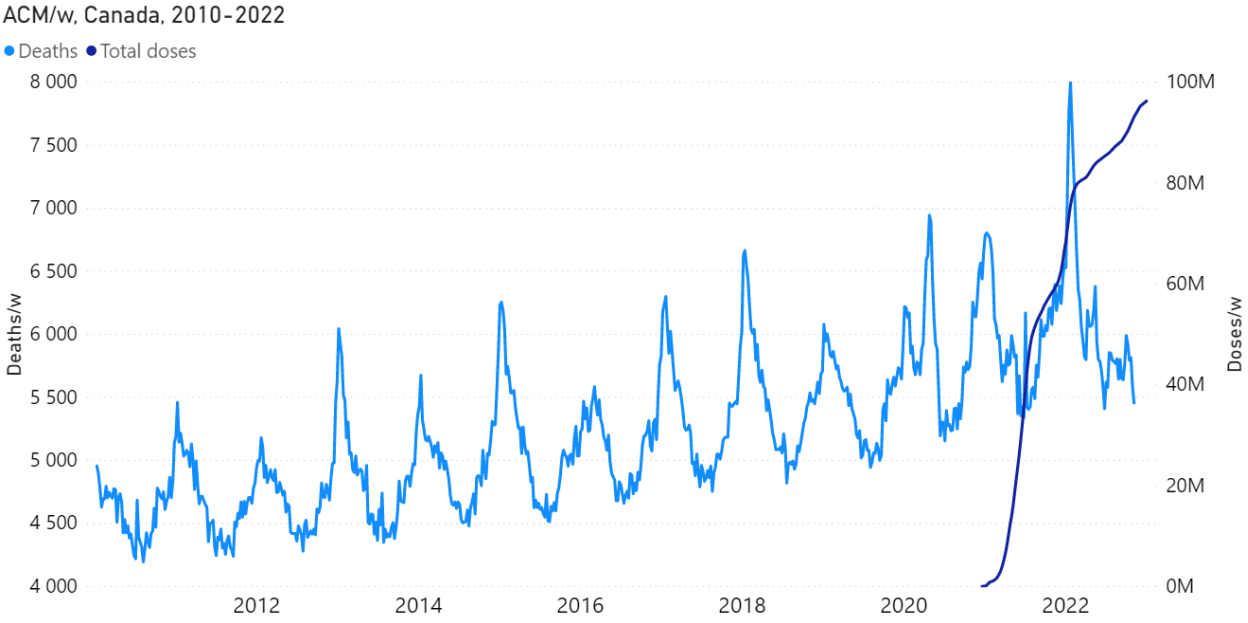

pVax-pCVD/pCVD, CA-TX-FL-NY-PA-IL-OH-GA-NC-MI, by age group
State
California
Texas
Florida
New York
Pennsylvania
Illinois
Ohio
Georgia
North Carolina
Michigan
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
0-24
25-44
45-64
65-74
75-84
85+
Age Group

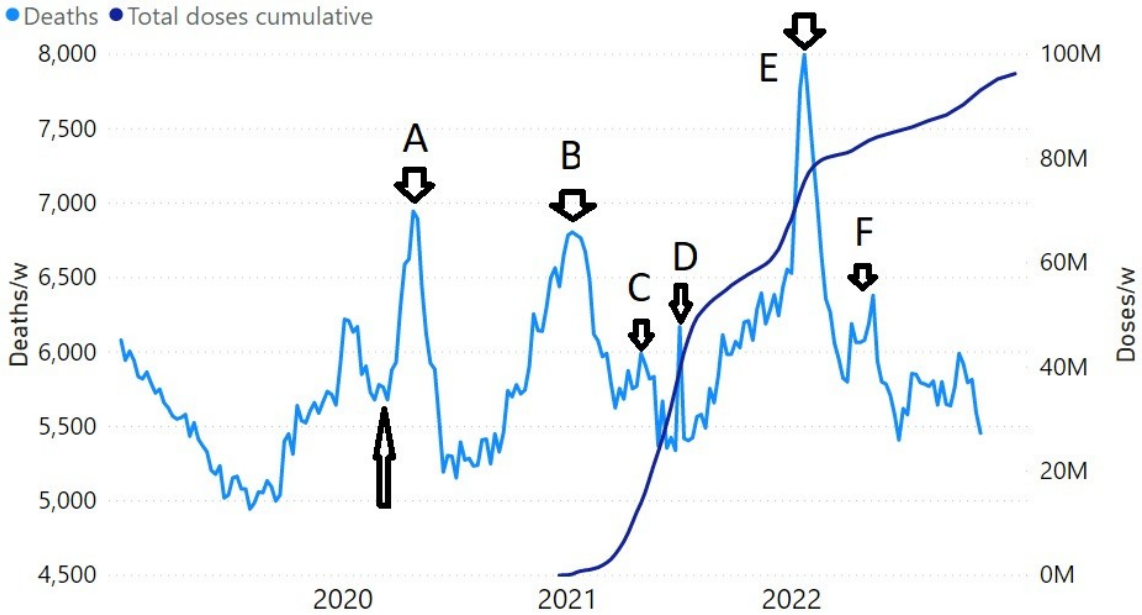

Vax-pCVD/pCVD, CA-TX-FL-NY-PA-IL-OH-GA-NC-MI, by age group
State
California
Texas
Florida
New York
Pennsylvania
Illinois
Ohio
Georgia
North Carolina
Michigan
60%
50%
40%
30%
20%
10%
0%
0-24
25-44
45-64
65-74
75-84
85+
Age Group

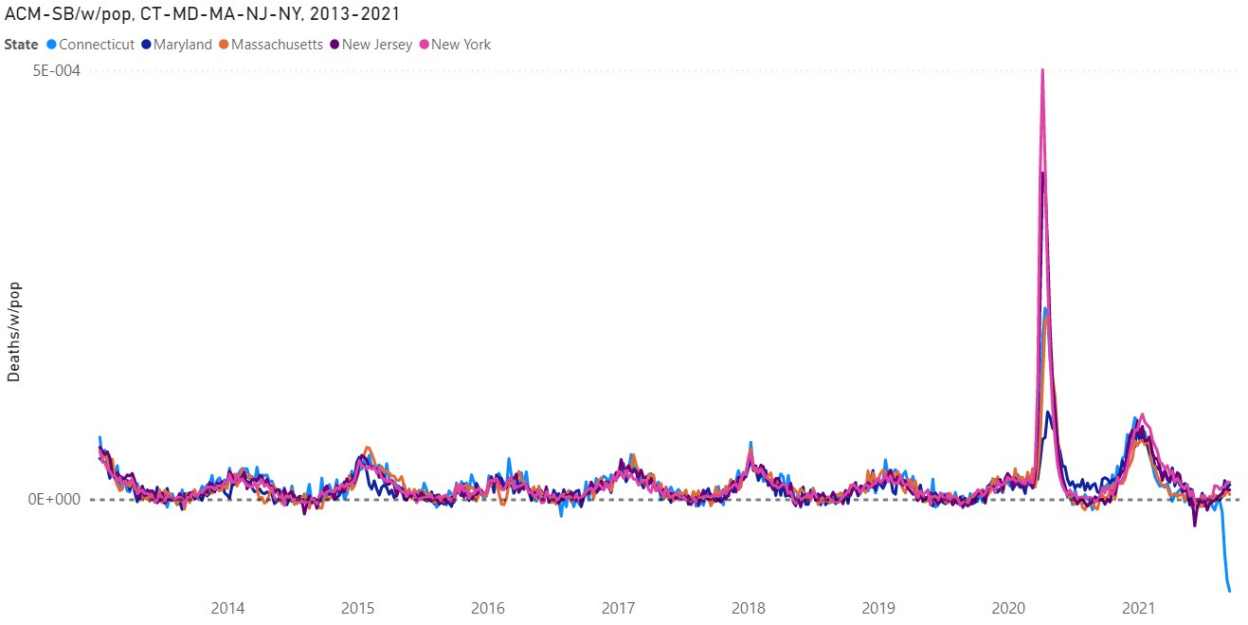

Simulated all-cause mortality (ACM) by week, 2010-2022, for Canada, using the proposal of Ogden et al.
16K
14K
12K
10K
8K
6K
4K
2K
0K
Deaths by week
2012
2014
2016
2018
2020
2022

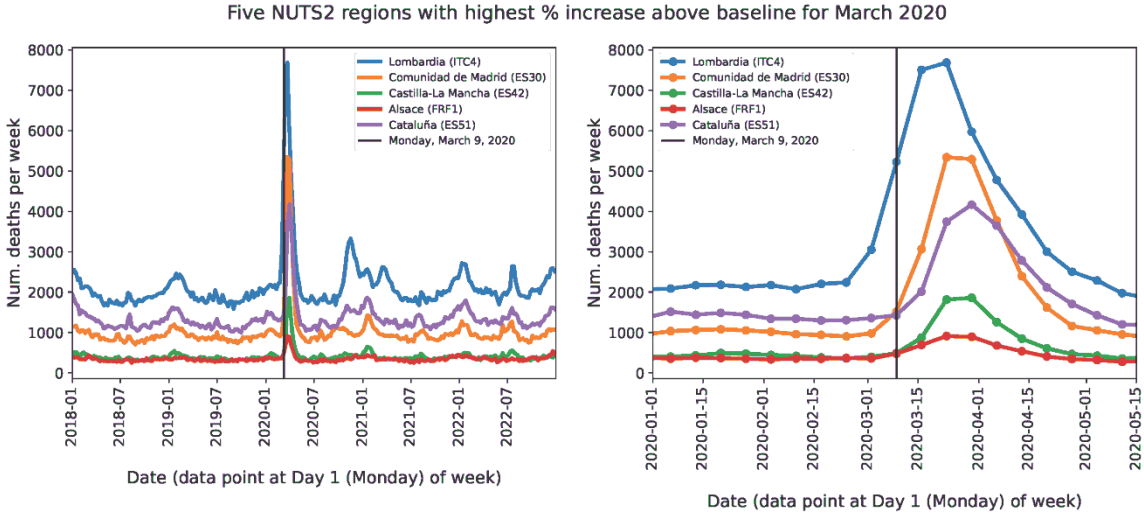

Deaths
Ap_cycle-year
Estimate
8K
7K
6K
5K
4K
3K
2K
1K
Deaths/w
300K
250K
200K
150K
100K
50K
0K
Deaths per cycle year
2012
2014
2016
2018
2020
2022


Deaths
Ap_cycle-year
Estimate
8 000
7 500
7 000
6 500
6 000
5 500
5 000
4 500
4 000
Deaths/w
320K
300K
280K
260K
240K
Deaths per cycle year
2012
2014
2016
2018
2020
2022


ACM/w, Canada, 2010-2022
Deaths
Total doses
8 000
7 500
7 000
6 500
6 000
5 500
5 000
4 500
4 000
Deaths/w
100M
80M
60M
40M
20M
0M
Doses/w
2012
2014
2016
2018
2020
2022


Deaths
Total doses cumulative
8,000
7,500
7,000
6,500
6,000
5,500
5,000
4,500
Deaths/w
100M
80M
60M
40M
20M
0M
Doses/w
A
B
C
D
E
F
2020
2021
2022


ACM-SB/w/pop, CT-MD-MA-NJ-NY, 2013-2021
State Connecticut Maryland Massachusetts New Jersey New York
5E-004
Deaths/w/pop
0E+000
2014
2015
2016
2017
2018
2019
2020
2021


Five NUTS2 regions with highest % increase above baseline for March 2020
Lombardia (ITC4)
Comunidad de Madrid (ES30)
Castilla-La Mancha (ES42)
Alsace (FRF1)
Cataluña (ES51)
Monday, March 9, 2020
Num. deaths per week
Date (data point at Day 1 (Monday) of week)

Europe
Kilometers
0 100 200 300 400 500
0 100 200 300
Miles
Barents Sea
White Sea
Norwegian Sea
Iceland
Faroe Islands (Denmark)
Norway
Sweden
Gulf of Bothnia
Finland
Russia
Estonia
Latvia
Lithuania
Russia
Baltic Sea
North Sea
Ireland
United Kingdom
Denmark
Netherlands
Belgium
Germany
Poland
Belarus
Kazakhstan
Luxembourg
Czech Republic
Slovakia
Ukraine
Caspian Sea
Bay of Biscay
France
Liechtenstein
Switzerland
Austria
Hungary
Moldova
Romania
Crimea (Ukraine) (de jure)
Slovenia
Croatia
Bosnia and Herzegovina
Serbia
Black Sea
Georgia
Azerbaijan
Armenia
Andorra
Monaco
Ligurian Sea
San Marino
Adriatic Sea
Bulgaria
Portugal
Spain
Corsica
Vatican City
Montenegro
Kosovo
North Macedonia
Albania
Italy
Mallorca
Sardinia
Tyrrhenian Sea
Iran
Turkey
Strait of Gibraltar
Mediterranean Sea
Greece
Sicily
Syria
Morocco
Algeria
Tunisia
Malta
Mediterranean Sea
Aegean Sea
Crete
Cyprus
Iraq
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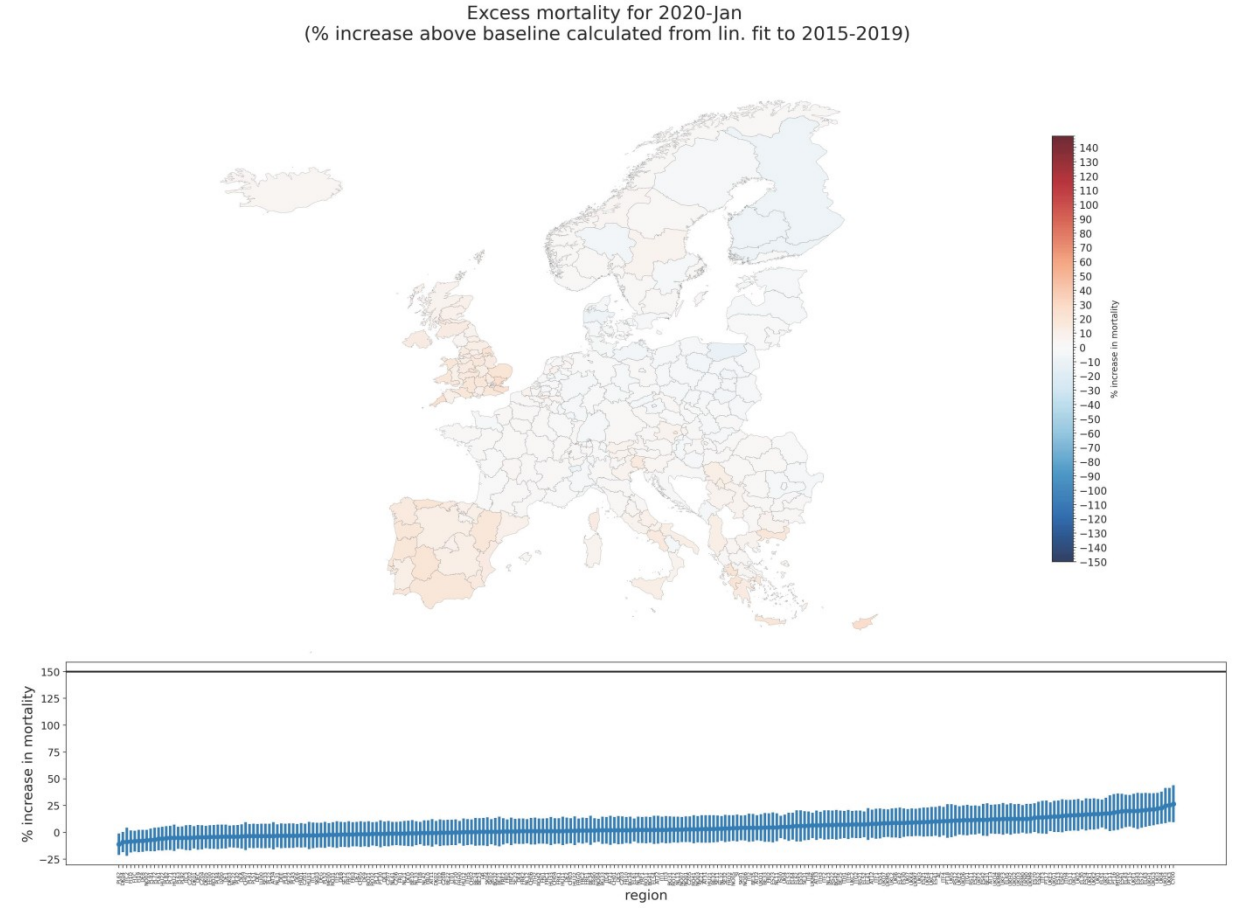
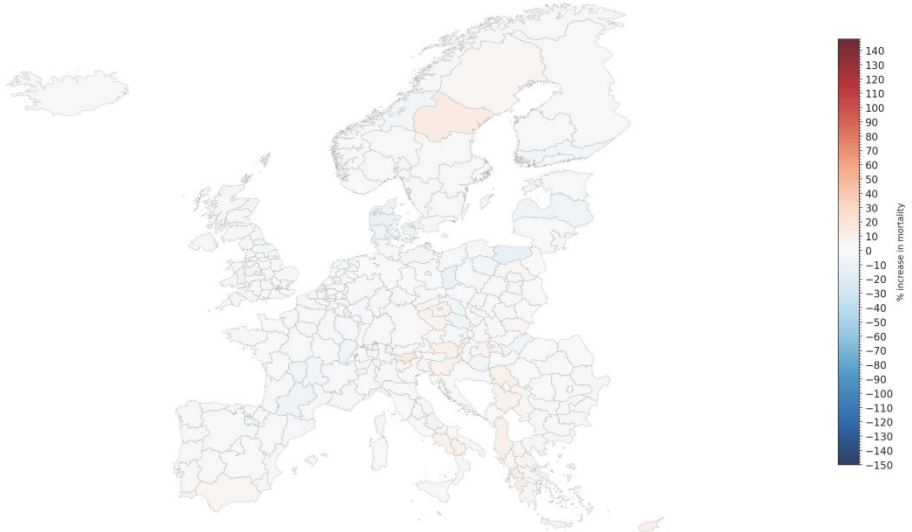
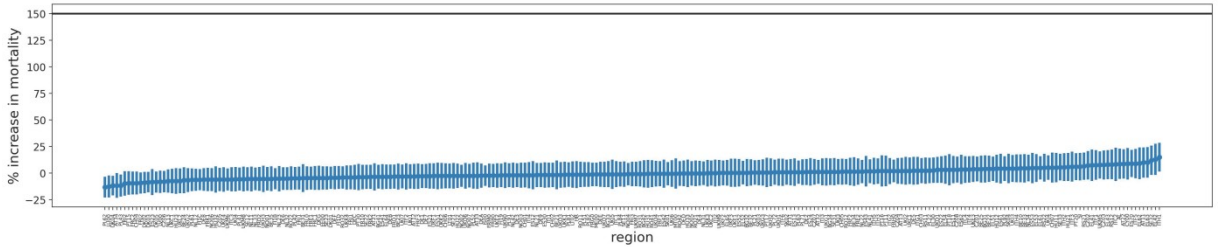
№A2304190012

Excess mortality for 2020-Jan
(% increase above baseline calculated from lin. fit to 2015-2019)

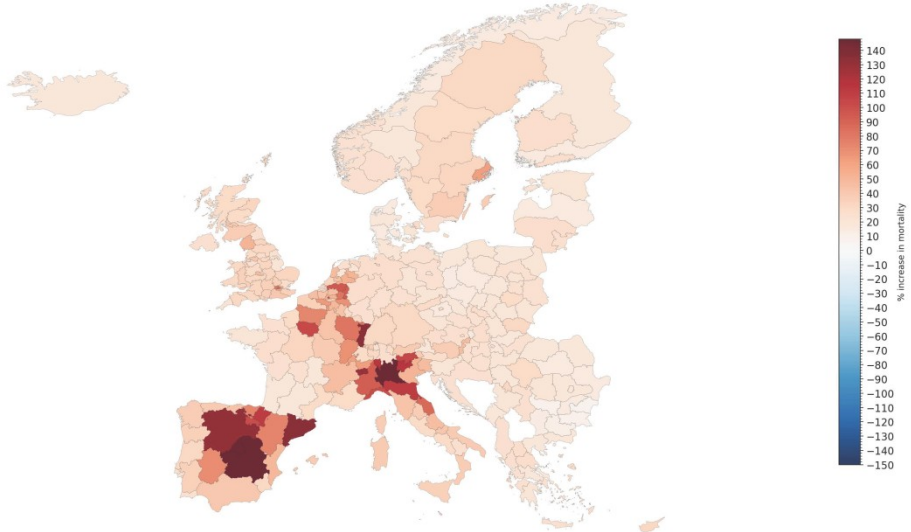


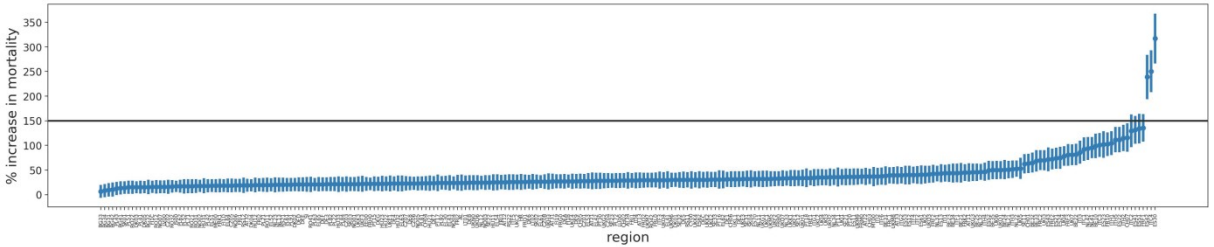
Excess mortality for 2020-Feb
(% increase above baseline calculated from lin. fit to 2015-2019)



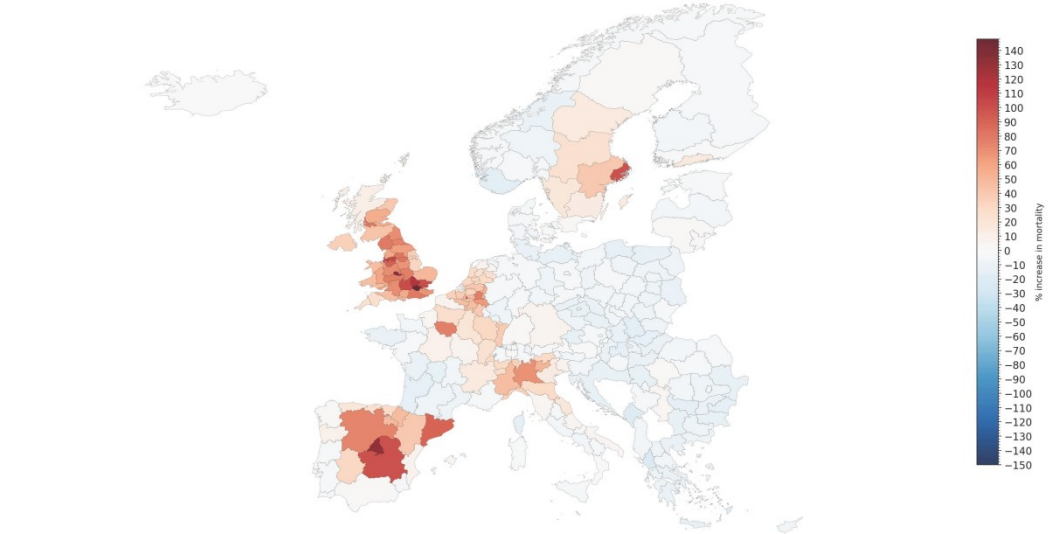


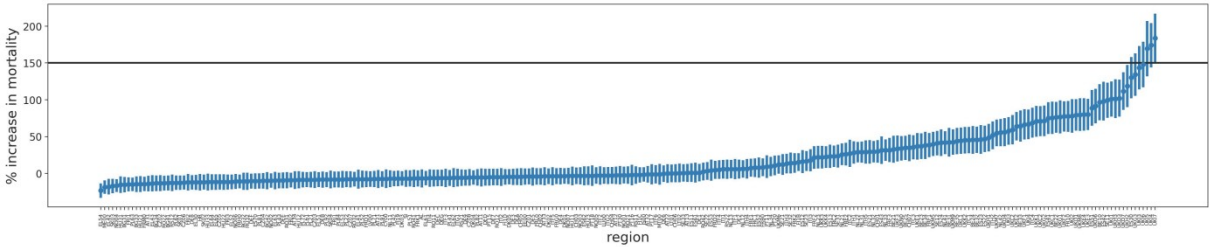
Excess mortality for 2020-Mar
(% increase above baseline calculated from lin. fit to 2015-2019)



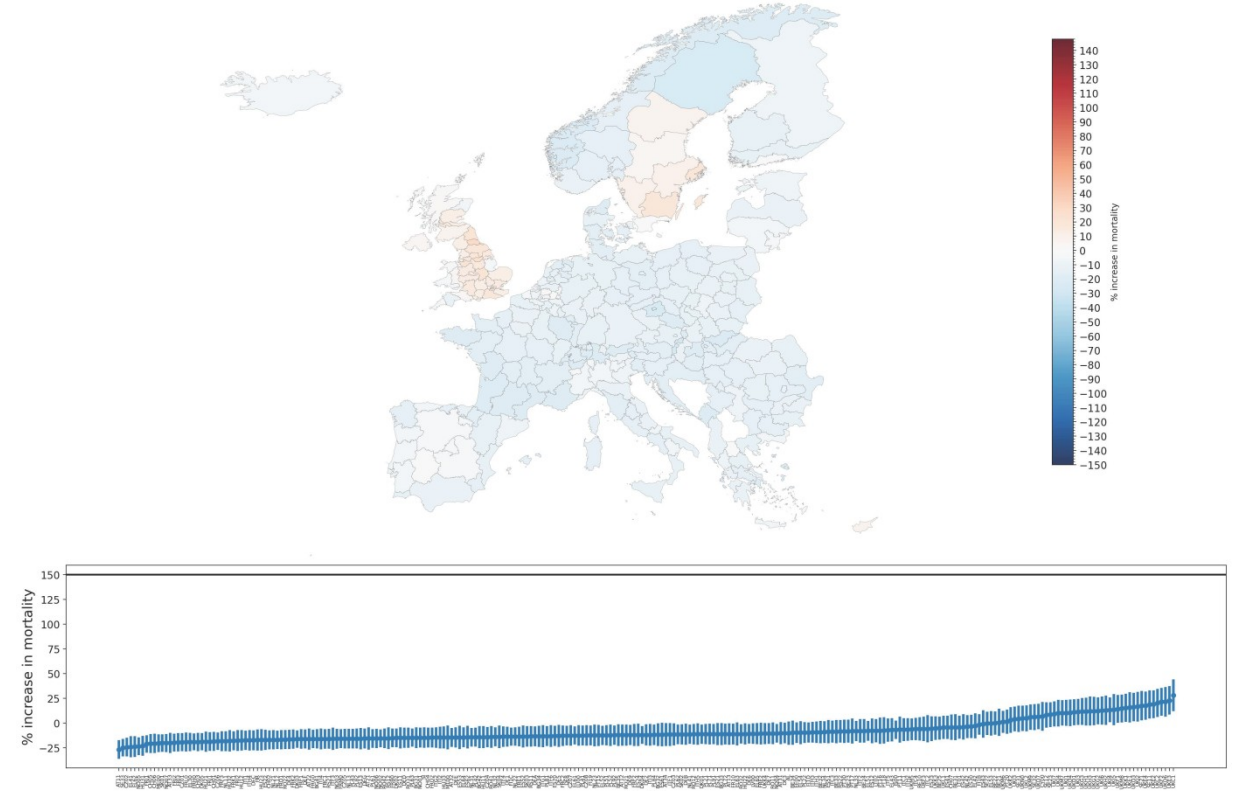


Excess mortality for 2020-Apr
(% increase above baseline calculated from lin. fit to 2015-2019)

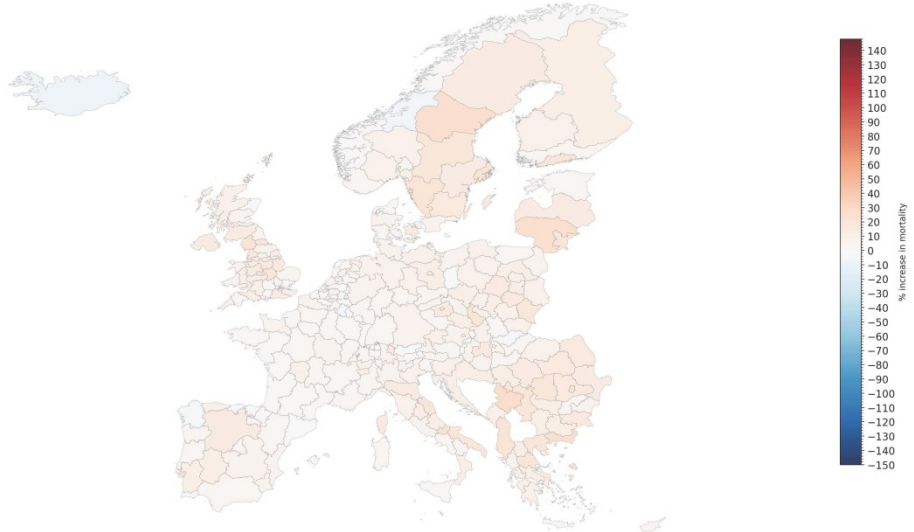


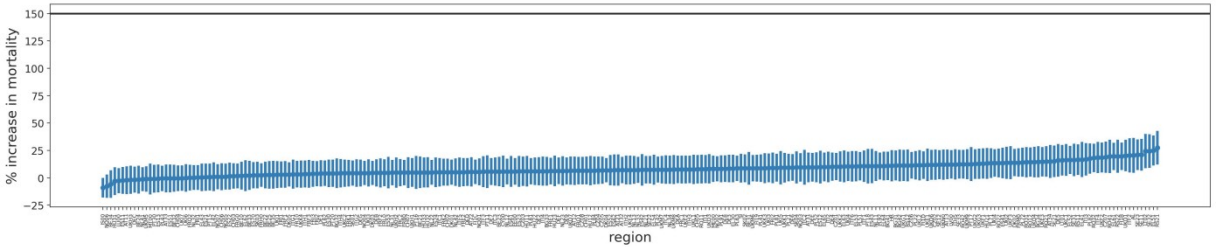


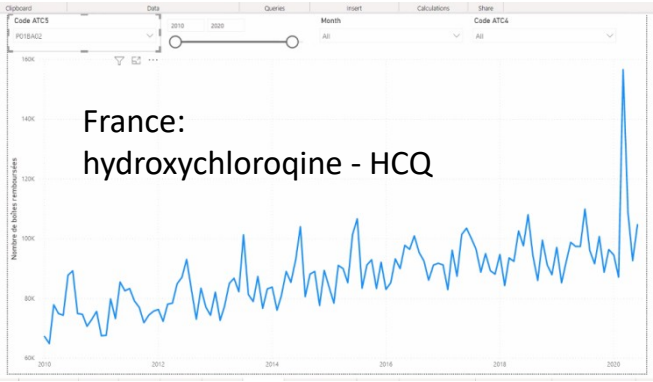
Excess mortality for 2020-May
(% increase above baseline calculated from lin. fit to 2015-2019)

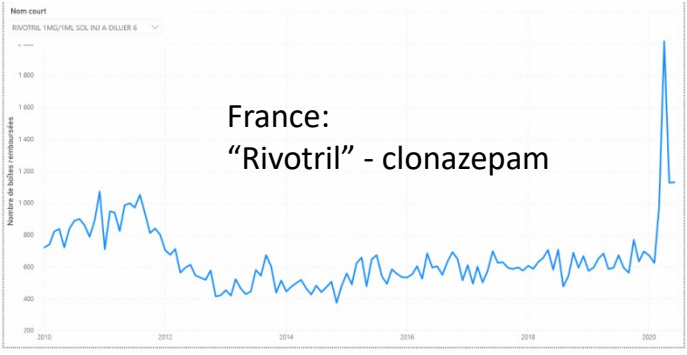


Excess mortality for 2020-Jun
(% increase above baseline calculated from lin. fit to 2015-2019)






Clipboard
Data
Queries
Insert
Calculations
Share
Code ATC5
P01BA02
2010
2020
Month
All
Code ATC4
All
160K
140K
120K
100K
80K
60K
Nombre de boîtes remboursées
2010
2012
2014
2016
2018
2020
France:
hydroxychloroqine - HCQ


Nom court
RIVOTRIL 1MG/1ML SOL INJ A DILUER 6
1 800
1 600
1 400
1 200
1 000
800
600
400
200
Nombre de boîtes remboursées
2010
2012
2014
2016
2018
2020
France:
“Rivotril” - clonazepam

Section 4: Can the COVID-19 vaccines cause death?

22. The answer is yes, beyond any reasonable doubt.

23. In fact, the vaccines are quite toxic, as far as pharmaceutical interventions go, reaching a rate of death for the most elderly patients of approximately 1 death per 100 doses administered (1 % death rate per dose). See ref. (111).

24. The conclusive evidence that the vaccines can cause death is from several sources, as explained in ref. (111) (at p. 2):

> It is well established that the COVID-19 vaccines can cause death, as seen from:
>
> - detailed autopsy studies (Choi et al., 2021; Schneider et al., 2021; Sessa et al., 2021; Gill et al., 2022; Mörz, 2022; Schwab et al., 2022; Suzuki et al., 2022; Tan et al., 2022; Yoshimura et al., 2022; Onishi et al., 2023),
> - adverse effect monitoring (Hickey and Rancourt, 2022) [ref. (100)],
> - a recent survey study (Skidmore, 2023),
> - studies of vaccine-induced pathologies (e.g., Goldman et al., 2021; Kuvandik et al., 2021; Turni and Lefringhausen, 2022; Edmonds et al., 2023; Wong et al., 2023), and
> - more than 1,250 peer-reviewed publications about COVID-19 vaccine adverse effects (React 19, 2022).
>
> Choi et al. (2021): Sangjoon Choi, SangHan Lee, Jeong-Wook Seo, Min-ju Kim, Yo Han Jeon, Ji Hyun Park, Jong Kyu Lee, Nam Seok Yeo /// Myocarditis-induced Sudden Death after BNT162b2 mRNA COVID-19 Vaccination in Korea: Case Report Focusing on Histopathological Findings /// *Journal of Korean Medical Science* 2021; 36(40): e286.
> DOI: https://doi.org/10.3346/jkms.2021.36.e286
>
> Schneider et al. (2021): Schneider, J., Sottmann, L., Greinacher, A. et al. /// Postmortem investigation of fatalities following vaccination with COVID-19 vaccines. /// *Int J Legal Med* 135, 2335–2345 (2021). https://doi.org/10.1007/s00414-021-02706-9
>
> Sessa et al. (2021): Sessa, F.; Salerno, M.; Esposito, M.; Di Nunno, N.; Zamboni, P.; Pomara, C. ///

Autopsy Findings and Causality Relationship between Death and COVID-19 Vaccination: A Systematic Review. /// *J. Clin. Med*. 2021, 10, 5876. https://doi.org/10.3390/jcm10245876

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Mörz (2022): Mörz, M. A /// Case Report: Multifocal Necrotizing Encephalitis and Myocarditis after BNT162b2 mRNA Vaccination against COVID-19. /// *Vaccines* 2022, *10*, 1651. https://doi.org/10.3390/vaccines10101651

Schwab et al. (2022): Schwab, C., Domke, L.M., Hartmann, L. *et al.* /// Autopsy-based histopathological characterization of myocarditis after anti-SARS-CoV-2-vaccination. /// *Clin Res Cardiol* (2022). https://doi.org/10.1007/s00392-022-02129-5

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Tan et al. (2022): Lii Jye Tan, Cai Ping Koh, Shau Kong Lai, Woon Cheng Poh, Mohammad Shafie Othman, Huzlinda Hussin. /// A systemic review and recommendation for an autopsy approach to death followed the COVID 19 vaccination. /// *Forensic Science International*, Volume 340, 2022, 111469, ISSN 0379-0738, https://doi.org/10.1016/j.forsciint.2022.111469.

Yoshimura et al. (2022): Yukihiro Yoshimura, Hiroaki Sasaki, Nobuyuki Miyata, Kazuhito Miyazaki, Koji Okudela, Yoko Tateishi, Hiroyuki Hayashi, Ai Kawana-Tachikawa, Hiromichi Iwashita, Kazuho Maeda, Yoko Ihama, Yasuyoshi Hatayama, Akihide Ryo, Natsuo Tachikawa /// An autopsy case of COVID-19-like acute respiratory distress syndrome after mRNA-1273 SARS-CoV-2 vaccination /// *International Journal of Infectious Diseases* 121 (2022) 98–101, https://doi.org/10.1016/j.ijid.2022.04.057

Onishi et al. (2023): Naoaki Onishi, Yuki Konishi, Toshiyuki Kaneko, Naohiro Maekawa, Akihira Suenaga, Shinnosuke Nomura, Takayasu Kobayashi, Shokan Kyo, Marie Okabayashi, Hirooki Higami, Maki Oi, Nobuya Higashitani, Sayaka Saijo, Fumiko Nakazeki, Naofumi Oyamada, Toshikazu Jinnai, Tomoko Okuno, Tomoyuki Shirase, Kazuaki Kaitani. /// Fulminant myocarditis with complete atrioventricular block after mRNA COVID-19 vaccination: A case report. /// *Journal of Cardiology Cases*, 2023, ISSN 1878-5409, https://doi.org/10.1016/j.jccase.2023.01.004

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Skidmore (2023): Skidmore, M. /// The role of social circle COVID-19 illness and vaccination experiences in COVID-19 vaccination decisions: an online survey of the United States population. /// *BMC Infect Dis* 23, 51 (2023). https://doi.org/10.1186/s12879-023-07998-3

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https://www.frontiersin.org/articles/10.3389/fmed.2021.798095

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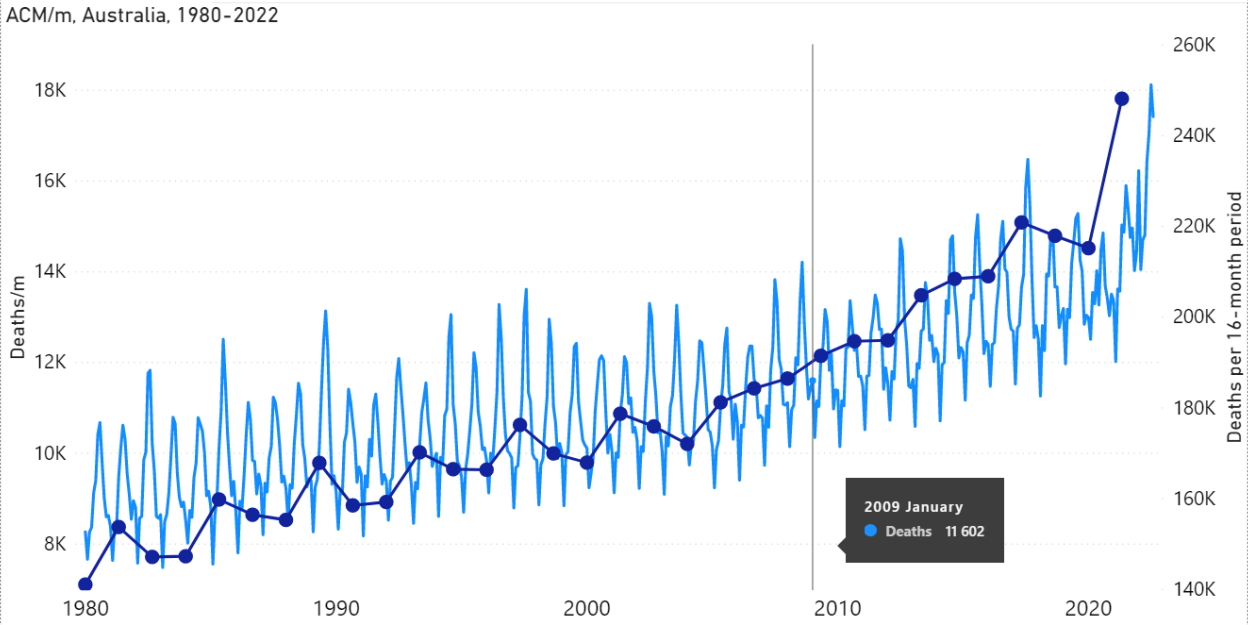
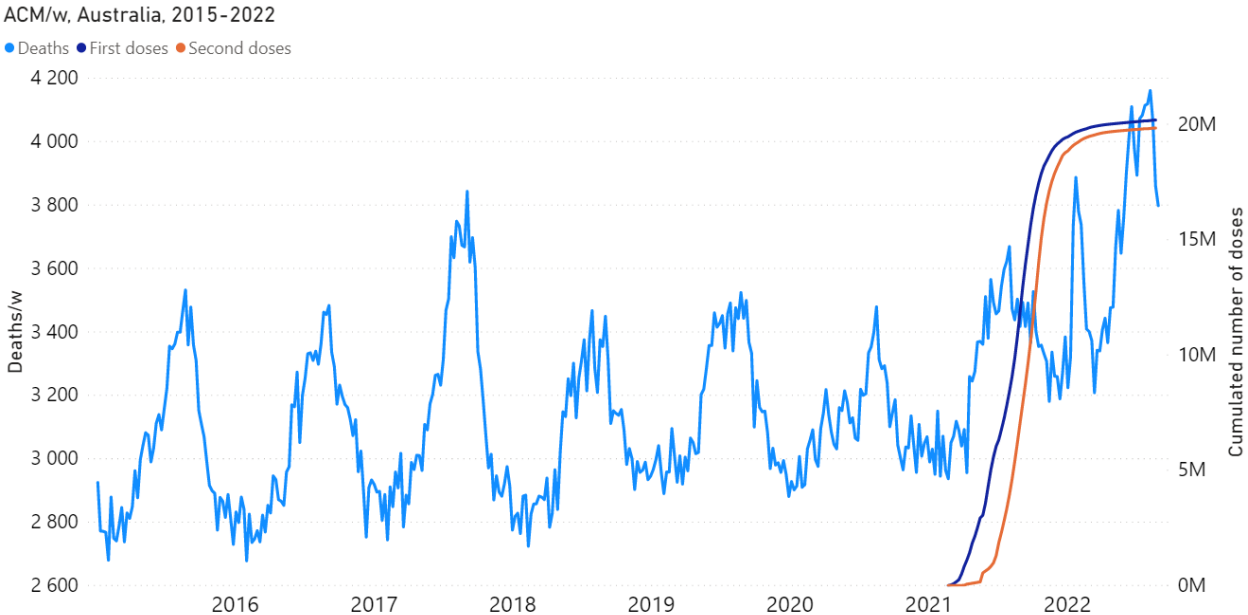
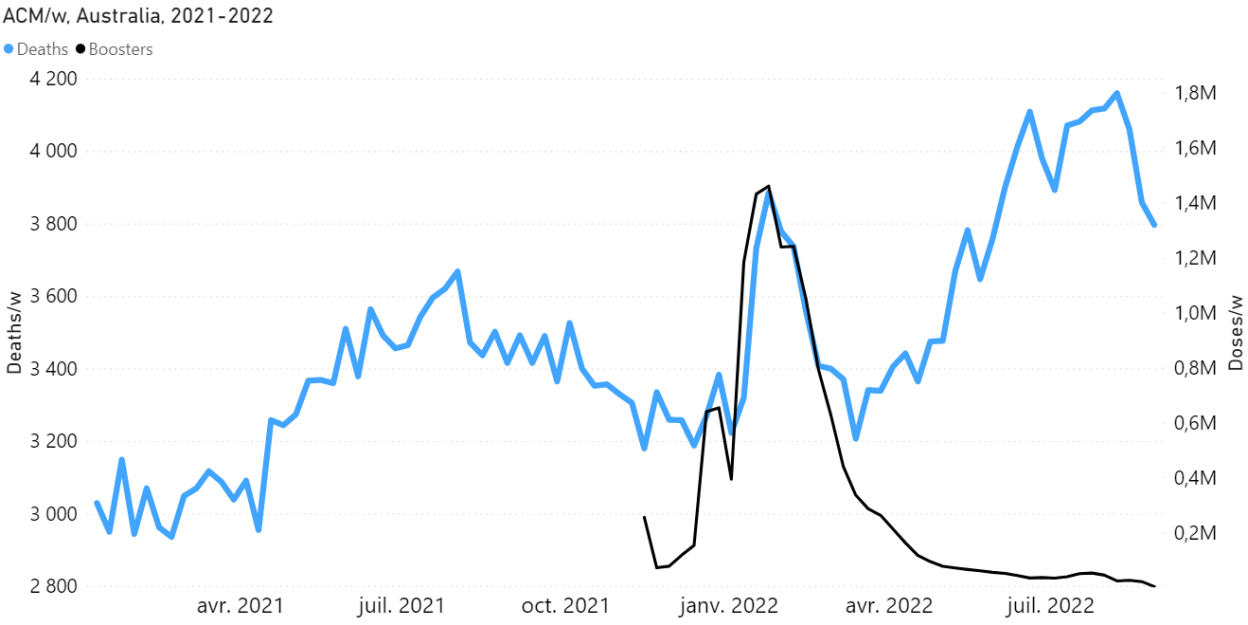
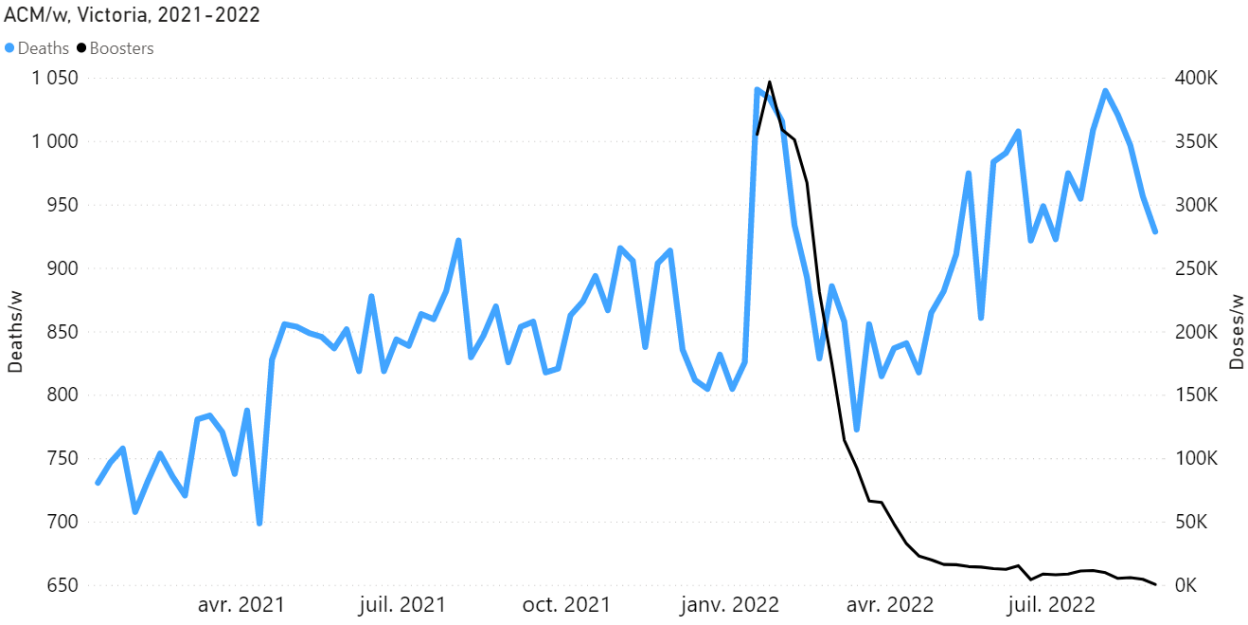
React 19 (2022): React 19. /// 1250+ COVID Vaccine Publications and Case Reports: Collection of peer reviewed case reports and studies citing adverse effects post COVID vaccination. /// 9 July 2022, https://react19.org/1250-covid-vaccine-reports/, archived here: https://archive.ph/T4hPV

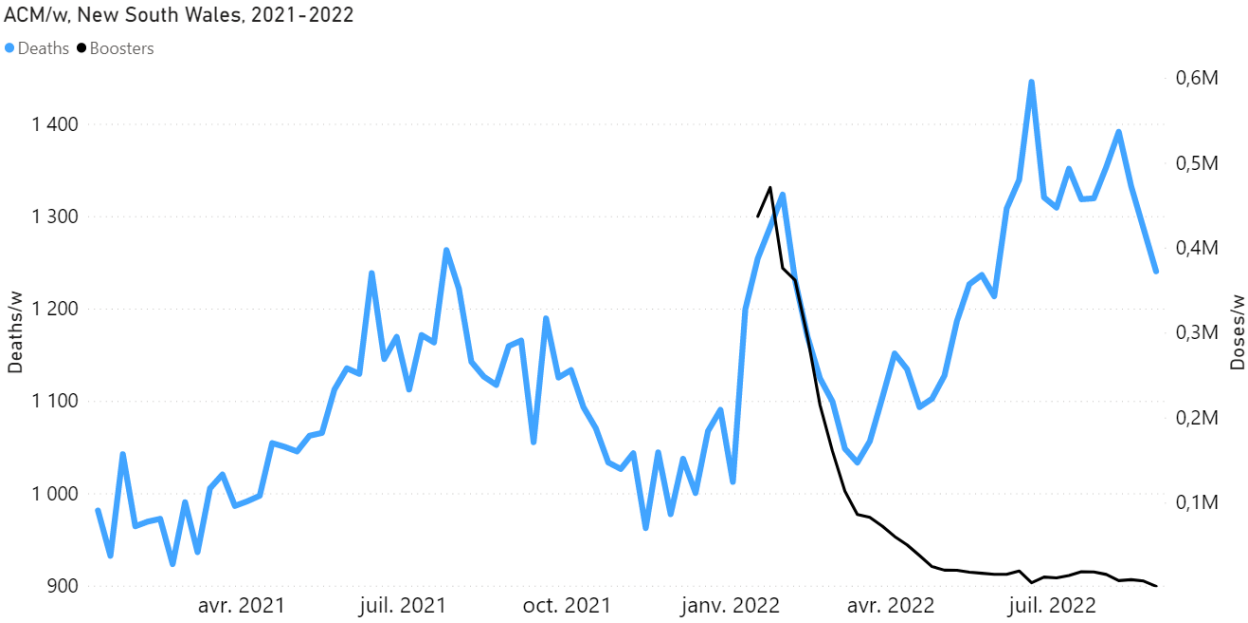
(100) J. Hickey, D.G. Rancourt. "Nature of the toxicity of the COVID 19 vaccines in the USA". Ontario Civil Liberties Association, 9 February 2022 (14 pages), OCLA Report 2022-1 (ver. 1) | 9 February 2022, https://ocla.ca/wp-content/uploads/2022/02/OCLA-Report-2022-1-v1.pdf

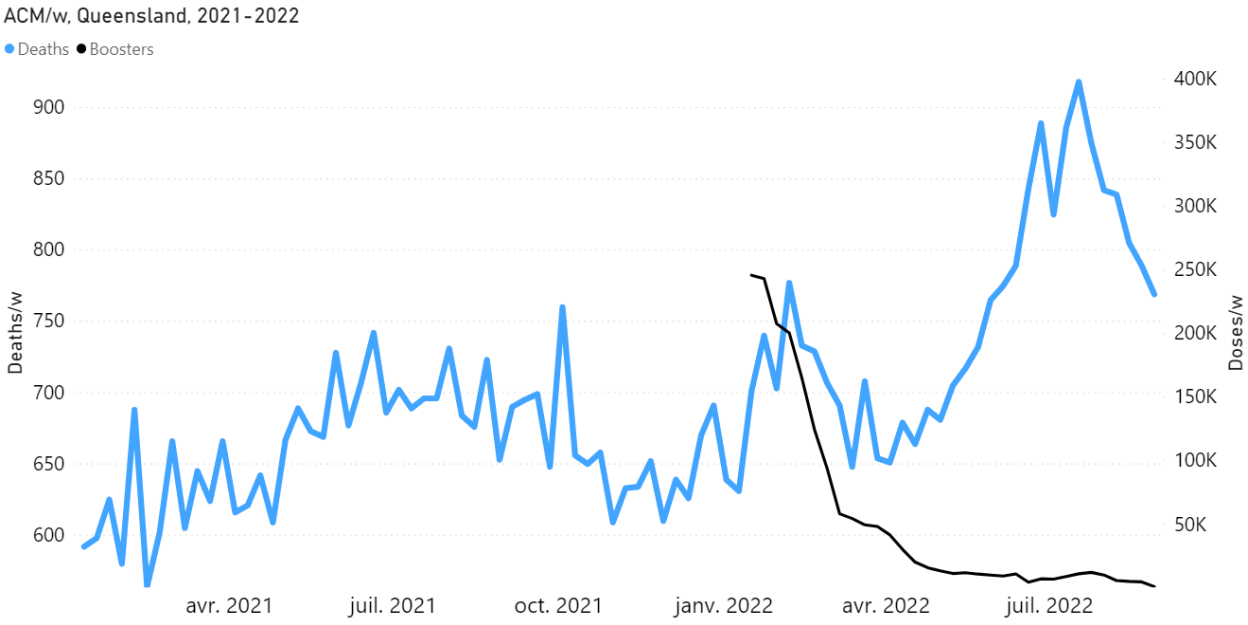

ACM/m, Australia, 1980-2022
Deaths/m
18K
16K
14K
12K
10K
8K
1980
1990
2000
2010
2020
Deaths per 16-month period
260K
240K
220K
200K
180K
160K
140K
2009 January
Deaths 11 602

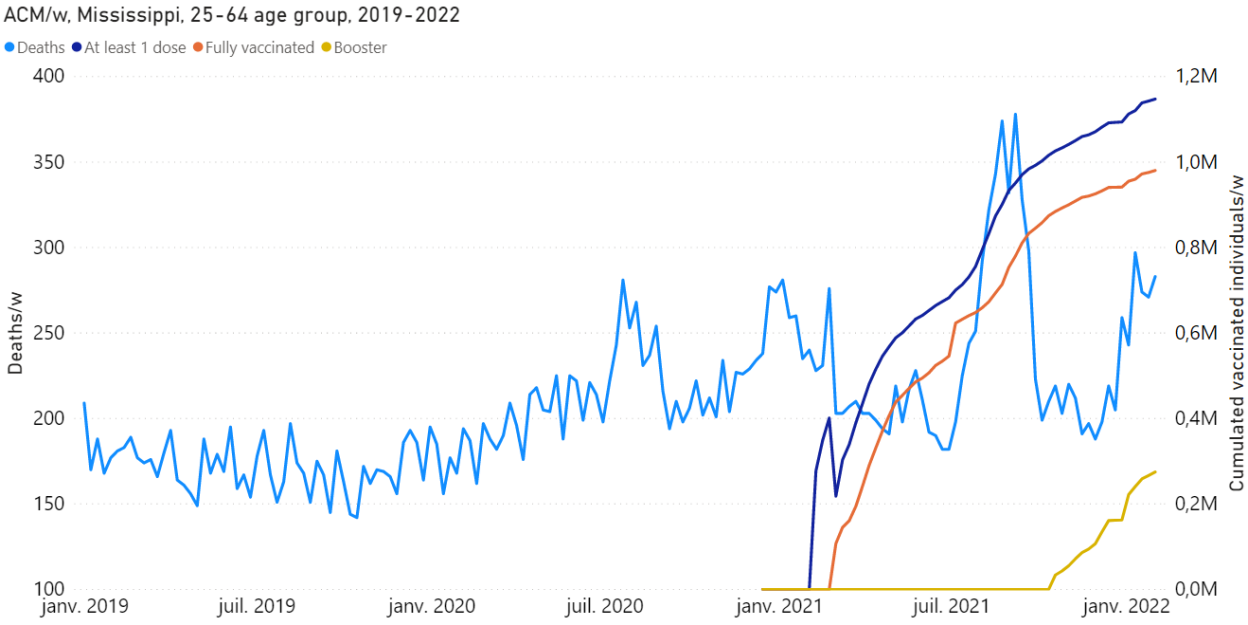

ACM/w, Australia, 2015-2022
Deaths
First doses
Second doses
4 200
4 000
3 800
3 600
3 400
3 200
3 000
2 800
2 600
Deaths/w
2016
2017
2018
2019
2020
2021
2022
20M
15M
10M
5M
0M
Cumulated number of doses

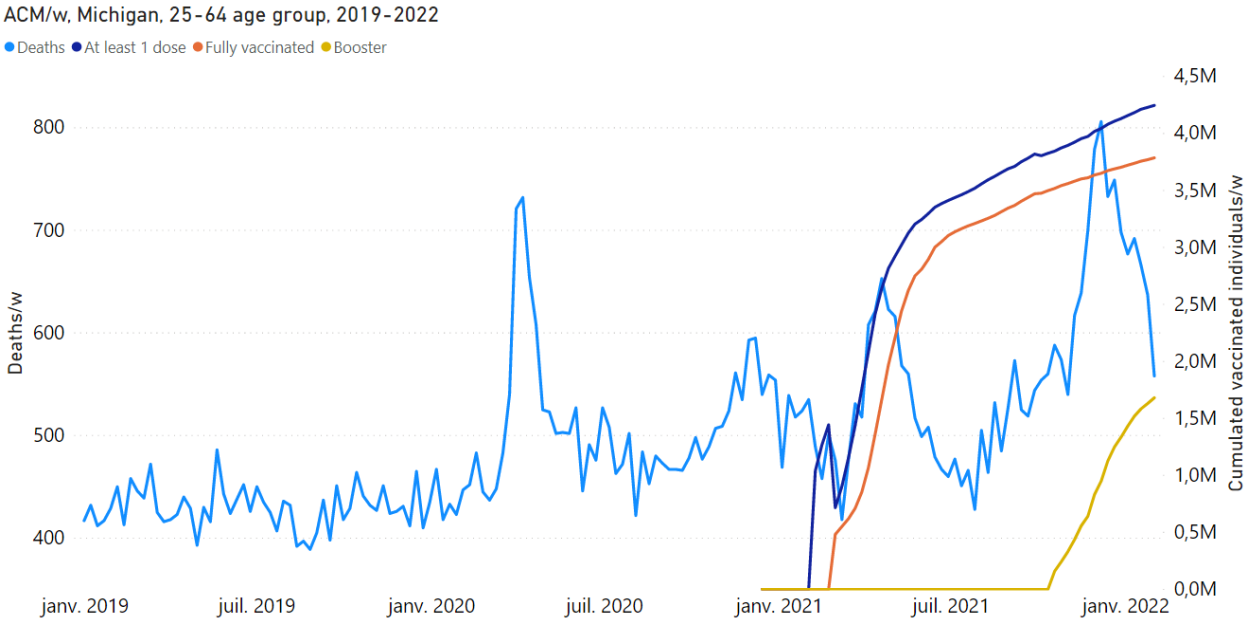

ACM/w, Australia, 2021-2022
Deaths
Boosters
4 200
4 000
3 800
3 600
3 400
3 200
3 000
2 800
Deaths/w
1,8M
1,6M
1,4M
1,2M
1,0M
0,8M
0,6M
0,4M
0,2M
Doses/w
avr. 2021
juil. 2021
oct. 2021
janv. 2022
avr. 2022
juil. 2022

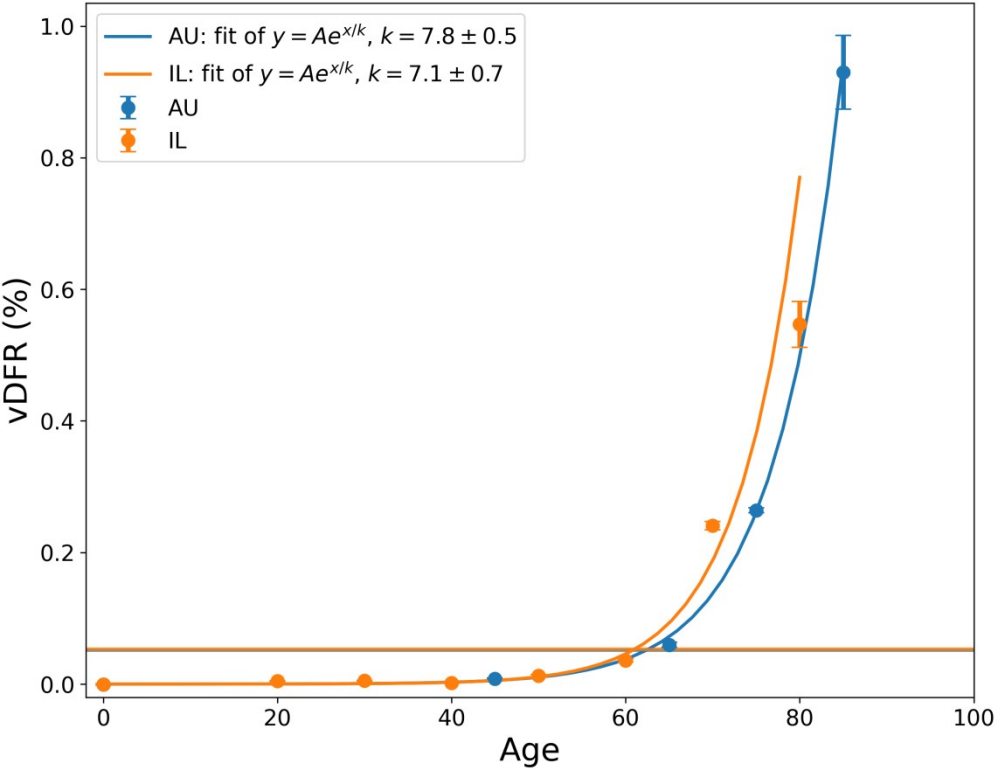

ACM/w, Victoria, 2021-2022
Deaths
Boosters
1 050
1 000
950
900
850
800
750
700
650
Deaths/w
400K
350K
300K
250K
200K
150K
100K
50K
0K
Doses/w
avr. 2021
juil. 2021
oct. 2021
janv. 2022
avr. 2022
juil. 2022

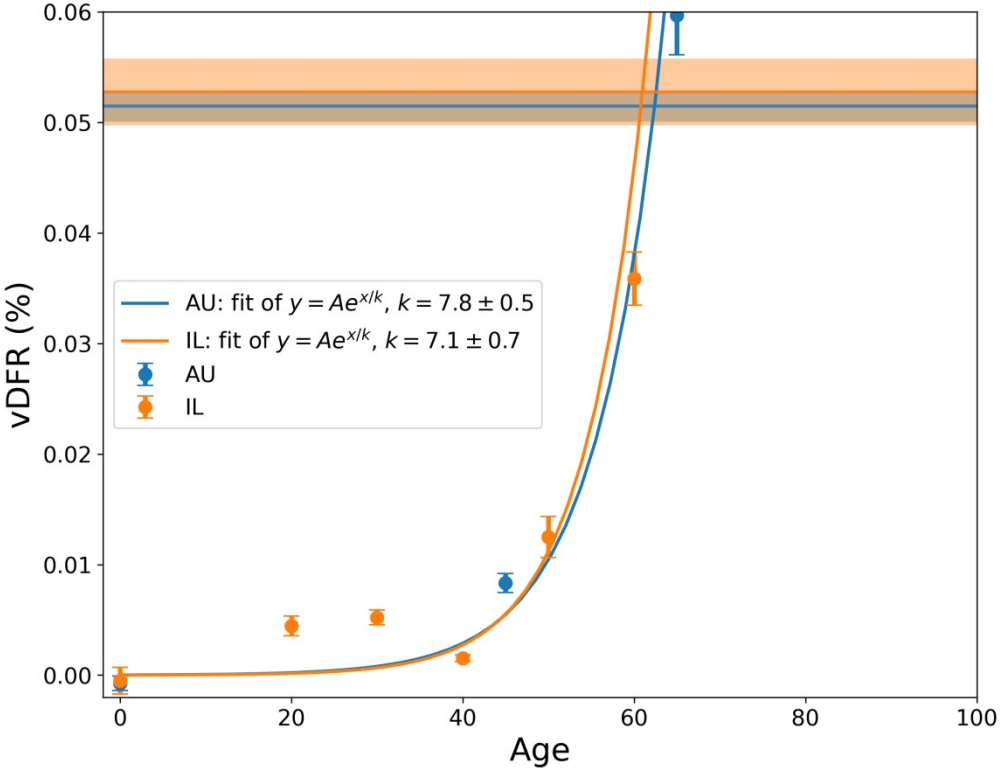

ACM/w, New South Wales, 2021-2022
Deaths
Boosters
1 400
1 300
1 200
1 100
1 000
900
Deaths/w
0,6M
0,5M
0,4M
0,3M
0,2M
0,1M
Doses/w
avr. 2021
juil. 2021
oct. 2021
janv. 2022
avr. 2022
juil. 2022

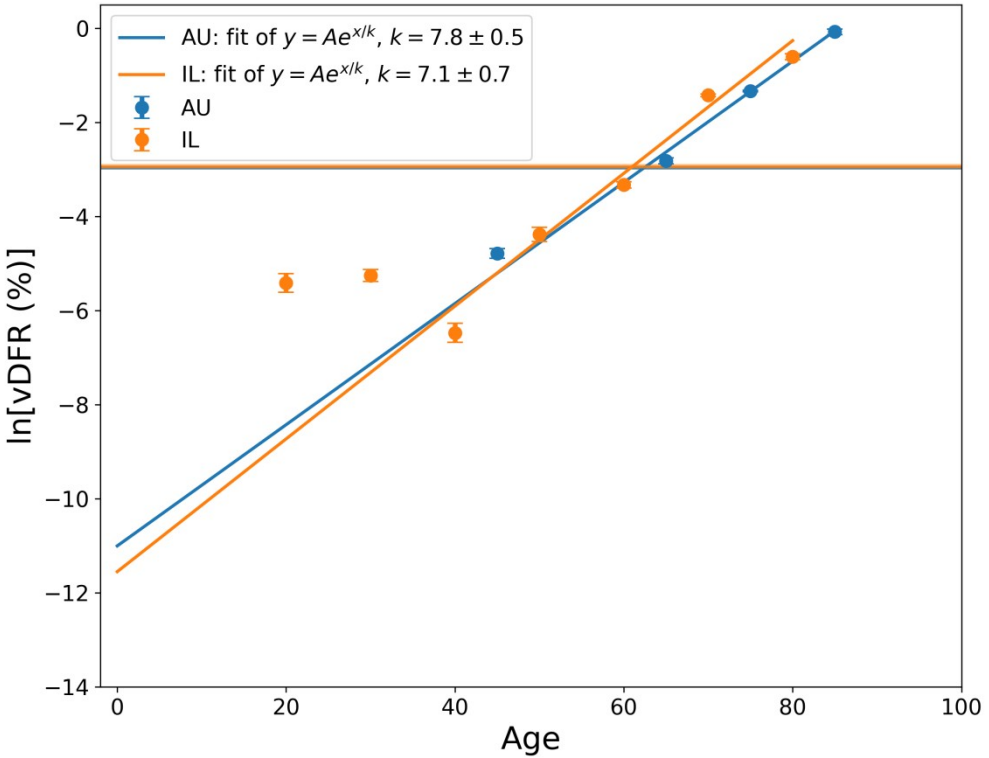

ACM/w, Queensland, 2021-2022
Deaths
Boosters
900
850
800
750
700
650
600
Deaths/w
400K
350K
300K
250K
200K
150K
100K
50K
Doses/w
avr. 2021
juil. 2021
oct. 2021
janv. 2022
avr. 2022
juil. 2022

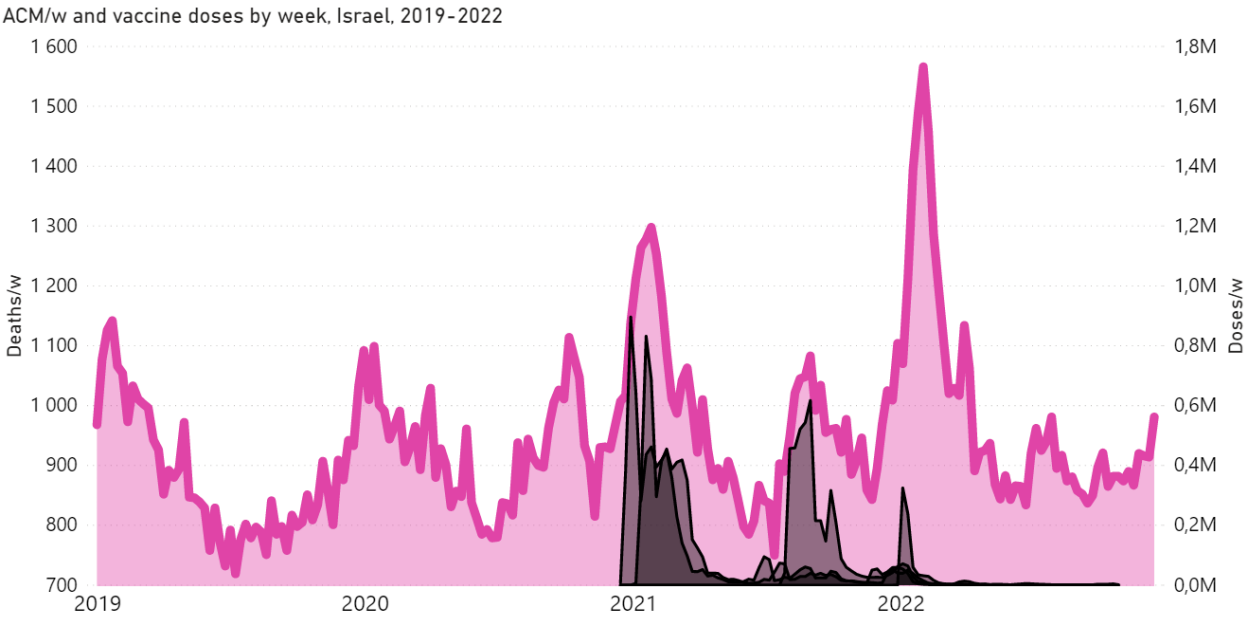

ACM/w, Mississippi, 25-64 age group, 2019-2022
Deaths
At least 1 dose
Fully vaccinated
Booster
Deaths/w
Cumulated vaccinated individuals/w
400
350
300
250
200
150
100
1,2M
1,0M
0,8M
0,6M
0,4M
0,2M
0,0M
janv. 2019
juil. 2019
janv. 2020
juil. 2020
janv. 2021
juil. 2021
janv. 2022

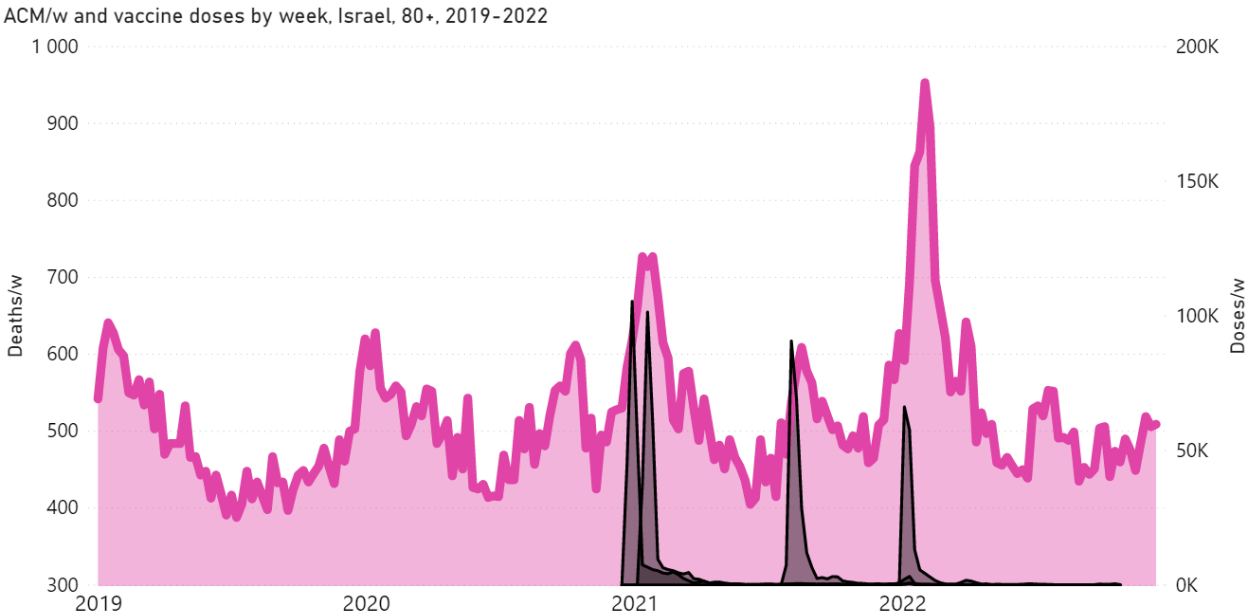

ACM/w, Michigan, 25-64 age group, 2019-2022
Deaths
At least 1 dose
Fully vaccinated
Booster
800
700
600
500
400
Deaths/w
4,5M
4,0M
3,5M
3,0M
2,5M
2,0M
1,5M
1,0M
0,5M
0,0M
Cumulated vaccinated individuals/w
janv. 2019
juil. 2019
janv. 2020
juil. 2020
janv. 2021
juil. 2021
janv. 2022


AU: fit of $y = Ae^{x/k}$, $k = 7.8 \pm 0.5$
IL: fit of $y = Ae^{x/k}$, $k = 7.1 \pm 0.7$
AU
IL
vDFR (%)
Age
0.0
0.2
0.4
0.6
0.8
1.0
0
20
40
60
80
100

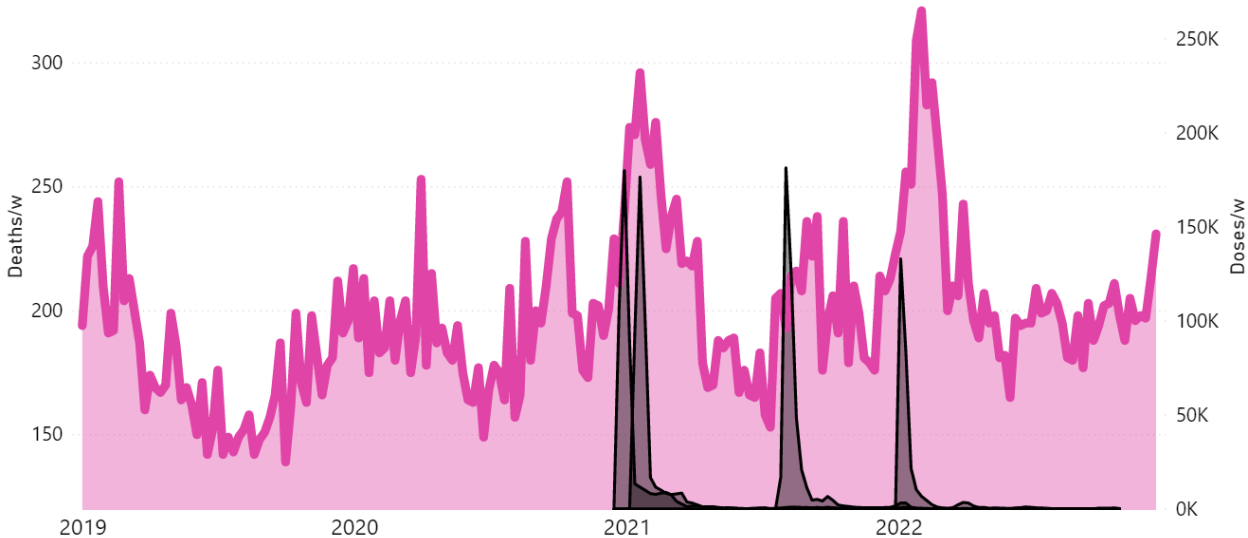

0.06
0.05
0.04
0.03
0.02
0.01
0.00
vDFR (%)
0
20
40
60
80
100
Age
AU: fit of $y = Ae^{x/k}$, $k = 7.8 \pm 0.5$
IL: fit of $y = Ae^{x/k}$, $k = 7.1 \pm 0.7$
AU
IL

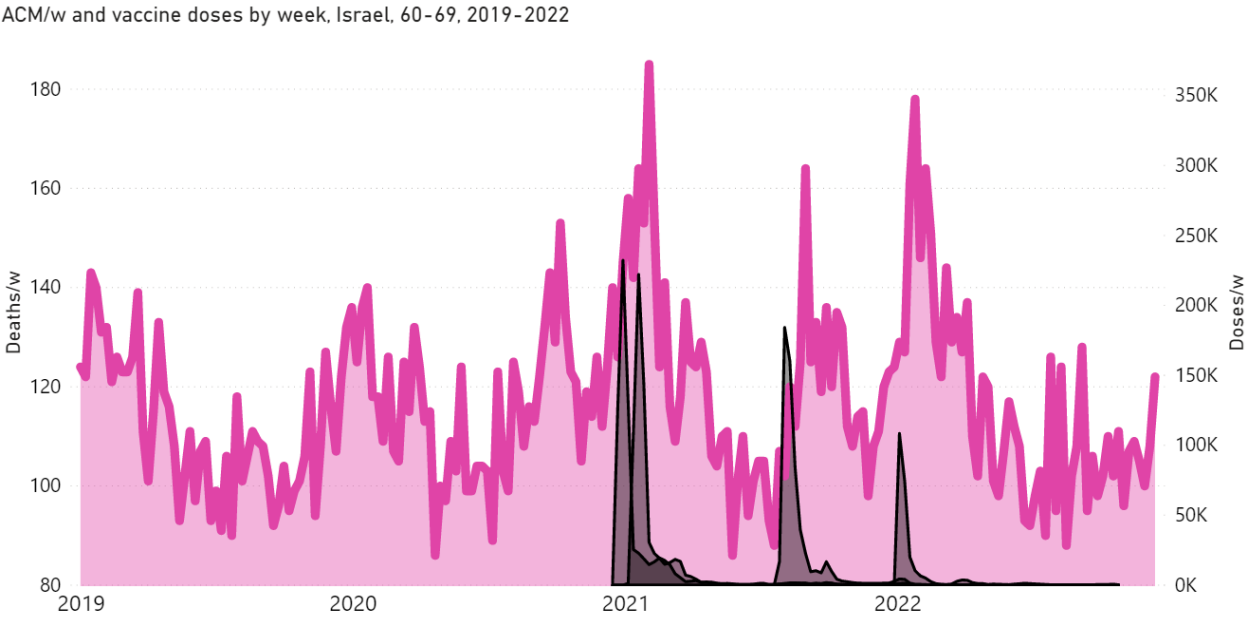

AU: fit of $y = Ae^{x/k}$, $k = 7.8 \pm 0.5$
IL: fit of $y = Ae^{x/k}$, $k = 7.1 \pm 0.7$
AU
IL
ln[vDFR (%)]
0
−2
−4
−6
−8
−10
−12
−14
0
20
40
60
80
100
Age

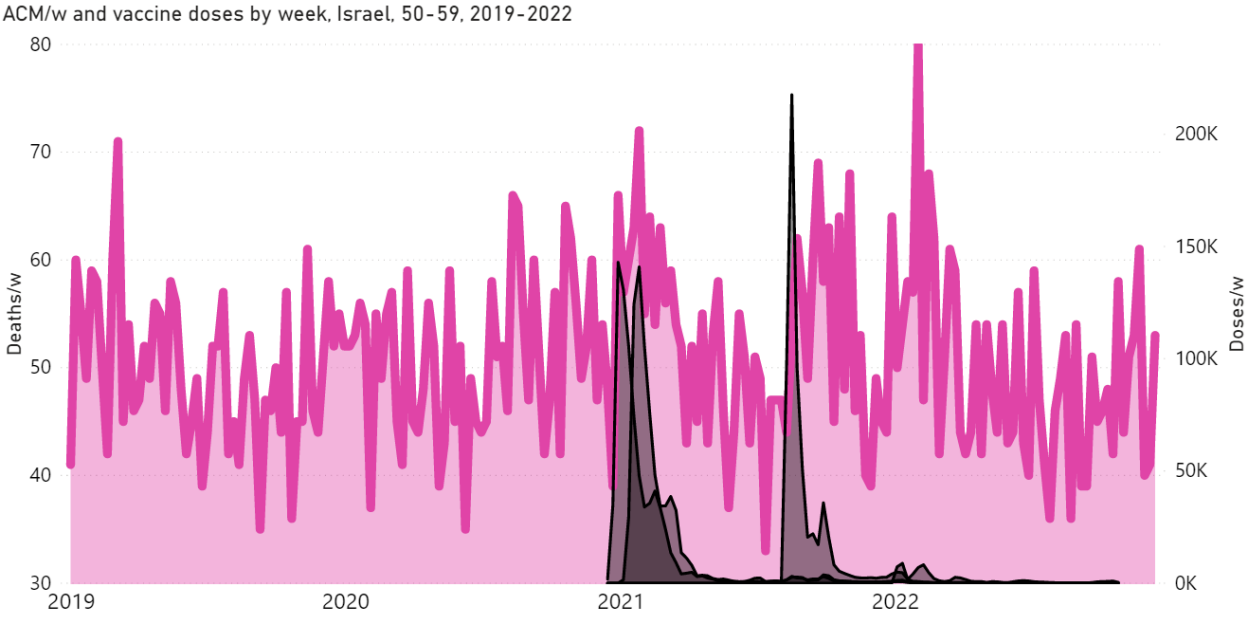

ACM/w and vaccine doses by week, Israel, 2019-2022
1 600
1 500
1 400
1 300
1 200
1 100
1 000
900
800
700
Deaths/w
1,8M
1,6M
1,4M
1,2M
1,0M
0,8M
0,6M
0,4M
0,2M
0,0M
Doses/w
2019
2020
2021
2022

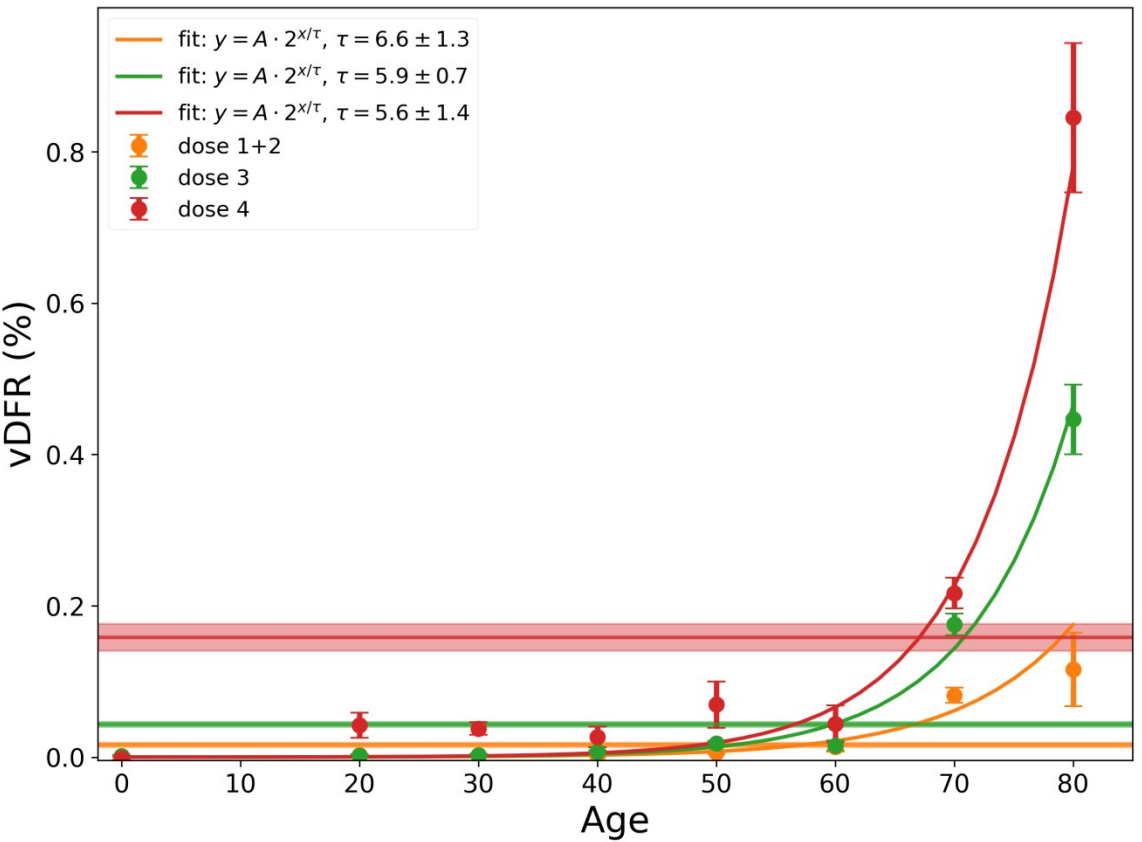

ACM/w and vaccine doses by week, Israel, 80+, 2019-2022
1 000
900
800
700
600
500
400
300
Deaths/w
200K
150K
100K
50K
0K
Doses/w
2019
2020
2021
2022

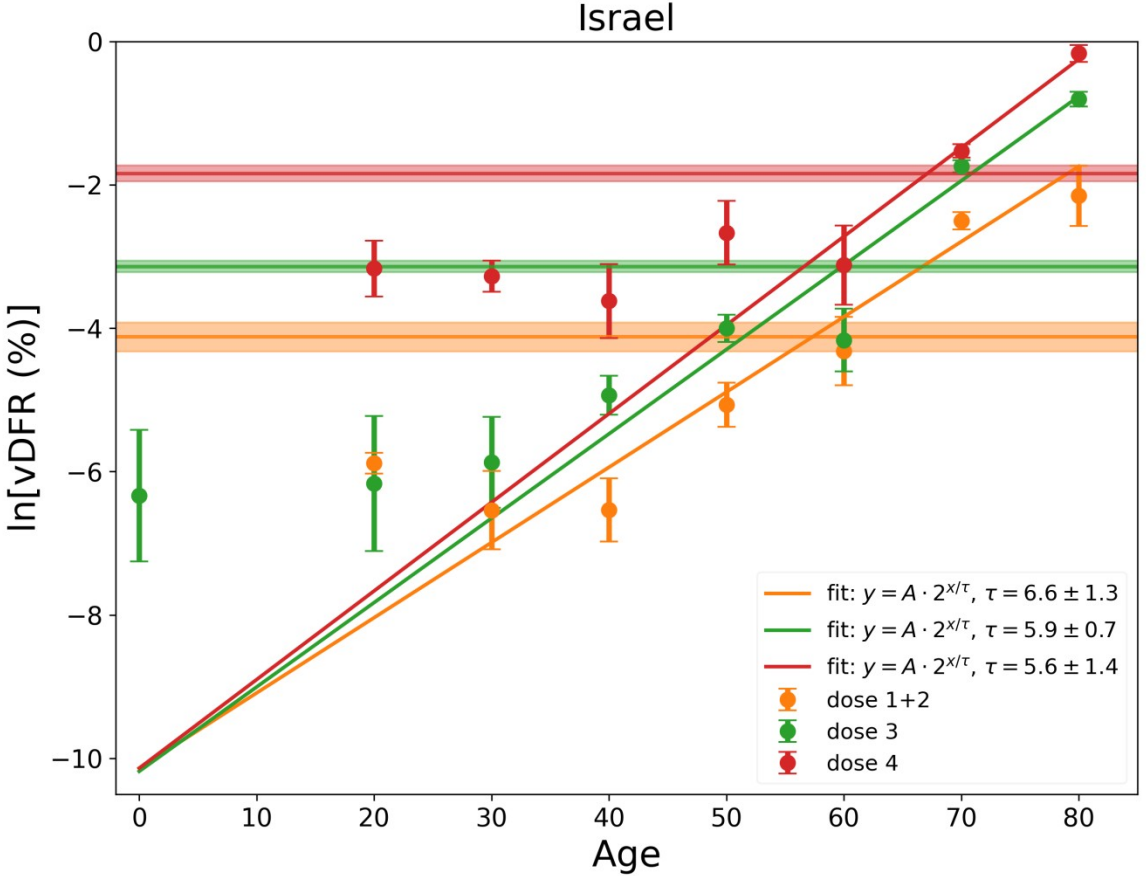
ACM/w and vaccine doses by week, Israel, 70-79, 2019-2022




ACM/w and vaccine doses by week, Israel, 60-69, 2019-2022
Deaths/w
180
160
140
120
100
80
Doses/w
350K
300K
250K
200K
150K
100K
50K
0K
2019
2020
2021
2022


ACM/w and vaccine doses by week, Israel, 50-59, 2019-2022
80
70
60
50
40
30
Deaths/w
200K
150K
100K
50K
0K
Doses/w
2019
2020
2021
2022


Israel
fit: $y = A \cdot 2^{x/\tau}$, $\tau = 6.6 \pm 1.3$
fit: $y = A \cdot 2^{x/\tau}$, $\tau = 5.9 \pm 0.7$
fit: $y = A \cdot 2^{x/\tau}$, $\tau = 5.6 \pm 1.4$
dose 1+2
dose 3
dose 4
vDFR (%)
0.0
0.2
0.4
0.6
0.8
0
10
20
30
40
50
60
70
80
Age


Israel
ln[vDFR (%)]
Age
0
−2
−4
−6
−8
−10
0
10
20
30
40
50
60
70
80
fit: $y = A \cdot 2^{x/\tau}$, $\tau = 6.6 \pm 1.3$
fit: $y = A \cdot 2^{x/\tau}$, $\tau = 5.9 \pm 0.7$
fit: $y = A \cdot 2^{x/\tau}$, $\tau = 5.6 \pm 1.4$
dose 1+2
dose 3
dose 4

India
Australia
Canada
Chile
Germany
Israel
New Zealand
USA ...

vDFR:
0.05% - 0.1% - 1% - <3%

13 M – World
3.7 M – India
330 K – USA (vs 1.3 M)
~ 30 K – Canada