

# Übersterblichkeit 2022 Studie zur Ursache

Article

## Is there a Link between the 2021 COVID-19 Vaccination Uptake in Europe and 2022 Excess All-Cause Mortality?

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**Abstract:** We primarily study a possible link between 2021 COVID-19 vaccination uptake in Europe and monthly 2022 excess all-cause mortality, i.e., mortality higher than before the pandemic. Analyses of 31 countries weighted by population size show that all-cause mortality during the first nine months of 2022 increased more the higher the 2021 vaccination uptake; a one percentage point increase in 2021 vaccination uptake was associated with a monthly mortality increase in 2022 by 0.105 percent (95% CI, 0.075–0.134). When controlling for alternative explanations, the association remained robust, and we discuss the result emphasizing causality as well as potential ecological fallacy. Also, the study shows that 2021 all-cause mortality was lower the higher the vaccination uptake, but this association became non-significant when controlling for alternative explanations.

**Keywords:** COVID-19; vaccination; all-cause mortality; excess mortality; causal inferences; ecological fallacy; individualistic fallacy



Spaß mit Statistik Teil 13. Übersterblichkeit 2022 - Ursache endlich gefunden?

## Übersterblichkeit 2022

# Impfraten in Europa

Country	Vaccination uptake	Population
Bulgaria	27.7	6951482
Romania	40.8	19328838
Slovakia	48.5	5457873
Croatia	53.3	4058165
Slovenia	55.6	2095861
Poland	55.8	37958138
Hungary	61.0	9769526
Estonia	61.3	1328976
Czechia	62.2	10693939
Latvia	64.9	1907675
Liechtenstein	65.4	38747
Lithuania	65.7	2794090
Greece	66.3	10718565
Switzerland	67.1	8606033
Netherlands	67.6	17407585
Luxembourg	68.2	626108
Sweden	69.3	10327589
Cyprus	69.4	888005



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# Übersterblichkeit 2022 Impfraten in Europa

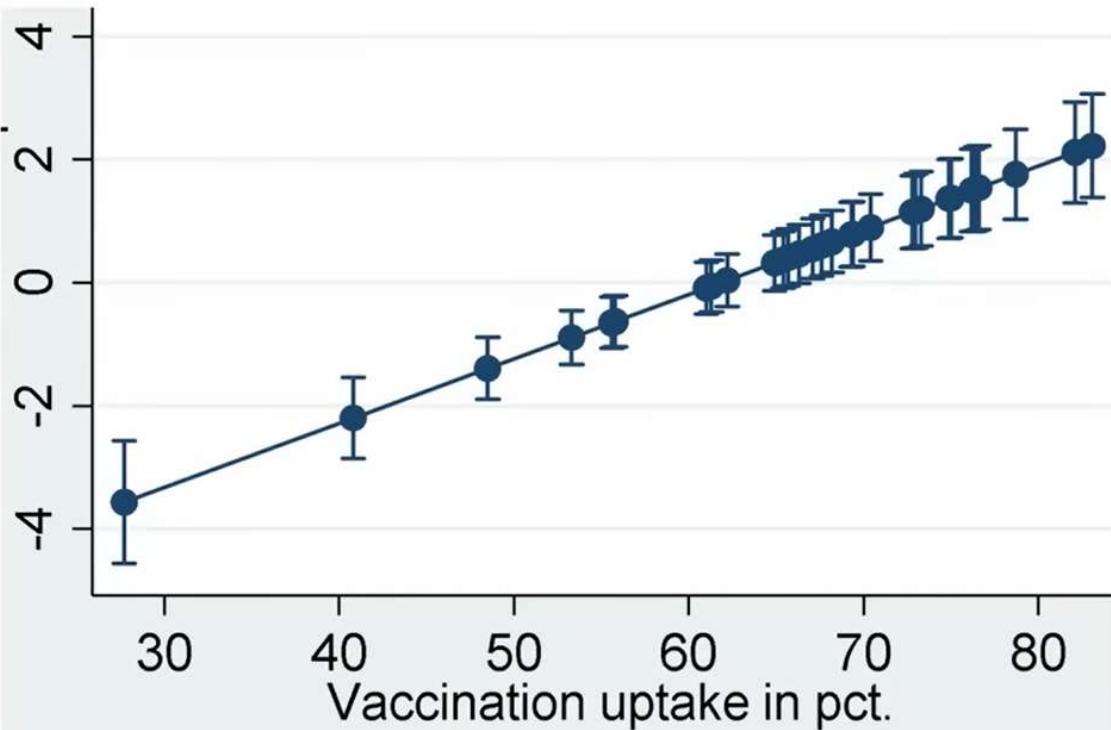


Austria	70.4	8901064
Germany	72.8	83166711
Norway	73.0	5367580
France	73.3	67320216
Italy	74.9	59641488
Spain	74.9	47332614
Finland	75.0	5525292
Belgium	76.2	11522440
Iceland	76.4	364134
Ireland	76.6	4964440
Denmark	78.7	5822763
Malta	82.1	514564
Portugal	83.1	10295909



Übersterblichkeit 2022

## Korrelation Impfrate/Mortalität



# Übersterblichkeit 2022

## Thesen

- Es gab 2021 eine negative Korrelation zwischen Impfraten und Sterblichkeit.
- Diese war aber nicht signifikant.
- Es gab 2022 (erste neun Monate) eine deutliche Übersterblichkeit in vielen Ländern.
- Diese war signifikant.
- Pro Prozent höhere Impfrate gab es 0,1 % mehr Übersterblichkeit.
- Diese war signifikant.



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### Übersterblichkeit 2022



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- Mehr Studien zu den Ursachen:
- Nach Alterszugehörigkeit
- Geschlecht
- Impfstoffen etc.



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