



Global Health Cast 50

September 20, 2023



Dr. Melvin Sanicas
🐦 @Vaccinologist



Prof. Dr. Joe Schmitt
🐦 @Prof_Schmitt

Every Week

12.00 noon - CET

50th Podcast

Check our
GHP Website:

www.ID-EA.org

VacciNEWS



GHP News Outbreak News Latest Science

VacciREVIEW



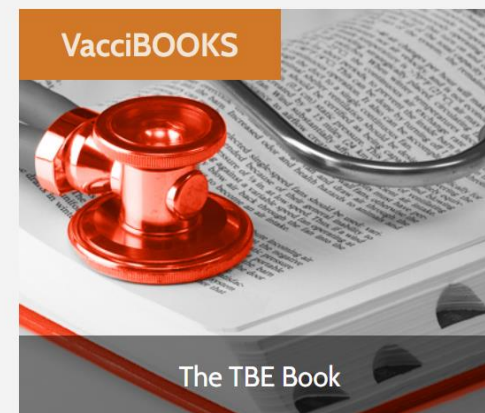
Review Articles

VacciTUTOR



Essentials in Vaccinology

VacciBOOKS



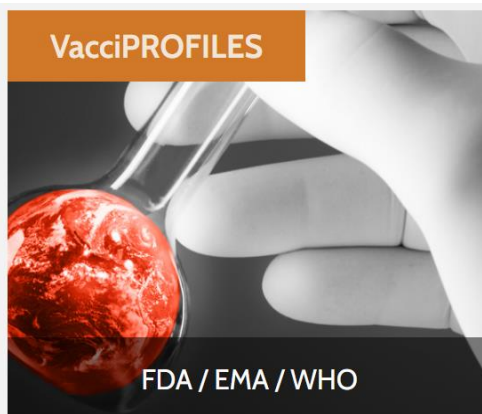
The TBE Book

VacciNATIONS



Country Level

VacciPROFILES



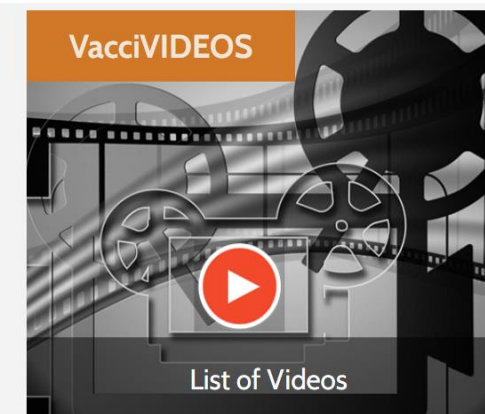
FDA / EMA / WHO

VacciCALENDAR



Infectious Disease Conferences
Worldwide

VacciVIDEOS



List of Videos

What we talk about today

- **Intelligent people get their COVID-19 vaccines first**
- **Past COVID infection, side effects top reasons for not getting booster**
- **166 Legionellosis cases and 23 deaths reported in Poland**
- **Is your vaccination status up to date?**
- **Adverse events following COVID-mRNA dosing in subjects ≥ 65 years**



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Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Journal of Health Economics

journal homepage: www.elsevier.com/locate/jhealeco

JOURNAL OF
HEALTH
ECONOMICS



Cognitive ability, health policy, and the dynamics of COVID-19 vaccination

Mikael Elinder^a, Oscar Erixson^{b,*}, Mattias Öhman^b

^a Department of Economics, Uppsala University, Uppsala, Sweden

^b Institute for Housing and Urban Research, Uppsala University, Uppsala, Sweden

TL,DR: Smart people first in line for COVID-19 vaccines

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Nudge

Administrative data

Twin-design



ABSTRACT

We examine the relationship between cognitive ability and prompt COVID-19 vaccination using individual-level data on more than 700,000 individuals in Sweden. We find a strong positive association between cognitive ability and swift vaccination, which remains even after controlling for confounding variables with a twin-design. The results suggest that the complexity of the vaccination decision may make it difficult for individuals with lower cognitive abilities to understand the benefits of vaccination. Consistent with this, we show that simplifying the vaccination decision through pre-booked vaccination appointments alleviates almost all of the inequality in vaccination behavior.

GLOBAL
HEALTH
PRESS



Understanding low COVID-19 booster uptake among US adults

[Elizabeth T. Jacobs](#)^a  , [Felina M. Cordova-Marks](#)^a, [Leslie V. Farland](#)^a, [Kacey C. Ernst](#)^a,
[Jennifer G. Andrews](#)^b, [Sage Vu](#)^a, [Kelly M. Heslin](#)^a, [Collin Catalfamo](#)^a, [Zhao Chen](#)^a,
[Kristen Pogreba-Brown](#)^a

^a Mel and Enid Zuckerman College of Public Health, University of Arizona, Tucson, AZ, United States

^b Department of Pediatrics, College of Medicine, University of Arizona, Tucson, AZ, United States

Received 5 May 2023, Revised 28 August 2023, Accepted 29 August 2023, Available online 4 September 2023.

Conclusions

Improvement in booster uptake is necessary for optimal public health in the United States. The development of vaccines against SARS-CoV-2 occurred at an unprecedented speed, but vaccine uptake remains among the greatest current public health challenges as updated boosters continue to be developed and made available to the public. Interventions to improve vaccination rates require a variety of approaches.

Poland launches probe as Legionella confirmed in city water supply

Intelligence bosses are looking into whether the outbreak in Rzeszów is a result of tampering.



AUGUST 28, 2023

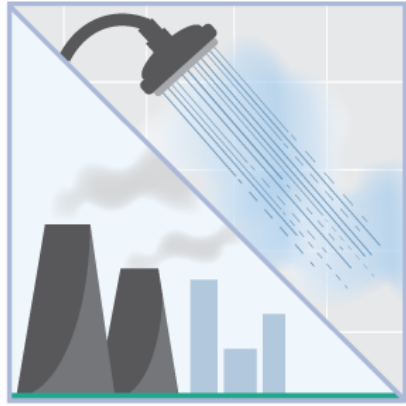
Eleven people die from Legionnaires' disease outbreak in Polish town of Rzeszow



Published on 28/08/2023

Legionella grow in human-made water systems

2



Legionella aerosolize and are inhaled (or aspirated) from human-made or natural water systems

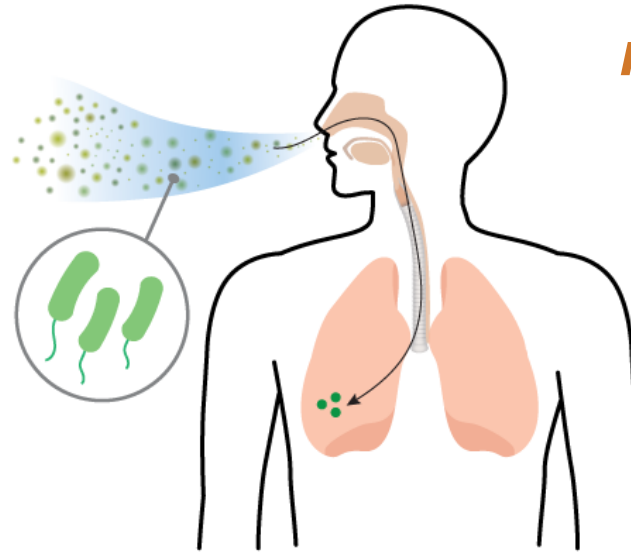
3



1

Legionella found in the natural environment

Transmission of *Legionella* Bacteria



4

Susceptible person can become infected

World Health Organization

“As of 11 September 2023, a total of 166 cases of legionellosis, including 23 deaths, have been reported from Poland.”

Levofloxacin or azithromycin for 7–10 days is recommended in cases of moderate to severe Legionella pneumonia. For immunocompromised hosts, a 21-day course of levofloxacin or a 10-day course of azithromycin is usually recommended

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9124264/>

Current Vaccines

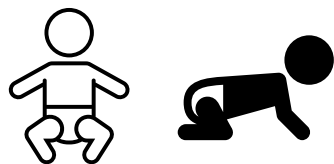
Maternal Immunization (5)

- Tdap
- Influenza
- COVID-19
- **RSV**
(Recommended, not licensed)



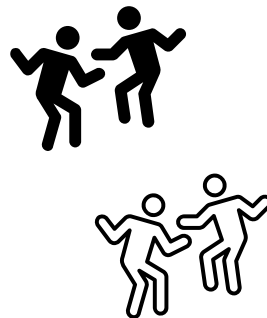
Infant, toddlers (≥11+4)

- DTaP-Hib-IPV-HBV
- PCV
- Rotavirus
- Influenza
- MenACWY
- MenB
- **TBE (>1 yr)**
- MMR-V



School Entry/ Adolescents (6)

- Boosters Tdap
- Influenza
- COVID-19
- MenACWY
- MenB
- HPV
- **TBE**



Adults (>3)

- Boosters
- Tdap-IPV
- Influenza
- HPV
- **TBE**
- "Workplace Vx"



≥65 yrs (9)

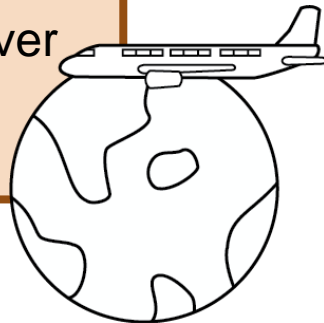
- Boosters
- Tdap
- **TBE**
- COVID-19
- Influenza
- PCV
- Zoster
- MenACWY
- MenB



Medical Need Based on special host/exposure

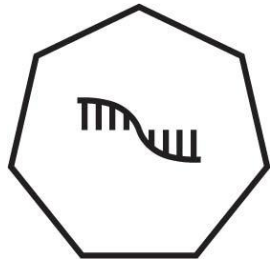
Traveler

- Boosters
- TBE (FSME)
- HAV
- HBV
- Influenza
- MenACWY
- MenB
- JE
- Typhoid
- Rabies
- Yellow fever
- Cholera
- Dengue



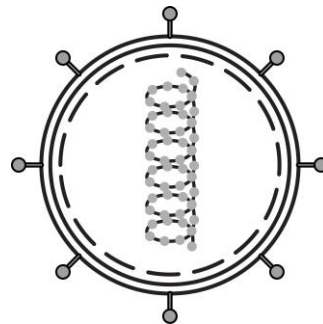
Underlying diseases

- Influenza
- Boosters
- (risk-based Vx)



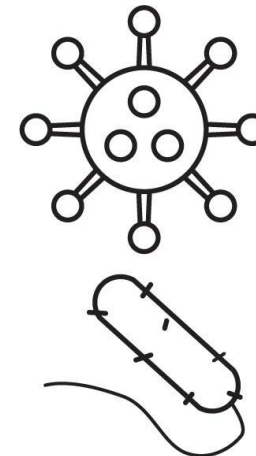
B-&T-cell Defect/ Cancer*

- Influenza
- PCV
- MenACWY
- MenB
- *H. influenzae b*
- HBV
- Boosters



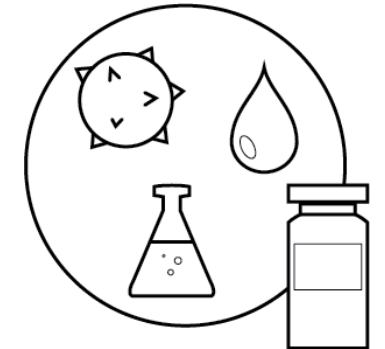
Emerging infections

- COVID-19 VOCs
- Avian influenza
- Cholera
- Smallpox
- Monkeypox



Lack of health care resources

- Monkeypox
- Ebola



* If sufficient immune responses can be reasonably expected

Potential AE after COVID-19 mRNA vaccination in subjects ≥ 65 years and older: Two self-controlled studies in the U.S

Background: Our near-real-time safety monitoring of 16 adverse events (AEs) following COVID-19 mRNA vaccination identified potential elevation in risk for six AEs following primary series and monovalent booster dose administration. The crude association with AEs does not imply causality. Accordingly, we conducted robust evaluation of potential associations.

Methods: We conducted two self-controlled case series studies of COVID-19 mRNA vaccines (BNT162b2 and mRNA-1273) in U.S. Medicare beneficiaries aged ≥ 65 years. Adjusted incidence rate ratio (IRRs) and 95 % confidence intervals (CIs) were estimated following primary series doses for acute myocardial infarction (AMI), pulmonary embolism (PE), immune thrombocytopenia (ITP), disseminated intravascular coagulation (DIC); and following monovalent booster doses for AMI, PE, ITP, Bell's Palsy (BP) and Myocarditis/Pericarditis (Myo/Peri).

Results: The primary series study included 3,360,981 individuals who received 6,388,542 primary series doses; the booster study included 6,156,100 individuals with one monovalent booster dose. The AMI IRR following BNT162b2 primary series and booster was 1.04 (95 % CI: 0.91 to 1.18) and 1.06 (95 % CI: 1.003 to 1.12), respectively; for mRNA-1273 primary series and booster, 1.01 (95 % CI: 0.82 to 1.26) and 1.05 (95 % CI: 0.998 to 1.11), respectively. The hospital inpatient PE IRR following BNT162b2 primary series and booster was 1.19 (95 % CI: 1.03 to 1.38) and 0.86 (95 % CI: 0.78 to 0.95), respectively; for mRNA-1273 primary series and booster, 1.15 (95 % CI: 0.94 to 1.41) and 0.87 (95 % CI: 0.79 to 0.96), respectively. The studies' results do not support that exposure to COVID-19 mRNA vaccines elevate the risk of ITP, DIC, Myo/Peri, and BP.

Conclusion: We did not find an increased risk for AMI, ITP, DIC, BP, and Myo/Peri and there was not consistent evidence for PE after exposure to COVID-19 mRNA primary series or monovalent booster vaccines. These results support the favorable safety profile of COVID-19 mRNA vaccines administered in the U.S. elderly population.

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ARE YOU WILLING TO
GET VACCINATED AGAINST A
POTENTIALLY DEADLY
DISEASE?

I'D
RATHER
DIE!

