An Evidence-Based Rebuttal of RIDOH's-Proposed School Masking Regulation *LYSENKOISM*

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March 15, 2024

Full slide set available: www.andrewbostom.org

Former RIDOH Interim Director, Dr. James McDonald, 12/2/21, holding his masked Dr. Fauci doll, & a mask

Lysenkoism

Trofim Lysenko believed that acquired traits are inherited, claimed that heredity can be changed by "educating" plants, & denied the existence of genes. Lysenko was supported by Stalin & Communist Party elites

[Borinskaya SA et al. "Lysenkoism Against Genetics: The Meeting of the Lenin All-Union Academy of Agricultural Sciences of August 1948, Its Background, Causes, and Aftermath." *Genetics*. 2019 May;212(1):1-12]

"Professor T.D. Lysenko, vice chairman of The Academy of Sciences of the Soviet Union, and holder of the Order of Lenin, is far ahead of any scientist in the field of genetics. ***He is, in fact, the only scientist who ever grew wax tomatoes from an ordinary vine****...This unusual product was revealed at the Moscow Scientific Congress…One report says that Lysenko's tomatoes were right on the vine. In any case, some scientist managed to stick one in his pocket and give it further examination.* ***The tomato was made of wax****.* ***But Dr. Lysenko is no joke to Soviet scientists****.* ***One leading Russian scientist who happened to dispute his views, Professor Nikolai Vavilov, died in a concentration camp 6-years ago under circumstances that were never explained. Obviously other scientists unwilling to share the fate of Vavilov agree with Lysenko****."*

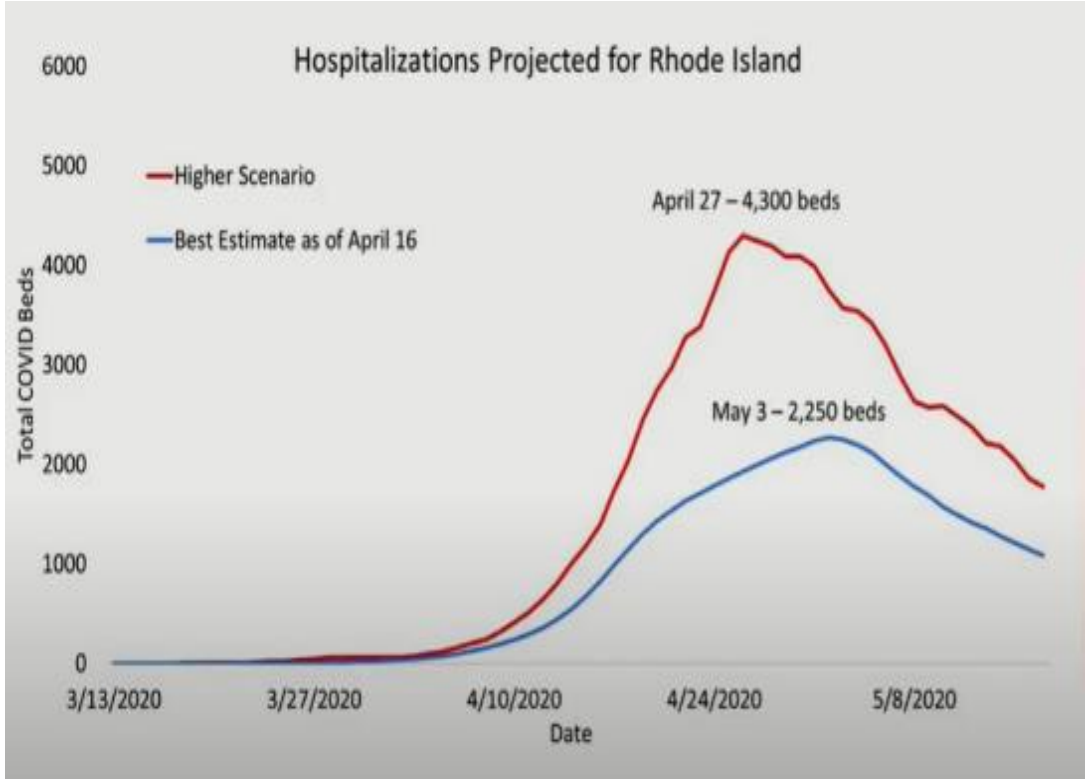
[Hugh E. Wells. "**How Soviet Shackles Its Scientists**" *The Philadelphia Inquirer* September 26, 1948; p. 152.]

Then Governor Gina Raimondo presser on Rhode Island covid-19 hospitalization "models," 4/16/20, broadcast live on C-SPAN

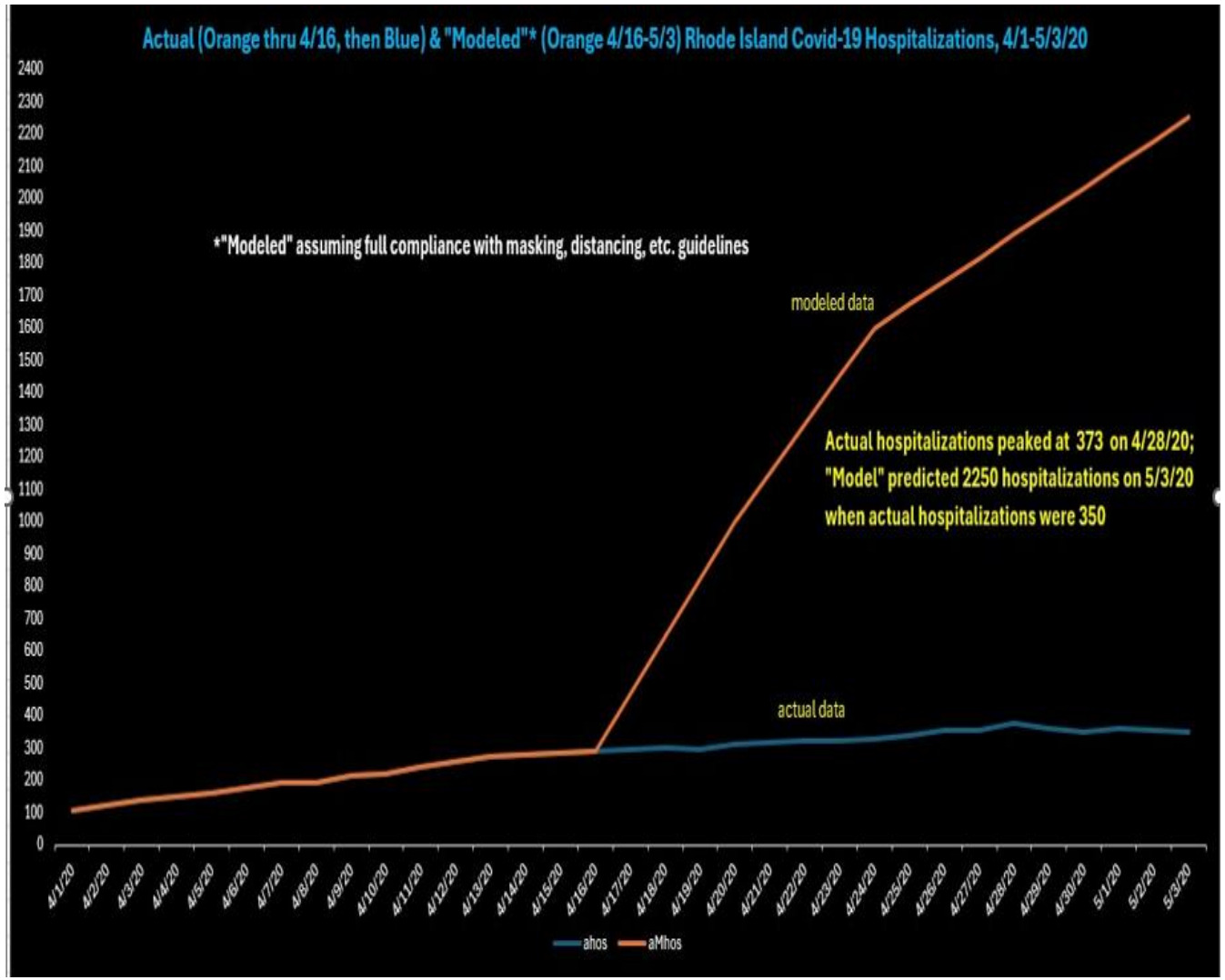
Then Governor Raimondo:
"It's been a collaborative effort with the (Rhode Island) Department of Health [**RIDOH], our own experts, Brown University, and Brown University's Policy Lab**. By the way, **I wanna give a huge shout out of thanks to Brown University**. I called you over a month ago, and **you gave us your very best statisticians and public health experts, and epidemiologists**. Thank you for being a great partner…***The blue line you could think of as our best guess of what we think the next few weeks will look like in Rhode Island. The blue line assumes all of the current restrictions—the stay at home order, the mask wearing, social distancing—are in place, and we are doing a pretty good job of adhering to them***. (Not a perfect job, but a good job of adhering to them.) In that scenario, we thank our peak will be around May 3, 2020, that means last week of April, first week of May, approximately, and at that time, **we will need about 2,250***…(O)n your screen, you should be seeing a red line. That red line represents what we think will happen if we stop taking social distancing seriously. And in that scenario, the peak comes sooner, probably April 27th, and obviously the peak is much higher. In that scenario, the red line that you're seeing, **we'll need closer to 4,300* hospital beds**."

(*Note: Actual absolute peak was n=373, on 4/28/20)

"Modeled" vs. Actual Rhode Island Covid-19 Hospitalizations, 4/27/20 & 5/3/20, were *> 6- to 12-fold higher only ~2-weeks after the predictions were made, on 4/16/20!*



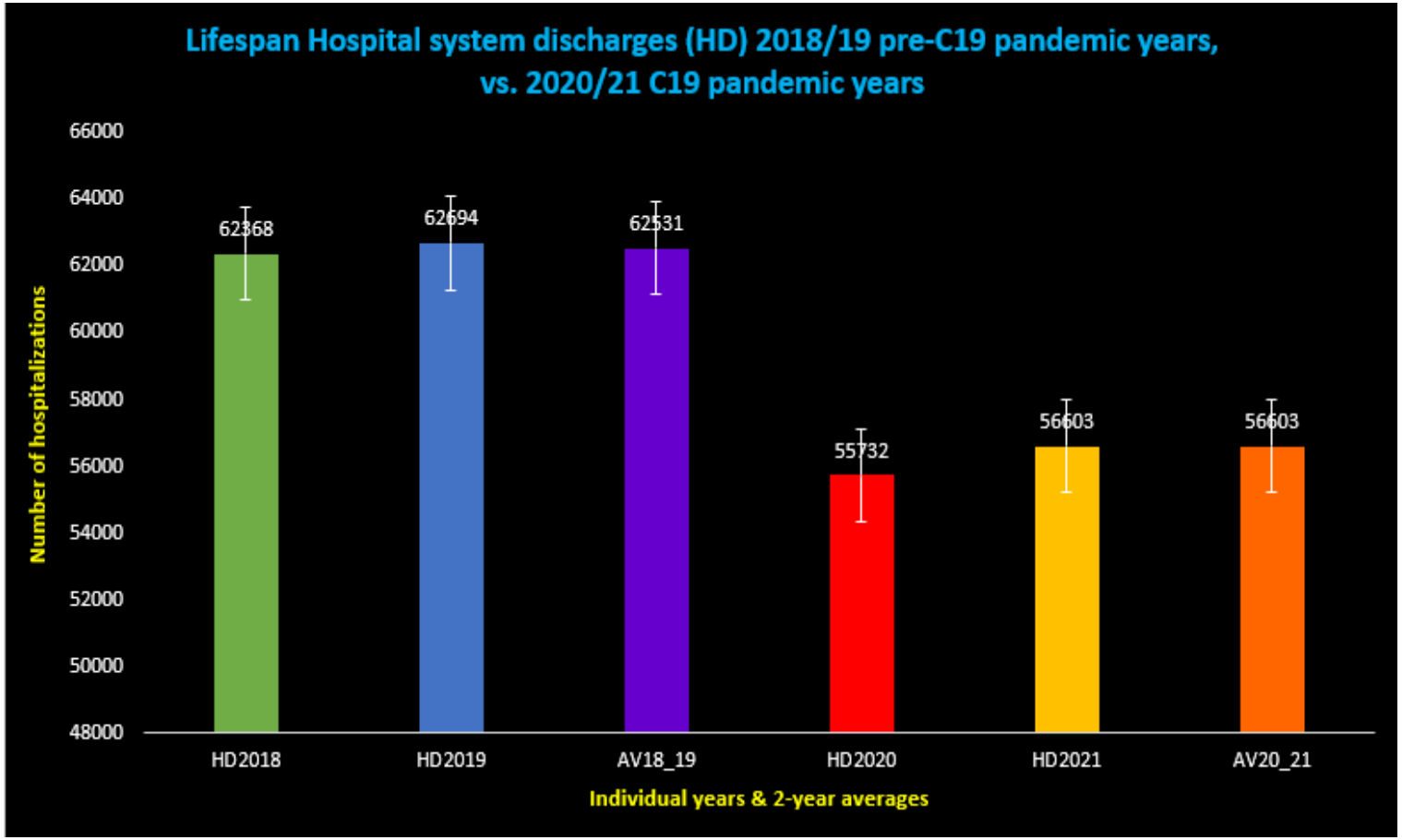
Type of Covid-19 Hospitalizations	Date	Number of Covid-19 Hospitalizations
Poor Social Distancing Model	**4/27/20**	**4,300**
Actual	**4/27/20**	**356**
Good Social Distancing Model	**5/3/20**	**2,250**
Actual	**5/3/20**	**350**



(Again: Actual absolute peak was n=373, on 4/28/20)

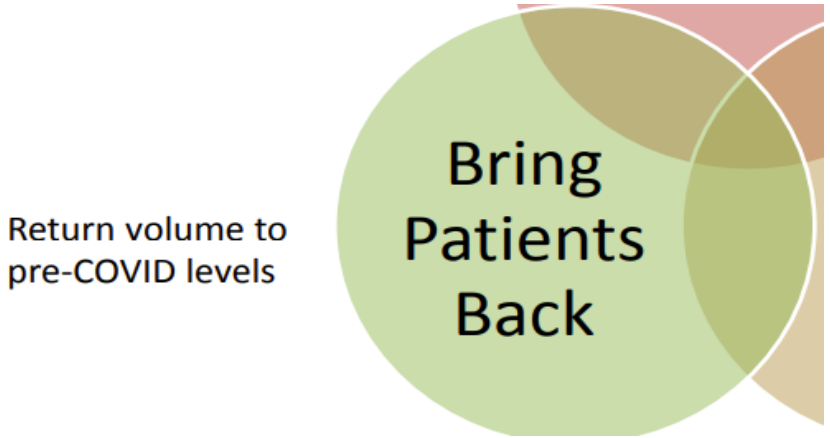
RI Statewide Hospital Discharges, Comparing Pre-Covid-19 Pandemic Years 2018-19, & Covid-19 Pandemic Years 2020-21

- **62,531 avg for 2018-19, Pre-covid-19 pandemic years**
- **56,603 avg for 2020-21 covid-19 pandemic years, i.e., *-9.5% LOWER***



Reference: https://www.lifespan.org/about-lifespan/lifespan-reports

Care New England (CNE) also experienced a decline in hospitalizations, vs. pre-covid levels. Indeed, a public record 8/25/21 CNE conference call featured a campaign of continued encouragement to ***"Bring Patients Back," and "return [hospitalization] volume to pre-covid levels"***



Reference: https://emma.msrb.org/P11522015-P11177370-P11593662.pdf, p. 14

Sweden NEVER "Locked Down," Never Imposed Mask Mandates, etc., & Kept In-Class, Primary School Education Schools Open, Throughout

National Demographer Orjan Hemstrom on Sweden's 2020 Total Mortality:

"We are back to the mortality of 2012…excess mortality is the same as it was a decade ago" 1918 flu pandemic far worse than covid-19

Statistics Sweden Demographer Orjan Hemstrom Reviews Swedish Total Mortality Trends, 1900-2020

From SVT (Swedish National Television), "The price of the Corona battle," Part 8 of 19, Sunday, February 28, 2021
https://www.svtplay.se/video/30291114/vetenskapens-varld/vetenskapens-varld-sasong-34-coronakampens-pris?start=auto&info=visa

SARS-CoV-2/Covid-19 Infection Fatality Rates (IFR)*: Critical Impact of Age

*(*covid-19 deaths/ total infected by SARS-CoV-2 antibody seroprevalence data)*

Age group (years)	IFR
≥70, overall (incl nursing homes)	4.5%
≥70, community dwelling When >85=5% When >85=10% When >85=20%	2.9% 1.2% 1.8% 3.9%
0-69, overall	0.1%
60-69	0.5%
50-59	0.1%
40-49	0.04%
30-39	0.01%
20-29	0.002%
0-19	0.0003%

- **≥ 70, overall, confers 45X the risk of 0-69, overall**
- **≥ 70, overall confers 15,000X the risk of 0-19**
- ***0-19 yos: 1 death per 333,000+ infections; (1 death per million infections since omicron)***

Reminders:

→→ 94% of the world's population is <70

→→ 86% of the world's population is <60

IFR for all ages, combined, ~0.25-0.30%

References:

Axfors C, **Ioannidis JPA**. Infection fatality rate of COVID-19 in community-dwelling elderly populations. Eur J Epidemiol. 2022 Mar;37(3):235-249. doi: 10.1007/s10654-022-00853-w. Epub 2022 Mar 20. PMID: 35306604; PMCID: PMC8934243

Pezzullo AM, Axfors C, Contopoulos-Ioannidis DG, Apostolatos A, **Ioannidis JPA**. Age-stratified infection fatality rate of COVID-19 in the non-elderly population. Environ Res. 2023 Jan 1;216(Pt 3):114655. doi: 10.1016/j.envres.2022.114655. Epub 2022 Oct 28. PMID: 36341800; PMCID: PMC9613797.

Patients with fatal or serious covid-19 disease were disproportionately elderly, & heavily burdened with multiple, chronic comorbidities: Data from ~541K U.S. covid-19 hospitalizations

Table 1. Characteristics of Adults Hospitalized With COVID-19 in Premier Healthcare Database Special COVID-19 Release (PHD-SR), March 2020–March 2021

Characteristic[a]	All Hospitalized Patients in PHD-SR, No. (%)	Hospitalized Patients With COVID-19, No. (%)			
		Full Sample	ICU[b] admission	IMV[b]	Died[b]
Total	4,899,447 (100.0)	540,667 (100.0)	249,522 (100.0)	76,680 (100.0)	80,174 (100.0)
No. of conditions					
≥1[c]	4,438,183 (90.6)	513,292 (94.9)	242,372 (97.1)	75,514 (98.5)	79,434 (99.1)
0	461,264 (9.4)	27,375 (5.1)	7,150 (2.9)	1,166 (1.5)	740 (0.9)
1	402,499 (8.2)	39,776 (7.4)	14,272 (5.7)	2,785 (3.6)	2,087 (2.6)
2–5	1,796,770 (36.7)	212,429 (39.3)	94,405 (37.8)	27,405 (35.7)	25,893 (32.3)
6–10	1,565,845 (32.0)	167,706 (31.0)	84,745 (34.0)	28,774 (37.5)	31,310 (39.1)
>10	673,069 (13.7)	93,381 (17.3)	48,950 (19.6)	16,550 (21.6)	20,144 (25.1)
Sex					
Female	2,860,589 (58.4)	261,078 (48.3)	110,017 (44.1)	30,062 (39.2)	32,939 (41.1)
Male	2,037,012 (41.6)	279,317 (51.7)	139,416 (55.9)	46,587 (60.8)	47,211 (58.9)
Unknown	1,846 (0.0)	272 (0.1)	89 (0.0)	31 (0.0)	24 (0.0)
Age, y					
Median (IQR), y	68 (57–78)	66 (53–77)	67 (55–77)	67 (57–75)	74 (65–83)
18–39	1,304,324 (26.6)	59,697 (11.0)	19,120 (7.7)	4,192 (5.5)	1,299 (1.6)
40–49	428,000 (8.7)	51,591 (9.5)	22,605 (9.1)	5,913 (7.7)	2,710 (3.4)
50–64	1,085,170 (22.1)	144,306 (26.7)	68,791 (27.6)	22,791 (29.7)	14,867 (18.5)
65–74	923,004 (18.8)	121,832 (22.5)	62,056 (24.9)	23,055 (30.1)	21,421 (26.7)
75–84	735,429 (15.0)	103,012 (19.1)	50,891 (20.4)	16,041 (20.9)	23,308 (29.1)
≥85	423,520 (8.6)	60,229 (11.1)	26,059 (10.4)	4,688 (6.1)	16,569 (20.7)

64.2% of those who died, 59.1% requiring mechanical ventilation, & 53.6 requiring ICU admission had ≥ 6 chronic comorbidities

76.5% of those who died, 57.1% requiring mechanical ventilation, & 55.7 requiring ICU admission were ≥ 65 years old

Reference:
Kompaniyets L, Pennington AF, Goodman AB, Rosenblum HG, Belay B, Ko JY, Chevinsky JR, Schieber LZ, Summers AD, Lavery AM, Preston LE, Danielson ML, Cui Z, Namulanda G, Yusuf H, Mac Kenzie WR, Wong KK, Baggs J, Boehmer TK, Gundlapalli AV. Underlying Medical Conditions and Severe Illness Among 540,667 Adults Hospitalized With COVID-19, March 2020-March 2021. Prev Chronic Dis. 2021 Jul 1;18:E66. doi: 10.5888/pcd18.210123. PMID: 34197283; PMCID: PMC8269743

Rhode Island Covid-19 Mortality: Critical Impact of Age

- **78% of deaths occurred among those ≥ 70**
- **55% of deaths occurred among those ≥ 80 (which is above the state's avg. life expectancy at birth of 79.8)**
- **53% of deaths occurred in nursing home or elder-assisted living facility residents (which further emphasizes the impact of comorbidity)**
- **NO DEATHS occurred in those ≤ 18 during > 3-years (*;**,***), while there were *269 non-covid-19 pediatric deaths* in Rhode Island from 1/1/2020-4/22/23**
- **(Sweden also had ZERO covid-19 pediatric deaths during the 1st [& most virulent] spring 2020 wave, despite ~2 million children attending school in person, without masks)**

*** Then RIDOH official Dr. James McDonald initially perjured himself on the issue of pediatric covid-19 deaths during Southwell v. McKee**

**** Compare this to 3 pediatric deaths in a single 2009-2010 H1N1 swine flu pandemic year in RI**

***** CDC SARS-CoV-2 antibody (nc) seroprevalence data indicates 96-100% of RI children have been infected!**

References:

RIDOH Covid-19 Data Hub: https://docs.google.com/spreadsheets/d/1c2QrNMz8pIbYEKzMJL7Uh2dtThOJa2j1sSMwiDo5Gz4/edit#gid=1592746937

RI avg life expectancy: https://247wallst.com/state/heres-how-life-expectancy-in-rhode-island-compares-to-the-nation/

CDC all-cause RI pediatric mortality: https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm

Ludvigsson JF et al. "Open Schools, Covid-19, and Child and Teacher Morbidity in Sweden" N Engl J Med. 2021 Feb 18;384(7):669-671. https://shorturl.at/adGQ6

For Dr. McDonald's initial perjury see: https://www.andrewbostom.org/wp-content/uploads/2021/10/brief-in-support-of-motion-for-preliminary-injunction_10_25-21.pdf

On 3 RI pediatric deaths from H1N1, 2009-10: (p.15) https://health.ri.gov/publications/surveillance/2011/Influenza.pdf

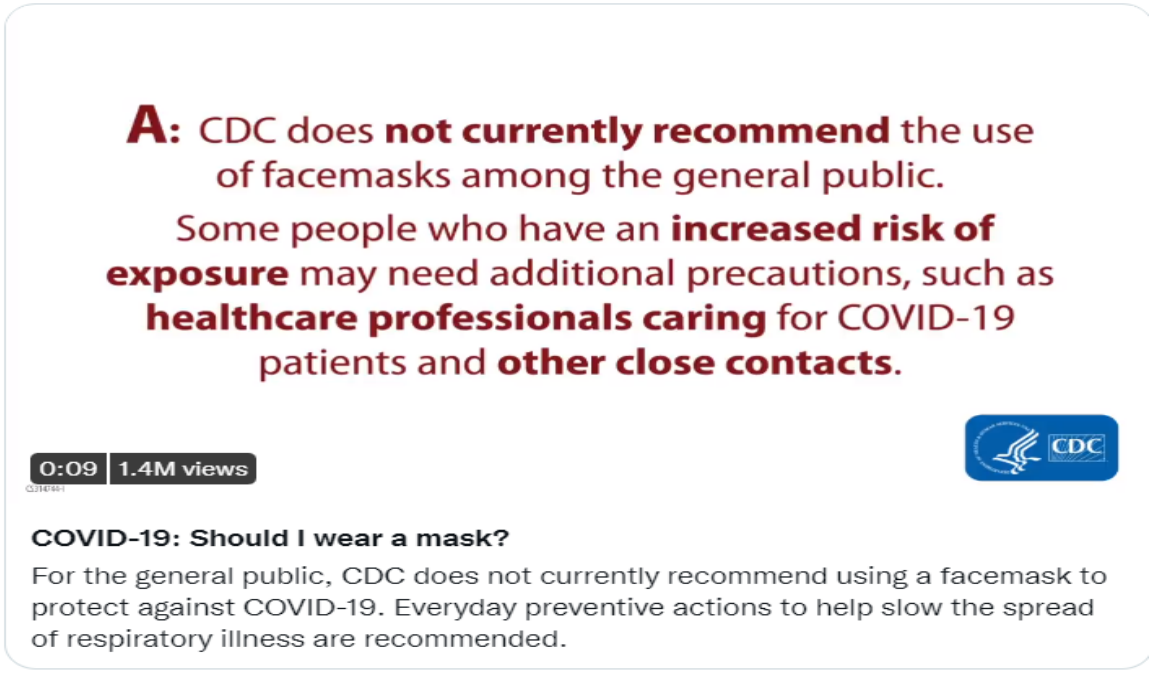
CDC SARS-CoV-2 antibody seroprevalence data for RI children as of 12/22: https://covid.cdc.gov/covid-data-tracker/#pediatric-seroprevalence

Original Rational, Evidence-Based Centers For Disease Control & Prevention (CDC) Advice on Masking to Prevent Covid-19, February 27, 2020

← Tweet

CDC
@CDCgov

CDC does not currently recommend the use of facemasks to help prevent novel #coronavirus. Take everyday preventive actions, like staying home when you are sick and washing hands with soap and water, to help slow the spread of respiratory illness. #COVID19 bit.ly/37Ay6Cm



4:00 PM · Feb 27, 2020 · Twitter Media Studio

Masking During the 1918 Influenza Pandemic:
Plus ça change, plus c'est la même chose?

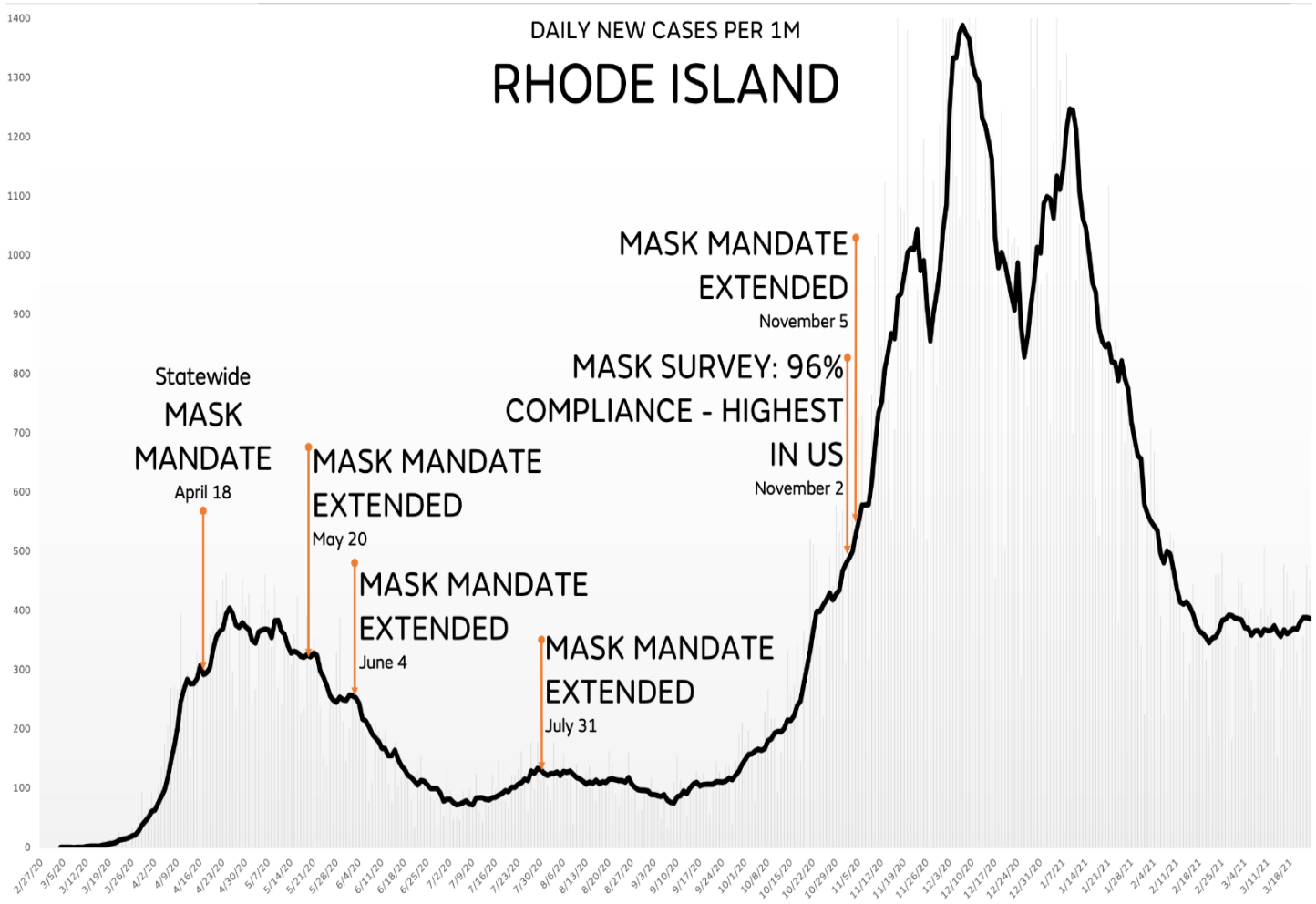
W.H. Kellogg, MD, infectious diseases expert, and then executive officer of the California State Board of Health, made this remorseful, brutally honest 1920 observation on the failure of masking to contain rampant influenza spread during the devastating 1918 pandemic (***Am J Public Health*** *[N Y]*. 1920;10(1):34-42. p. 35):

"The failure of the mask was a source of disappointment, for the first experiment in San Francisco was watched with interest with the expectation that if it proved feasible to enforce the regulation the desired result would be achieved. The reverse proved true. ***The masks, contrary to expectation, were worn cheerfully and universally, and also, contrary to expectation of what should follow under such circumstances, no effect on the epidemic curve was to be seen. Something was plainly wrong with our hypotheses*****."**

Masking in Rhode Island During the Initial Two Waves of the 2020-21 Covid-19 Pandemic: *Plus ça change, plus c'est la même chose*?

- Per a marketing survey of 5,000 Americans, reported 11/2/20, Rhode Island had the highest percentage—96%– of those who wear a mask "every time they go out" https://slickdeals.net/article/news/united-states-face-mask-wearing-habits-survey/

- Yet we still had an enormous late fall, early winter spike in covid-19 positive "cases" despite this 96% mask compliance, and the mandate extension, 11/5/20.



[Raw data for plot from RIDOH google doc]: https://docs.google.com/spreadsheets/d/1c2QrNMz8pIbYEKzMJL7Uh2dtThOJa2j1sSMwiDo5Gz4/edit#gid=264100583

Randomized, Controlled Trials as the Requisite Gold-Standard Evidence for *Recommendations* (*Let Alone "Mandates"*)

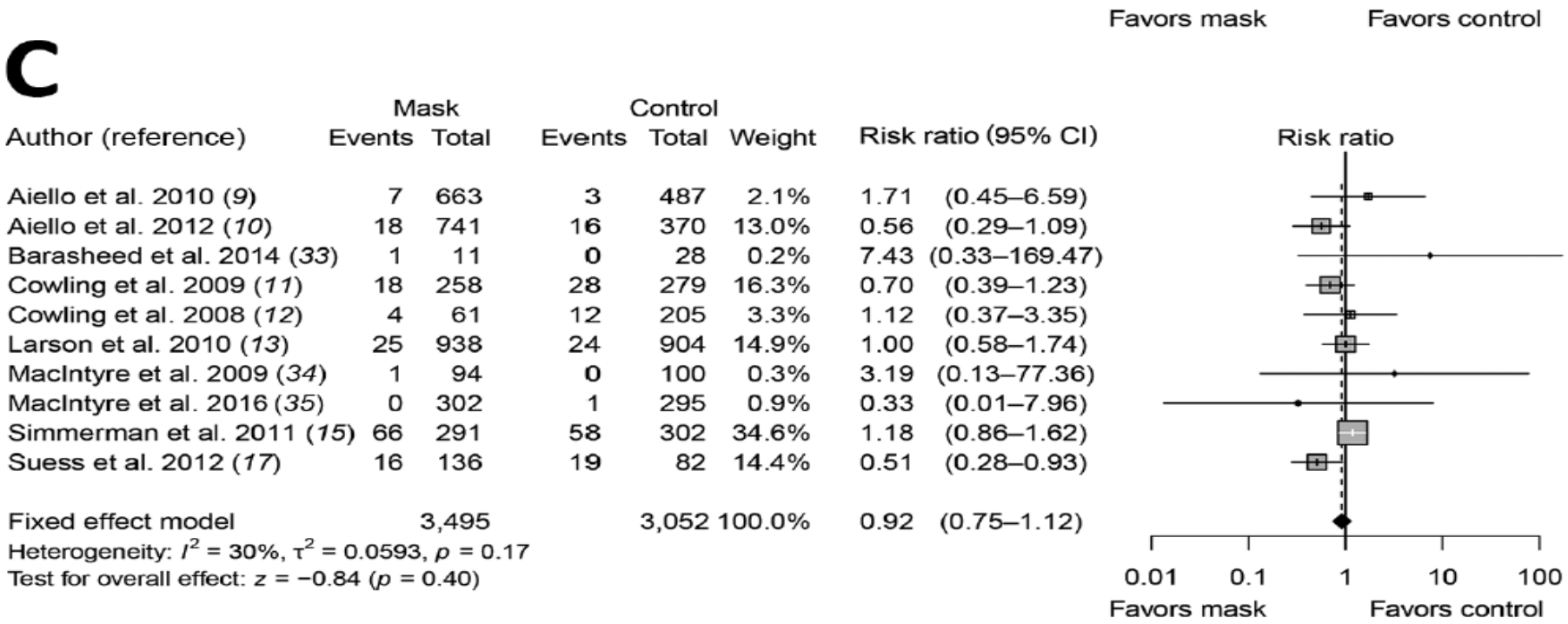
- In 1963 Campbell and Stanley published their seminal monograph on research methodology entitled "Experimental and Quasi-Experimental Designs for Research."
  - This work, which shaped research designs ever since highlighted the major threats to validity that ***are avoided, uniquely, by the randomized controlled trial***—a true experimental design—**but NOT by purely observational studies and all other non-randomized designs lacking parallel control groups**, **which they referred to "*quasi-experimental*", and fraught with intractable biases we attempt to control for, with limited success, after the fact**.
- Guyatt et al in their 2008 BMJ paper "GRADE: an emerging consensus on rating quality of evidence and strength of recommendations" https://www.bmj.com/content/336/7650/924.long, updated and reinforced these ideas, appropriately assigning highest priority to randomized, controlled trial evidence ***FOR MAKING RECOMMENDATIONS, NOT MANDATES!***

Factors that affect the strength of a recommendation

Factor	Examples of strong recommendations
Quality of evidence	Many high quality randomised trials

Uniformly NEGATIVE Randomized, Controlled Trials of Community Masking for the Prevention of Respiratory Viral Infections, Primarily Influenza, Published 2008, to 2020 (I)

- Between 2008-2020, at least 11 negative randomized controlled trials on masking were published. These studies conducted among ~12,000 persons, worldwide, all indicated that masking does not reduce community respiratory virus, especially influenza, infection rates. (1,2)
- Ten negative studies, focusing primarily on influenza, 2008 to 2016, were “meta-analyzed” [their data “pooled”], confirming the individual negative results (1)



Uniformly NEGATIVE Randomized, Controlled Trials of Community Masking for the Prevention of Respiratory Viral Infections, Primarily Influenza, Published 2008, to 2020 (II)

- Independently validating these pooled findings are the results from a single large randomized controlled trial of masking among another cohort of Hajj pilgrims whose enrollment [n=6338] (2) equaled the sum enrollment of all the 10 studies in the May, 2020 “meta-analysis.” Published online in mid-October, 2020, this “cluster randomized” (i.e., by tent) controlled trial confirmed mask usage did ***not*** reduce the incidence of clinically defined, or laboratory-confirmed respiratory viral infections, primarily influenza and/or rhinovirus. Indeed, there was a suggestion masking increased laboratory-confirmed infections by 40%, although this trend was not “statistically significant.” (2).

References

1) “Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures” https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article
2) “Facemask against viral respiratory infections among Hajj pilgrims: A challenging cluster randomized trial” https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7553311/pdf/pone.0240287.pdf

Those Pooled NEGATIVE RCTs Likely* Formed the Basis Centers For CDC'S Original Rational, Evidence-Based Advice AGAINST Masking to Prevent Covid-19, February 27, 2020 !

*FOIA request of Dr. Fauci's emails revealed he was shown in Feb 2020, the accepted, pre-publication galleys of the NEGATIVE pooled analysis of masking RCTs, "Nonpharmaceutical Measures for Pandemic Influenza in Nonhealthcare Settings—Personal Protective and Environmental Measures" https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article

Cochrane Meta-analysis (+2): Randomized, Controlled Trials of Masking (Med-surgical Masks & N95 Masks) Confirm NO BENEFIT for the Prevention of Influenza, or Covid-19

Cochrane—Medical/surgical masks compared to no masks

"***Wearing masks in the community probably makes little or no difference to the outcome of influenza-like illness (ILI)/COVID-19 like illness compared to not wearing masks*** (risk ratio (RR) 0.95, 95% confidence interval (CI) 0.84 to 1.09; **9 trials, 276,917 participants**; moderate-certainty evidence. ***Wearing masks in the community probably makes little or no difference to the outcome of laboratory-confirmed influenza/SARS-CoV-2 compared to not wearing masks*** (RR 1.01, 95% CI 0.72 to 1.42; **6 trials, 13,919 participants**; moderate-certainty evidence). **Harms were rarely measured and poorly reported (very low-certainty evidence)**."

Cochrane—N95=P2 respirators compared to medical-surgical masks

"***The use of a N95/P2 respirators compared to medical/surgical masks probably makes little or no difference for the objective and more precise outcome of laboratory-confirmed influenza infection*** (RR 1.10, 95% CI 0.90 to 1.34; **5 trials**, 8407 participants; moderate-certainty evidence). **Restricting pooling to healthcare workers made no difference to the overall findings. Harms were poorly measured and reported, but discomfort wearing medical/surgical masks or N95/P2 respirators was mentioned in several studies (very low-certainty evidence)**."

Reference

Jefferson et al. Physical interventions to interrupt or reduce the spread of respiratory viruses. Cochrane Database of Systematic Reviews 2023, Issue 1. Art. No.: CD006207. DOI: 10.1002/14651858.CD006207.pub6

TWO ADDITIONAL STUDIES PUBLISHED AFTER COCHRANE META-ANALYSIS

Fit tested N95s vs. medical masks in ~1000 HCWs for SARS-CoV-2 Prevention:

RCT among health care workers comparing fit-tested N95 masks (**n=507**), to medical masks (**n=497**) published 11/29/22 in the pre-eminent internal medicine journal *Annals of Internal Medicine*, found **SARS-CoV-2 infection rates did not differ between the groups**. Confirmed (by RT-PCR) SARS-CoV-2 infections occurred in 52/497 (10.46%) of those assigned to medical masks, vs. 47/507 (9.27%) assigned to fit-tested N95 masks (hazard ratio 1.14 [95% CI, 0.77-1.69).

Enormous (~40K) community RCT of cloth masks in Guinea-Bissau, published in high impact journal *PLOS* :

No benefit in entirety which incl subgroup of 10-18 yo children (~10K)*; suggestion of both slightly increased all-cause deaths (52 vs. 37) & hospitalizations (8 vs. 3) in the mask intervention grp

*(*During Southwell v. McKee, Dr. McDonald claimed it would be "unethical" to conduct an RCT of masking in children...[but ethical to just mask them, in the absence of supportive data from an RCT!])*

References

Loeb M et al. Medical Masks Versus N95 Respirators for Preventing COVID-19 Among Health Care Workers : A Randomized Trial. Ann Intern Med. 2022 Dec;175(12):1629-1638. doi: 10.7326/M22-1966. Epub 2022 Nov 29;

Nanque LM, et al. Effect of distributing locally produced cloth facemasks on COVID-19-like illness and all-cause mortality-a cluster-randomised controlled trial in urban Guinea-Bissau. PLOS Glob Public Health. 2024 Feb 13;4(2):e0002901. doi: 10.1371/journal.pgph.0002901.

October 2019, Brown University & RIDOH Investigators Published a Peer Reviewed Study in the Journal "*Medical Care*," Using, & Praising, The Cochrane Reviews as a Tool for Teaching "Expert Guidance" to "Community Partners in Evidence Synthesis"!

"Good decision-making by policy makers, insurers, health systems administrators and funding agencies requires access to evidence that is applicable to their local context and responds to the needs of their constituencies.[1]" What was ref 1? Armstrong R, et al. "**Tracking and understanding the utility of Cochrane reviews for public health decision-making**." J Public Health. 2012;34:309–313.

"*The training program adapted expert guidance from the Institute of Medicine, Agency for Healthcare and Research Quality Effective Health Care Program, and* ***the Cochrane Handbook for Systematic Reviews of Interventions*** *for the community audience."*

Community-engaged Evidence Synthesis to Inform Public Health Policy and Clinical Practice

A Case Study

Stacey Springs, PhD,*† Valerie Rofeberg, ScM,* Sherilyn Brown, MA,‡ Steven Boudreau,§ Spencer Phillips Hey, PhD,‖¶ and Jay Baruch, MD#

Springs S, Rofeberg V, Brown S, Boudreau S, Hey SP, Baruch J. Community-engaged Evidence Synthesis to Inform Public Health Policy and Clinical Practice: A Case Study. Med Care. 2019 Oct;57 Suppl 10 Suppl 3(10 Suppl 3):S253-S258. doi: 10.1097/MLR.0000000000001180

This *Tripe* is What RIDOH, via CDC, Relied Upon, in Lieu of Valid RCTs: Evaluation of 77 masking "studies" published in CDC's non-peer reviewed, house organ, "Morbidity & Mortality Weekly Reports (*MMWR*)," 2019-2023

"We found that, while <20% of MMWR studies pertaining to masks generated ***any*** **statistical evidence of mask effectiveness *and no randomized [controlled trial (RCTs)] investigations were published***, more than 75% of the publications arrived at a favorable conclusion about using masks, and 70% of studies testing masks used causal language. Similarly, language about the studies' implications, including the importance of masking, was used in multiple publications despite lack of supporting evidence."

Høeg TB, Haslam A, Prasad V. An Analysis of Studies Pertaining to Masks in Morbidity and Mortality Weekly Report: Characteristics and Quality of Studies through 2023. ***Am J Med***. 2024 Feb;137(2):154-162.e1. doi: 10.1016/j.amjmed.2023.08.026. https://www.amjmed.com/article/S0002-9343(23)00580-6/fulltext

"*A number of studies that were particularly influential in shaping policy recommendations around masking in the public and schools were not even among the studies that attempted to properly evaluate masks, as they had no control group or comparative time period*. These studies included the investigation of Missouri hairdressers, the Georgia overnight camp outbreak investigation, and the Marin County, California school outbreak investigation."

Table 2 Select Conclusion Statements Indicating a Causal Relationship Between Mask Wearing and Decreased Case Rates/Transmission from MMWR Mask Studies that Failed to Find Evidence of Mask Effectiveness

Study and Date	Conclusion Statement	Control Group/Time Period	Provided Evidence of Mask Effectiveness
Outbreak investigation of 2 Missouri hairdressers 7/14/2020[7]	"Consistent and correct use of face coverings, when appropriate, is an important tool for minimizing spread of SARS-CoV-2."	No	No
Georgia camp outbreak investigation 8/7/2020[16]	"Consistent and correct use of cloth masks should be emphasized as important strategies for mitigating transmission."	No	No
Marin County Elementary School outbreak 9/3/2021[17]	"Strict adherence to multiple nonpharmaceutical prevention strategies, including masking, are important to ensure safe school instruction."	No	No

Negative effects of masking in children

REMINDER: Judge Lanphear in Southwell v. McKee, ruled masking caused, "(some) irreparable harm"

–The discomfort of a mask distracts some children from learning, & can cause social isolation as described during the 2003 SARS-CoV-1 epidemic in a Hong Kong study of preschool children.

–A 2019 controlled randomized, crossover study of N95 masking in children reported that within 5-minutes, masking significantly raised blood CO2 concentrations vs. a controlled 5-minute period when unmasked

–A 2022 controlled study of 72 children, aged 6–14 years old using the Cambridge Face Memory Test, a validated measure of face perception performance, revealed *"substantial quantitative and qualitative alterations in the processing of masked faces in school-age children,"* which *"could have significant effects on children's social interactions with their peers and their ability to form relationships with educators."*

Rao N. "Sars, preschool routines and children's behaviour: Observations from preschools in Hong Kong" *Int J Early Child*. 2006;38(2):11-22.

Goh DYT et al. "A randomised clinical trial to evaluate the safety, fit, comfort of a novel N95 mask in children" *Sci Rep.* 2019 Dec 12;9(1):18952.

Stajduhar A et al. Face masks disrupt holistic processing and face perception in school-age children. *Cogn Res Princ Implic*. 2022 Feb 7;7(1):9.

Covid-19 Policy Negative Educational Outcomes in US/ RI Schoolchildren

REMINDER: Judge Lanphear in Southwell v. McKee, ruled masking caused, "(some) irreparable harm"

2022

Test Scores Show Historic COVID Setbacks for Kids Across US

New national test results show that the pandemic spared no part of the country as it caused historic learning setbacks for America's children.

By Associated Press | Oct. 24, 2022, at 5:37 p.m.

"Across the country, math scores saw their largest decreases ever. Reading scores dropped to 1992 levels. Nearly four in 10 eighth graders failed to grasp basic math concepts. Not a single state saw a notable improvement in their average test scores, with some simply treading water at best. Those are the findings from the National Assessment of Educational Progress — known as the 'nation's report card' — which tested hundreds of thousands of fourth and eighth graders across the country this year. It was the first time the test had been given since 2019, and it's seen as the first nationally representative study of the pandemic's impact on learning."

2023

Study: R.I. students suffered significant learning loss during pandemic

By **James Bessette** - 05/11/2023

Providence Business News

Harvard & Stanford University, "Education Recovery Scorecard" Study:

"According to the researchers' findings – based on a points system to determine the results – **Rhode Island students statewide lost more than four months of learning math during the pandemic and more than two months of learning reading**. Some districts, though, have suffered greater losses. **In South Kingstown, students there have lost close to nine months of learning in math and more than five months of learning reading**. Students in **Newport, per the research, have experienced almost eight months of learning loss in math and more than six months of learning loss in reading. The Providence Public School District, currently under R.I. Department of Education control, has seen its students lose close to six months of math learning loss and almost four months of lost learning in reading**. Students in Woonsocket, Westerly, North Providence, Cranston, West Warwick, Pawtucket, East Providence and Chariho have also lost about six months of learning math due to the pandemic, according to the research. Students in those same districts have experienced approximately three months of learning loss in reading. Meanwhile, **only Narragansett students have not experienced learning loss in both math and reading during the pandemic, per the research**."

Covid-19 Policies WITHOUT NEGATIVE Educational Outcomes in Swedish Schoolchildren

ELSEVIER

International Journal of Educational Research

Volume 114, 2022, 102011

No learning loss in Sweden during the pandemic: Evidence from primary school reading assessments

Anna Eva Hallin [a], Henrik Danielsson [b], Thomas Nordström [c], Linda Fälth [d]

Highlights

- No COVID-19 related learning loss in reading in Swedish primary school students.
- The proportion of students with weak reading skills did not increase during the pandemic.
- Students from disadvantaged socio-economic backgrounds were not especially affected.

No More Lysenkoism & a Return to Experiential, Evidence-Based Medicine (I)

D. A Henderson (d. 2016), MD, MPH, who was Dean of the Johns Hopkins University School of Public Health, and a leading figure in the WHO's successful smallpox eradication program, was the senior author on a paper about respiratory virus, esp. influenza, pandemic planning, circa 2006

Perhaps Henderson's very calm, sober perspective was shaped by dealing with a much more catastrophic illness—smallpox—which had a 20–60% fatality rate (persisting at 15-30% in its last endemic century), whose survivors were often maimed by the disease. This scourge, and the havoc it wrought, destroyed entire civilizations, and killed some 300 million in the 20th century, alone.

> "There are **no historical observations or scientific studies that support the confinement by quarantine of groups** of possibly infected people for extended periods in order to slow the spread of influenza... **The negative consequences of large-scale quarantine are so extreme (forced confinement of sick people with the well; restriction of movement of large populations)... that this mitigation measure should be eliminated from serious consideration...** During seasonal influenza epidemics, public events with an expected large attendance have sometimes been cancelled or postponed, the rationale being to decrease the number of contacts with those who might be contagious. **There are, however, no certain indications that these actions have had any definitive effect on the severity or duration of an epidemic**... Schools are often closed for 1–2 weeks early in the development of seasonal community outbreaks of influenza primarily because of high absentee rates, especially in elementary schools, and because of illness among teachers. This would seem reasonable on practical grounds. **However, to close schools for longer periods is not only impracticable but carries the possibility of a serious adverse outcome...**

No More Lysenkoism & a Return to Experiential, Evidence-Based Medicine (II)

...In Asia during the SARS period, many people in the affected communities wore surgical masks when in public. **But studies have shown that the ordinary surgical mask does little to prevent inhalation of small droplets bearing influenza virus. The pores in the mask become blocked by moisture from breathing, and the air stream simply diverts around the mask.** ***There are few data available to support the efficacy of N95 or surgical masks outside a healthcare setting. N95 masks need to be fit-tested to be efficacious and are uncomfortable to wear for more than an hour or two***... **The problems in implementing such measures are formidable, and secondary effects of absenteeism and community disruption as well as possible adverse consequences, such as loss of public trust in government and stigmatization of quarantined people and groups, are likely to be considerable…*Experience has shown that communities faced with epidemics or other adverse events respond best and with the least anxiety when the normal social functioning of the community is least disrupted***. Strong political and public health leadership to provide reassurance and to ensure that needed medical care services are provided are critical elements. If either is seen to be less than optimal, **a manageable epidemic could move toward catastrophe**."

From Henderson's senior author paper: "Disease mitigation measures in the control of pandemic influenza." Biosecur Bioterror. 2006;4(4):366-75. doi: 10.1089/bsp.2006.4.366. PMID: 17238820.

RCT evidence-based ultimatum to RIDOH, from parents, & their advocates :

"There will be no regulation requiring masking in schools for the alleged prevention of respiratory viral infections until evidence of BOTH their effectiveness, & lack of harm, has been demonstrated convincingly by multiple, rigorous, randomized controlled trials (RCTs) in school age children, published in peer reviewed journals."