Could the MMR vaccine provide partial or temporarily complete protection against COVID-19?

The story below was actually written up extremely well in the Athens Daily News on 5/30/2020:

<https://www.onlineathens.com/news/20200501/oconee-man-nm-researcher-mmr-vaccine-may-help-against-coronavirus>

Also provided here:

<https://medafile.com/coronareg/Ford-2020-5-3-AthensDailyNews-MMR-MayProtectAgainstCovid.docx>

This hypothesis could be quickly and easily tested with a variety of studies reviewing data which should already be known (individuals with COVID-19 positivity looking at the relationship between symptom presence and severity and MMR history -including age, sex, dates of MMR vaccinations – and serology for Rubella).

The Veterans Affairs tally: <https://www.accesstocare.va.gov/Healthcare/COVID19NationalSummary>

compared with the US prevalence suggests that Veterans (who are 86% male, average age 58 y/o, largest group between 48 and 64 y/o, 47.5% of the males over 75 y/o are Veterans - don’t know if they were getting MMRs before WW2 and the most relevant vaccine was apparently made after 1971) may have one third the incidence of the general US population:

19 million; VA registered – about 9 million. The VA reported 5/4/2020 that it had 9,666 cases (about 90% Veterans), 722 deaths. This is well below the national average at this point: 1,180,634 cases and 68,922 deaths:

Veterans: 5.8% of the US population (330 M), of COVID-19 cases: 0.8%; of deaths: 1%

Numbers for individual states can be checked. For 2018, California:

1,538,797 Vets of a population of 39.46 M = 3.9%

367 COVID-19 cases reported = 0.6%

19 COVID-19 deaths reported = 0.8%

There could be many reasons that Veterans have relatively fewer COVID-19 cases, even though being proportionally much older than the general population, including inaccurate reporting. But, accurate reporting would provide an excellent weapon for combatting COVID-19 and could show if immunization history was a relevant factor.

Babak, May 3, 2020 – noon (Pacific Time)

Great thread on WhatsApp about the MMR started by Daniel – I am checking out – the paper he sent about the Homologous protein domains is most interesting – links below.

In the second year of medical school, before the microbiology class, medical students are given numerous vaccinations to boost their immunity.

The USS Theodore Roosevelt had relatively few hospitalizations and deaths, possibly because sailors were all relatively recently immunized with MMR.

The VA link is down at the moment – there is a question of whether Veterans have less hospitalization and mortality because of their more recent MMR vaccination history than most adults.

Immediate thought is that front-line COVID-19 workers should be tested for sero-reactivity to measles, get MMR boosters.

Testing the MMR utility may be worthwhile since there could difficulty ever getting a vaccine for COVID-19:

<https://www.news4jax.com/health/2020/05/03/what-happens-if-a-coronavirus-vaccine-is-never-developed-it-has-happened-before/>

Thanks,

Wes

Great paper:

<https://www.medrxiv.org/content/10.1101/2020.04.10.20053207v1.full.pdf>

Homologous protein domains in SARS-CoV-2 and measles, mumps and rubella viruses:

preliminary evidence that MMR vaccine might provide protection against COVID-19

Adam Young1, Bjoern Neumann1, Rocio Fernandez Mendez2, Amir Reyahi3, Alexis Joannides2, Yorgo

Modis4,5,\* & Robin JM Franklin1,\*

1 Wellcome Trust- MRC Stem Cell Institute, Jeffrey Cheah Biomedical Centre, University of Cambridge,

Cambridge UK, CB2 0AW, UK

2 Department of Clinical Neurosciences, University of Cambridge, Cambridge Biomedical Campus,

Cambridge, CB2 0QQ, UK

Consideration that morbidity and mortality on the USS Theodore Roosevelt was about 1/20 what would have been expected because sailors would have had relatively recent MMR vaccinations:

<https://www.nbcsandiego.com/news/local/uss-theodore-roosevelt-covid-19-cases-exceed-1100-navy-to-decrease-reporting/2316749/>

<https://en.wikipedia.org/wiki/2020_coronavirus_pandemic_on_USS_Theodore_Roosevelt>

USS Roosevelt (about 4,800 sailors), SARS-CoV-2 detected in March 2020 (presumably from stop in Vietnam March 5-9; first positive case March 22 - see WIKIPEDIA) - finally, 1,102 sailors (including Captain Crozier) with active COVID-19 infections detected (increase from 940 due to positive tests in asymptomatic sailors. Chief Petty Officer Charles Robert Thacker Jr., 41 y/o died April 13. April 21: 9 sailors hospitalized, none in ICU; April 30: 3 sailors hospitalized, 1 (One) sailor died (less than 0.1%). (US and international rates vary 1- 15%)

USS Kidd - 78 case, no hospitalizations

Measles, Evidence of Immunity: https://www.cdc.gov/measles/hcp/index.html#immunity

**From:** Babak Kateb <babak.kateb@worldbrainmapping.org>
**Sent:** Saturday, May 2, 2020 8:54 PM
**To:** washford@medafile.com
**Cc:** Danielle Kim <kim.daniellek@gmail.com>; Al Kim <kim.alisonj@gmail.com>
**Subject:** Re: {SPAMFILTER} Re: {SPAMFILTER} Re: UQ COVID-19 vaccine shown to induce potent protective response in pre-clinical trials - UQ News - The University of Queensland, Australia

PR.  I have seen 100% cure out of Israel. So let wait and see.

Sent from my iPhone

**From:** David Earnest, MD

**Sent:** Saturday, May 2, 2020 12:12 PM
**To:** Wes
**Subject:** Re: UQ COVID-19 vaccine shown to induce potent protective response in pre-clinical trials - UQ News - The University of Queensland, Australia

This is very uplifting news.  I hope they progress to large population trials with the vaccine soon.  May have to go to another part of the world with large population that is actively in midst of viral replication to get durable idea of protection. The neutralizing antibody response certainly contrasts to the variable antibody response described in early patients who have recovered.  Thanks for sending me the link.

Of interest, the U of AZ has developed a test for some type of antibody which they plan to use, along with testing for viral antigen, to determine who gets to attend class here this fall. With so many false positive/negative antibody tests being reported, it would be nice if testing could utilize antibody shown to be protective.  The QU study is thus most encouraging that such can be defined.  Hope you are faring well in this interesting time.

More later,

David

On Fri, May 1, 2020 at 8:47 PM Wes Ashford wrote:

Sorry, the link broke in the middle:

<https://www.uq.edu.au/news/article/2020/04/uq-covid-19-vaccine-shown-induce-potent-protective-response-pre-clinical-trials>

They think they have a vaccine in Australia.
Wes

-----Original Message-----
From: Babak Kateb
Sent: Friday, May 1, 2020 8:15 PM
Subject: {SPAMFILTER} Re: UQ COVID-19 vaccine shown to induce potent protective response in pre-clinical trials - UQ News - The University of Queensland, Australia

The link doesn’t work. I know Australia very well.  Did they find a vaccine?

Sent from my iPhone

> On May 1, 2020, at 8:05 PM, Wes Ashford wrote:
>
> ﻿Al,
>
> I have been concerned that we might not be able to develop a vaccine.

<https://www.news4jax.com/health/2020/05/03/what-happens-if-a-coronavirus-vaccine-is-never-developed-it-has-happened-before/>

> Hopefully, we will and it will last.
>
> Thanks, Wes
>
> -----Original Message-----
> From: Ashford, J. Wesson > Sent: Friday, May 1, 2020 3:14 PM

> Subject: FW: [EXTERNAL] UQ COVID-19 vaccine shown to
> induce potent protective response in pre-clinical trials - UQ News -
> The University of Queensland, Australia
>
> -----Original Message-----
> From: Al Kim
> Sent: Friday, May 1, 2020 1:11 PM
> To: Ashford, J. Wesson
> Subject: [EXTERNAL] UQ COVID-19 vaccine shown to induce potent
> protective response in pre-clinical trials - UQ News - The University
> of Queensland, Australia
>
> Our daughter Danielle went to UQ fo study abroad during her undergraduate studies. She found the attached article reporting on their work on Covid  19 vaccine.
 Stay safe, Al
>
https://www.uq.edu.au/news/article/2020/04/uq-covid-19-vaccine-shown-induce- potent-protective-response-pre-clinical-trials