

1 COVID-19 / MEASLES CONNECTION v1.6

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3 (This report published online and emailed to Dr. Anthony Fauci at NIAID on March 29, 2020.)

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5 Widely used MMR, MR and live attenuated measles vaccines (referred collectively herein as
6 "MCV" or measles containing vaccines) are theorized by the author to be the reason why
7 children, teenagers and other young adults rarely have symptoms from COVID-19, and few if
8 any deaths can be attributed to COVID-19 in young populations. The author will go on to
9 explain herein why there are so many different outcomes related to COVID-19 happening in
10 different countries.

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12 In countries where vaccination "catch up" programs have been instituted in recent decades where
13 two doses of MCV have been properly given to older teenagers and young adults, there seems to
14 be the lowest incidence of deaths, and in a few instances no deaths at all, from COVID-19.

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16 Unlike most countries which only give MCV to children, several countries which have reported
17 zero deaths and zero cases of COVID-19 have had aggressive MCV programs which include a
18 large percent of the adult population: North Korea (many adults vaccinated through age 45),
19 Turkmenistan (many adults vaccinated through age 40), Cook Islands (many adults vaccinated
20 through age 35), Marshall Islands (many adults vaccinated through age 40), Solomon Islands
21 (many adults vaccinated through age 29), and Tuvalu (many adults vaccinated through age 34).

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23 [MCV DATA FROM WHO USED HEREIN:

24 https://www.who.int/immunization/monitoring_surveillance/data/Summary_Measles_SIAs.xls]

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26 Other countries which have had MCV programs reaching beyond young children are also seeing

27 fewer and in some cases no deaths from COVID-19. Such countries include: South Korea,

28 Russia, Vietnam, Laos, Mongolia, Nepal, Sudan, Maldives, Libya, Kuwait, Djibouti,

29 Kyrgyzstan, Kazakhstan, Myanmar, Republic of Georgia, El Salvador, Uruguay, Nicaragua,

30 Bolivia, Honduras, Guatemala, Belarus, Armenia, Oman, Somalia, Azerbaijan, Cambodia, Sri

31 Lanka, Papua New Guinea, and Micronesia.

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33 One small country in Asia, Bhutan, with zero COVID-19 deaths, has in recent years vaccinated

34 nearly their entire population of children and adults with MCV.

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36 Also of note, South Korea had a huge outbreak of measles in 2000 - 2001 (55,707 reported

37 cases) resulting in the government going back and vaccinating its population well above the

38 typical child-only MCV protocols in most other countries. South Korea is showing an unusually

39 low incidence of death from COVID-19 as compared to other countries with similar populations

40 infected at the same time.

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42 [SOUTH KOREA MEASLES OUTBREAK:

43 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3534158/>]

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45 Hong Kong in response to a Measles outbreak close to the same time as the one in South Korea,
46 initiated a large “catch up” MCV program. As of March 28, 2020 only four people have died
47 from COVID-19 in Hong Kong despite its proximity to mainland China.

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49 [HONG KONG MEASLES CAMPAIGN: [https://www.who.int/bulletin/archives/80\(7\)585.pdf](https://www.who.int/bulletin/archives/80(7)585.pdf)]

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51 On the opposite end of the spectrum, Italy had a large scale measles outbreak in 2017 affecting
52 over 4,000, caused by a much lower than typical MCV rate in that country. The lack of sufficient
53 MCV is perhaps the reason why there are so many more deaths in Italy from COVID-19 when
54 compared to most other similarly affected countries. According to one researcher, the
55 immunization rate in Italy in 2005 was just 85%, one of the lowest in Europe.

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57 [ITALY MEASLES OUTBREAK: <https://www.ncbi.nlm.nih.gov/pubmed/28933342>]

58 [INADEQUATE VACCINATION IN ITALY:

59 <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5243a4.htm>]

60 [MEASLE VACCINATION RATES IN IN ITALY:

61 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6321942/>]

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63 Analysis of data related to topics like MCV are, of course, never straightforward. For example,
64 Iran is one of the countries that has been hardest hit by COVID-19 deaths, yet Iran engaged in an
65 aggressive MCV strategy in 2003. Iran vaccinated over 33 million of its citizens that year, up
66 through age 25. Assuming the theory put forward herein is validated, it seems contradictory that
67 Iran's death rate would be so high. The possible reason for this becomes more clear once the data

68 is examined further. A study in 2007 found that just a few years after Iran's immunization
69 program, measles immunity levels were as low as 72.7% in vaccinated children aged 11-15. It is
70 known that immunity levels continue to decrease over time, so now, another 13 years later, it is
71 likely that immunity levels are even lower. The reason Iran's ambitious vaccination program
72 failed to live up to expectations was that only one vaccination was given, while two vaccinations
73 at least 28 days apart are required for proper effectiveness of an MCV.

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75 [MEASLES VACCINE FAILURE IN IRAN:

76 <https://www.sciencedirect.com/science/article/pii/S120197120700080X>]

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78 Young children may be the most protected from COVID-19 because not only have nearly all
79 children received two MCV, mothers of current generation children and teens have also most
80 likely also had two MCV themselves, thus providing additional passive immunity to infants.

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82 The efficacy of MCV has been shown to go down with age, leaving some of those who received
83 the vaccines in their youth more vulnerable as they age. Further, people over age 60 likely never
84 received any form of MCV. As a side note, it would be interesting to investigate whether there is
85 any correlation between having had a prior case of measles and either a higher or lower
86 incidence of death or complications from COVID-19. A 2019 Harvard report describes how
87 measles wipes out 20 to 50% of antibodies against viruses and bacteria unrelated to measles
88 itself.

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90 [MEASLES AND IMMUNE AMNESIA:

91 <https://www.sciencedaily.com/releases/2019/10/191031204630.htm>]

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93 It would also be useful to research titer levels for MCV in young, healthy people who are getting
94 sick or dying from COVID-19. Equally useful would be to examine titer levels of elderly people
95 who are unaffected by COVID-19 despite living in close quarters with an infected person.

96 Outside of countries where MCV have been widely given to adults, many adults get additional
97 MCV as part of a vaccine protocol when traveling to certain countries.

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99 [MEASLES VACCINES FOR TRAVELERS: <https://www.cdc.gov/measles/plan-for->

100 [travel.html](https://www.cdc.gov/measles/plan-for-travel.html)]

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102 The exact mechanism of the protective effect of current MCV for COVID-19 needs to be further
103 explored. A live measles vaccine has previously been considered in studies as a base for other
104 Coronavirus vaccines including SARS. Novel alphacoronaviruses and paramyxoviruses (the
105 measles family) have also been found to cocirculate. Further, MCV have been shown to
106 generally increase immunity against many unrelated viruses.

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108 [PROTECTION FROM SARS CORONAVIRUS WITH A LIVE MEASLES VACCINE:

109 <https://www.sciencedirect.com/science/article/pii/S0042682214000051>]

110 [VIRUSES COCIRCULATE: <https://aem.asm.org/content/83/18/e01326-17>]

111 [MEASLES VACCINES ADDITIONAL BENEFITS:

112 <https://www.ncbi.nlm.nih.gov/pubmed/28646947>]

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114 In reaching the connection described herein regarding a possible association between MCV and
115 COVID-19, data sets consisting of people who test positive for COVID-19 were not used since
116 such data is currently grossly incomplete and widely inconsistent. Similarly, data regarding death
117 rate in a given population (as compared to total number of people with COVID-19) was also not
118 used since it is based upon the same inconsistent COVID-19 testing protocols. As such, the data
119 reviewed for the analysis described herein was simply a review of total number of COVID-19
120 related deaths in any given country, compared to that country's MCV protocols. On initial
121 review, it appears that the total number of deaths from COVID-19 in any given country and the
122 rate at which the total number of deaths from COVID-19 may or may not be increasing in that
123 country, appears to correlate with the rate and style of MCV protocols.

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125 In conclusion, the author believes the use of MCV should be investigated further to determine if
126 an aggressive MCV program with two MCV spaced 28 days apart could quickly and
127 economically protect vulnerable populations from COVID-19.

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