Dear Adam Curry,

I just finished listening to show 1116 – and I had to write in after your discussion of measles and measles vaccines – which I am currently researching.

If we consider that most countries no longer administer a vaccine against smallpox, the pro-vaccine consensus should be that modern society can declare victory, and stop giving any more vaccines against diphtheria; tetanus; measles; mumps; polio; and rubella.

You ask, “Why?” In true NA fashion, I say, “Because.” The short answer is, herd immunity – which has been reached long ago for these ailments – and for most of them, herd immunity was achieved prior to the use of the vaccines that came online in the 1960s or after.

Allow me to highlight the case of measles.

**Measles was Eliminated in 2000!**

In 2000, the CDC declared that measles had been eliminated in the United States. But curiously, though eliminated [sic], the CDC did not call for an end to the MMR (measles-mumps-rubella) vaccine.

Please appreciate that according to the CDC, elimination of a disease does not mean zero cases per year. Instead

> “elimination is defined as the absence of endemic disease transmission for 12 consecutive months or longer, in a defined geographical area.”

(They do not define endemic).

In sum, since 2000, there are relatively few measles cases in the U.S., and the illness does not spread – even though roughly 80% of the population has no measles antibodies.

**Americans Conquered Measles Prior to the Vaccine**

Through the 1950s, 100% of all recorded measles cases in the United States occurred in children under the age of 16. For the decade, every year, any where from 5-10 percent of all children,

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got the measles. And with a decade-long average of 350,000 people sick with measles every year, even those numbers were not called an epidemic.

In 1960, three years before any type of measles vaccine was introduced to the American public, the measles infection rate was about 270 per 100,000. That number was 40% lower than the morbidity rate of 1950 (see Table 1 below). The tremendous drop makes sense because by 1960, “95% of the population had been infected with measles, by the age [15].”

The 95% number is significant because, according to Merrill (2010), Introduction to Epidemiology, herd immunity against measles will be achieved when perhaps as few as 83%, or with at least 94%, of the population is insusceptible to the disease. Hence, because in 1960, 95% had already survived a bout of measles, the American people already developed herd immunity against measles – without any vaccine.

What Has Happened in the Vaccine Era?

The first measles shot came online in 1963. By 1981, eighteen years into the “one MMR-shot regimen,” measles cases in the U.S. were extremely rare – 1.3 per 100,000. The drop seen from 1963 to 1981, moved researchers at the CDC to say:

“It is anticipated that indigenous transmission will be eliminated entirely from the country within the year” (meaning before December 1984).

And note, at that time, 1983, the MMR shot was given only to children, at a scant rate of 68% – and measles was the lowest in the nation’s history. Arguably there was no need for the MMR by the year 1983, as the measles rate was 1% of the 1962 rate – and annual deaths had dropped to zero. (See Table 1, below).

Despite the low measles morbidity and mortality, but largely because immunization rates were slowly dropping and lawsuits were rising, by 1988, Congress gave immunity to the vaccine-makers. From the U.S. Supreme Court case, Bruesewitz v. Wyeth (2011) we read:

“[By the 1980s] the public became much less alarmed at the threat of those diseases and much more concerned with the risk of injury from the vaccines themselves.”

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4 See the CDC vaccine schedule of 1983, which called for one dose of MMR at age 15 months.
8 Mortimer, “Immunization Against Infectious Disease,” 200 Science 902, 906 (1978)
“Lederle Laboratories, estimated that its potential tort liability exceeded its annual sales, by a factor of 200”¹⁰; and

“A significant [sic] number of parents were already declining vaccination for their children,¹¹ and concerns about compensation [sic] threatened to depress vaccination rates even further.”¹²

Unsurprisingly, with the legal immunity for the vaccine-makers and administrators (doctors and nurses), granted through the National Childhood Vaccine Injury Act, the MMR guidelines from the CDC went from one to two shots, and MMR vaccination rates grew from 65% to 88%.¹³

The View Over 100-Years: Examining the Data

Table 1. Measles in America: for selected years, 1920-2018.

<table>
<thead>
<tr>
<th>Selected year</th>
<th>Measles Morbidity rate per 100 million</th>
<th>Measles</th>
<th>Relative Change (year to year)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Relative lethality</td>
<td>Mortality per 100 million</td>
<td>Morbidity Rate</td>
<td>Mortality Rate</td>
</tr>
<tr>
<td>1920</td>
<td>441,000</td>
<td>1.60%</td>
<td>711</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1950</td>
<td>390,000</td>
<td>0.16%</td>
<td>400</td>
<td>-11.50%</td>
<td>-43.75%</td>
</tr>
<tr>
<td>1960</td>
<td>230,000</td>
<td>0.16%</td>
<td>204</td>
<td>-41.00%</td>
<td>-49.00%</td>
</tr>
<tr>
<td>1981</td>
<td>1,300</td>
<td>0.00%</td>
<td>0</td>
<td>-99.43%</td>
<td>-100.00%</td>
</tr>
<tr>
<td>1985</td>
<td>3,984</td>
<td>0.00%</td>
<td>0</td>
<td>206.00%</td>
<td>0</td>
</tr>
<tr>
<td>1990</td>
<td>11,086</td>
<td>0.32%</td>
<td>17.6</td>
<td>178.26%</td>
<td>99.99%</td>
</tr>
<tr>
<td>2001</td>
<td>13</td>
<td>0.00 * (0.37)</td>
<td>0.00 * (0.17)</td>
<td>-99.88%</td>
<td>-99.03%</td>
</tr>
<tr>
<td>2018</td>
<td>204</td>
<td>1469%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Note for the period 2001-2018, there were 2671 measles cases, and 10 people died. The lethality rate was 0.37% (more than double the pre-vaccine era), yet the mortality rate is 0.17 per 100 million.

As referenced in Table 1 (above), initially with the two-shots practice, from 1988-1991, the morbidity rate in the vaccine-era rose – from about 4,000 to 11,000 cases per 100,000,000 people. Even if anyone were troubled by that peak of 11,000 per 100 million, the figure was still

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¹¹ Footnote 10: Mortimer, supra, at 906.
97% less than the rate in 1920. After the relative surge, from 1992 to 2001, once again, measles infection rates continued the historic trend and dropped down to 13 per 100,000,000.

While today (2019) measles infections are more common (exceeding 200 per 100,000,000) than they were in 2001, and lethality is more prevalent that in the 1950s pre-vaccine era, the overall mortality attributable to measles is practically zero (1 American dies from measles every two years). Perhaps this latest upward tick signals something about nutrition (low vitamin A) and what researchers admitted about the smallpox vaccine in the 1970s – at a time when the disease was so rare – the shot caused more harm than it prevented.14

So even if one argued that a measles vaccine were ever necessary, the regressive trends of the 1980s, and first two decades of the 21st century, show us that more measles vaccines (two shots vs one), given at a younger age (now the first shot is suggested at 12 months – not 15), correlates with more measles outbreaks and more measles deaths.

As the CDC said, measles has been eliminated, and what they call herd immunity is here. Now is time to declare victory, and end the MMR.

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