

Department of Epidemiology Johns Hopkins Bloomberg School of Public Health 415 N. Washington Street, 2<sup>nd</sup> Floor Baltimore, Maryland 21231

6 March 2020

## Memorandum

To: Trialists

Fr: Curtis Meinert

Re: We shall overcome

We stand at the edge of a coronavirus pandemic. Who knows what lies ahead?

**Virus** (fr Webster's online) any of a large group of submicroscopic infectious agents that are usually regarded as nonliving extremely complex molecules, that typically contain a protein coat surrounding an RNA or DNA core of genetic material but no semipermeable membrane, that are capable of growth and multiplication only in living cells, and that cause various important diseases in humans, animals, and plants.

**Coronavirus** (fr Webster's online) any of a family (Coronaviridae) of single-stranded RNA viruses that have a lipid envelope studded with club-shaped projections, infect birds and many mammals including humans, and include the causative agents of MERS and SARS.

Our president says (27 February 2020) "It's going to disappear. One day it's like a miracle, it will disappear".

Mr President, that is not how it works. We live in a world of viruses. Viruses may morph but do not, like a miracle, disappear. The only virus I know to have disappeared is the smallpox virus, by capture. It still exists in laboratories in Russia and the U.S.

I live in an institution once headed by the person who helped capture the virus (DA Henderson; 1928-2016). Vaccination against smallpox stopped in the U.S. in 1972 because of his and efforts of many others. You can tell the age of someone by whether they have that telltale circular scar on their upper right or left shoulder from vaccination for smallpox.

I have had measles, German measles, mumps, and chicken pox, and have been vaccinated for smallpox, whooping cough, diphtheria, and polio (and maybe others), and every year, in recent years, for flu (to please my children).

People from young on now get a menu of vaccinations including for hepatitis A and B, rabies, meningitis, polio, measles, mumps, rubella, tetanus, diphtheria, pertussis, chickenpox, shingles, pneumonia, influenza, and HPV.

Ironically, even when we have a vaccine to prevent disease, like measles, we still have mini outbreaks because of workarounds for the requirement for vaccination as a condition for entry to school by parents who object to vaccination.

In my lifetime I have lived through epidemics and pandemic capable of putting the fear of the devil in you (made worse now by 24 hour "news" channels). Perhaps the epidemic most reminiscent of what is happening now was the polio epidemic in the summer of 1952. My mother had me scared stiff. (That is what mothers do when it comes to kids and diseases.) If I awoke up with a "stiff" neck I was

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sure I had polio. Swimming pools were closed. So was the Pix movie house in Sleepy Eye. Ditto for major social gatherings. A boring summer for a teenager on the farm.

The fear was not so much of dying from the disease (because it had a relatively low mortality rate) but what it could do to you. Still now, I have graphic memories of going to a special train stopping in Sleepy Eye with a car for viewing a person in an iron lung. Sobering!

A couple of years later (1954) the Salk Polio Vaccine Field Trials got under way eventually involving 1.8 million children; the largest trial undertaken heretofore.

A year later (12 April 1955), researchers announced the vaccine was safe and effective. Chalk one up for the Gipper!

Obviously the timing was serendipitous. The field trial preceded years of effort stretching back decades.

Edward Jenner is credited with having developed the smallpox vaccine (1796). It was the product of his observation that milkmaids, who had had cowpox, did not get smallpox. He showed that inoculated cowpox protected against inoculated smallpox, but his work stood on of centuries of effort by others aimed at controlling the disease.

It takes battalions of people to win battles against viruses and often, then only, a stalemate.

I was a late soldier in battalions of trialists battling HIV. The virus still exists but largely reduced to a manageable chronic condition.

In the 1980s and 90s a diagnosis of AIDs was a death sentence; now a manageable condition with a cocktail of drugs.

Chalk up another one for the Gipper.

I have no idea when we can say that for CORVID-19, but one day, somewhere, someone will say it!

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