

Measles: The New Red Scare

BY ROMAN BYSTRANYK

The fatal tendency of mankind to leave off thinking about a thing when it is no longer doubtful, is the cause of half their errors.

– John Stuart Mill, 1859

Majorities are never a proof of the truth.

– Dr. Walter R. Hadwen, 1896

The only thing we have to fear is fear itself.

– Franklin D. Roosevelt, 1933

Fear. It's a natural and primal human emotion. While human instinct is exceptional in evaluating and reacting to a natural personal risk, as in facing a predator, humans are terrible at assessing modern risks. According to *Psychology Today*¹ this is because our ancestors were programmed to quickly react and respond to a situation before it is even consciously perceived. Our reactions aren't based in logic and statistics, but in lightning fast primitive responses. Threats such as venomous spiders and snakes² cause an out-of-proportion fear compared with the more likely threat of being killed in a car crash.³ The low risk of a being killed in a shark attack⁴ evokes more terror than the much greater chance of dying from a prescription drug.⁵ (Spider and snake bites kill approximately 13 people a year and shark attacks kill 1 person every 2 years in the United States; there were 32,719 deaths in motor vehicle crashes in 2013 and 38,329 people died from a drug overdose in 2010 in the United States.)

Roman Bystranyk has been researching the history of diseases and vaccines for more than 15 years. He has an extensive background in health and nutrition as well as a BS in engineering and an MS in computer science. He is the co-author with Suzanne Humphries MD of *Dissolving Illusions: Disease, Vaccines, and the Forgotten History*.

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Infectious diseases fall into this emotional fear-based primal mental algorithm. This reaction is completely understandable with mankind's horrifying historical experience with deadly microbes. The black plague decimated 30-60% of Europe's total population in the mid-1300s,⁶ a number of cholera pandemics during the 1800s killed millions,⁷ typhus killed 3 million in Russia during the early 1900s,⁸ and the list goes on. Historically, infectious diseases killed massive numbers of people. Typhus, typhoid, cholera, dysentery, smallpox, scarlet fever, whooping cough, diphtheria, tuberculosis, measles, and others were responsible for multimillions of deaths in the Western world over many centuries.

So with the recent spate of measles cases in the United States, the enormous amount of fear and anger comes as no surprise. People who have chosen not to vaccinate for a variety of reasons, have been viciously disparaged,⁹ there have been calls to jail people that don't vaccinate,¹⁰ many pediatricians are banning parents who don't vaccinate their kids,¹¹ and laws are quickly being considered to strip people of all rights to refuse any vaccine.¹² There has been nothing short of a panic over the relatively small number of cases. It has also incited a raging fear that has been fanned by numerous incendiary media reports. Even comedian Jimmy Kimmel has jumped in, ridiculing anyone that questions vaccines.¹³

But let's take a deep breath and a moment to step back from the hysteria and look at some information that is never part of the discussion involving infectious diseases.

Declining Measles Mortality

It's true that during the 1800s, and even into the early 1900s, measles was a big killer. In fact, all infectious diseases were the leading cause of death—whooping cough, scarlet fever, tuberculosis, and others already mentioned, killed millions. How deadly these diseases were is often emphasized. The implication is that without vaccines, we would return to those dark and deadly times. Massive deadly plagues would all return, and the advances we made because of vaccines would all be wiped out.

However, looking at mortality records, there is something that is never mentioned. The death rate for all infectious diseases had plummeted

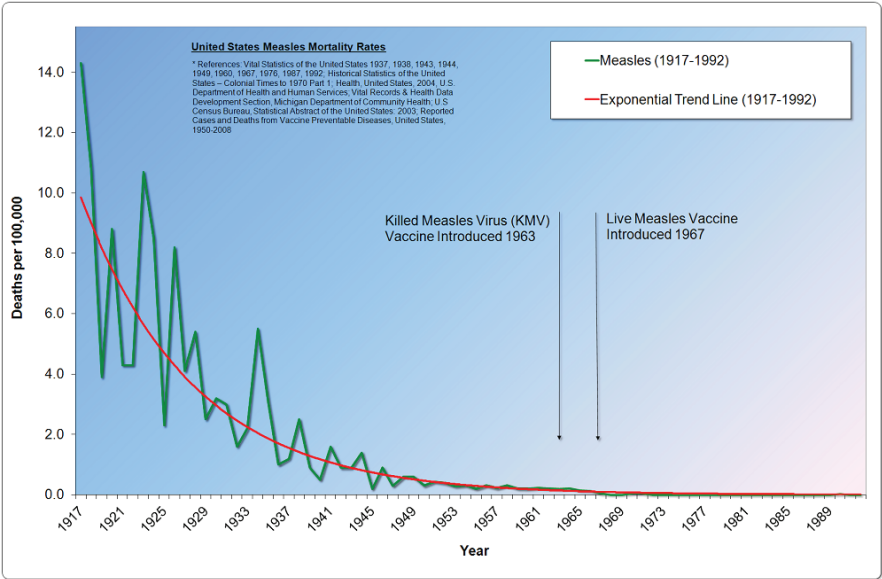


Figure 1

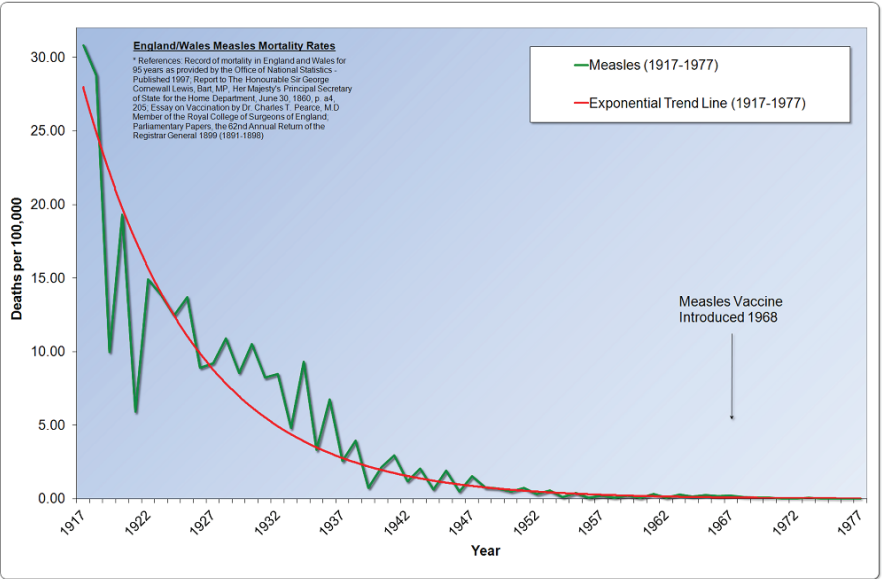


Figure 2

before the introduction of vaccines for all those diseases. For example, in the United States the mortality rate for measles decreased by more than 98% before the introduction of the measles vaccine in 1963 (Figure 1). In England, we see the same thing—a dramatic decrease in deaths before the introduction of the measles vaccine in 1968 (Figure 2). The same can be said for other infectious diseases such as whooping cough—massive declines in death before the introduction of any vaccine. Scarlet fever, which was during the 1800s a bigger killer than whooping cough or measles, went to near zero without the use of a vaccine.

Before the advent of a measles vaccine, measles was generally considered a mild illness. Even the *British Medical Journal* remarked in 1959 at this particular medical practice that over a 10 year span there were few complications from measles and that all children recovered.

In the majority of children the whole episode has been well and truly over in a week . . . In this practice measles is considered as a relatively mild and inevitable childhood ailment that is best encountered any time from 3 to 7 years of age. Over the past 10 years there have been few serious complications at any age, and all children have made complete recoveries. As a result of this reasoning no special attempts have been made at prevention even in young infants in whom the disease has not been found to be especially serious.¹⁴

Things were dramatically better before 1963 and the introduction of the first measles vaccine. In fact, if we look at all the causes of death from the *United States Vital Statistics* in 1962, we see that measles accounted for 0.02% of deaths that year (Figure 3).

In 1962, measles was sixth from the bottom for causes of death. You can look through the list of causes of death and find almost everything from “Birth Injuries” at 28,199 to “Ulcers” at 12,228 to “Asthma” at 4,896 were far higher than the 408 deaths attributed to “Measles” that year.

Even if there was never a measles vaccine invented in the first place, would we be experiencing deaths on a massive scale as they were in the 1800s or early 1900s? Not likely. In fact, if we look at the exponential

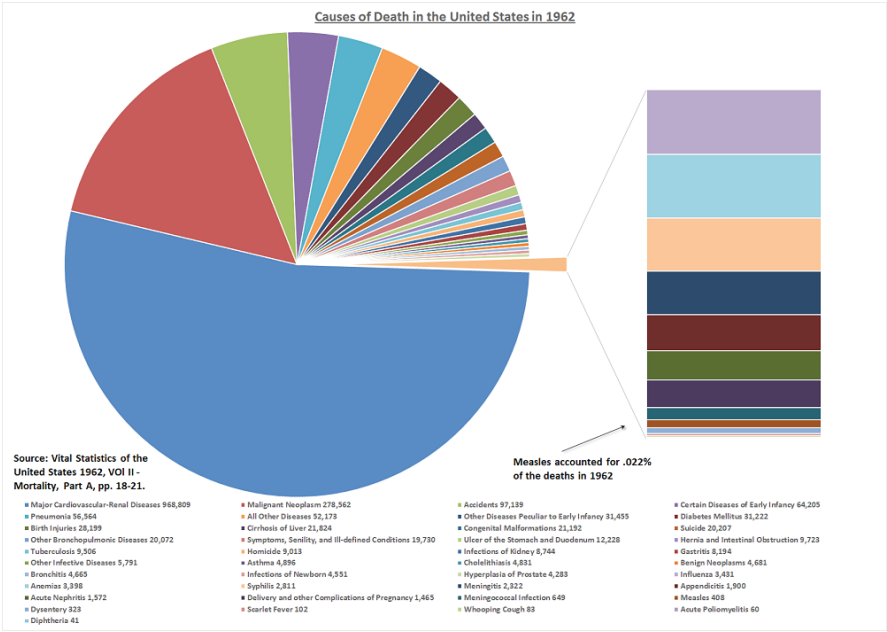


Figure 3

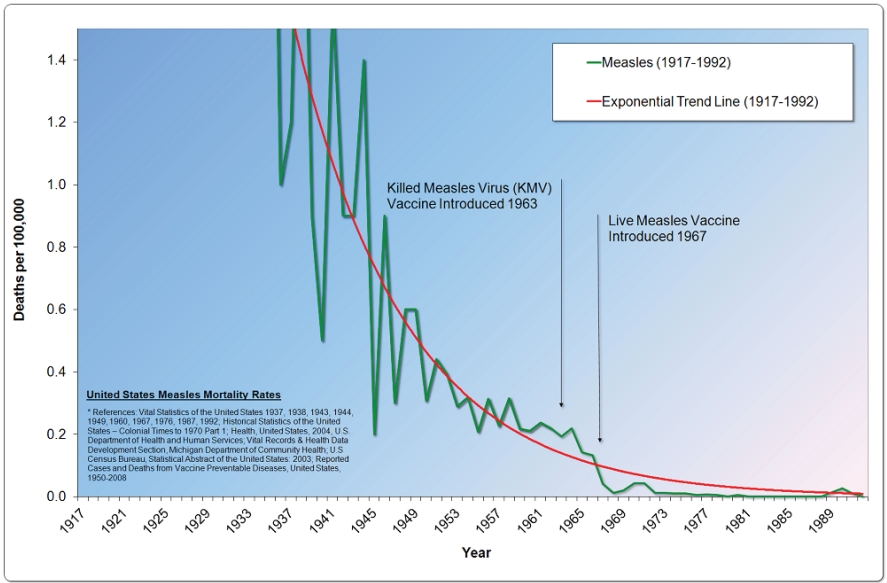


Figure 4

trend line based on 50 years of data, the death rate would have more than likely continued to drop (**Figure 4**). We can see the same thing in England—the trend shows a decreasing death rate that would have continued after the introduction of the vaccine anyway (**Figure 5**). It's not, as you may have believed, that there was death and chaos before the introduction of the measles vaccine and suddenly as if a magic wand was waved we all lived happily ever after. In reality, most of the advances came over many decades of improvement in hygiene, sanitation, electricity, transportation of food, refrigeration, labor laws, and nutrition. The innovation and hard won struggle for all these and other societal improvements were what were instrumental in the mortality decline in all infectious diseases. You owe much more to your plumber, electrician, and grocer for the massive improvements in infectious diseases than any doctor or pharmacist.

Another way to look at the improvements is to see how the case-fatality rate if you caught measles changed over the years (**Figure 6**). In 1913, if you caught measles you had as high as a 1 in 29 chance of dying. This case-fatality rate improved over the century so that by 1955 you odds had improved to 1 in 1,625. Although the CDC states that the odds of death from measles is 1 in 500 to 1 in 1,000, the odds to just before the vaccine introduction vary from the low of 1 in 1,625 in 1955 to a high of 1 in 980 in 1961, with an actual average of about 1 in 1,215 in the 10 year years before the vaccine was introduced in 1963.

That doesn't mean there weren't deaths because of measles in 1962. There were, but they were very rare. For instance, in the six New England States (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut) there were just 16 deaths attributed to measles. Some states had zero that year. It just wasn't as huge of a problem as you might think today with all the rage and panic.

Back in 1962, we didn't have the detailed statistics on causes of death that we have today. The National Safety Council now accumulates causes of death from being struck by lightning to falling out of a building to drowning. If we compare the 1962 odds of dying from measles (1 in 457,000), it falls between drowning in a swimming pool (1 in 486,000) and a fall involving a bed, chair, or other furniture (1 in 424,000); we

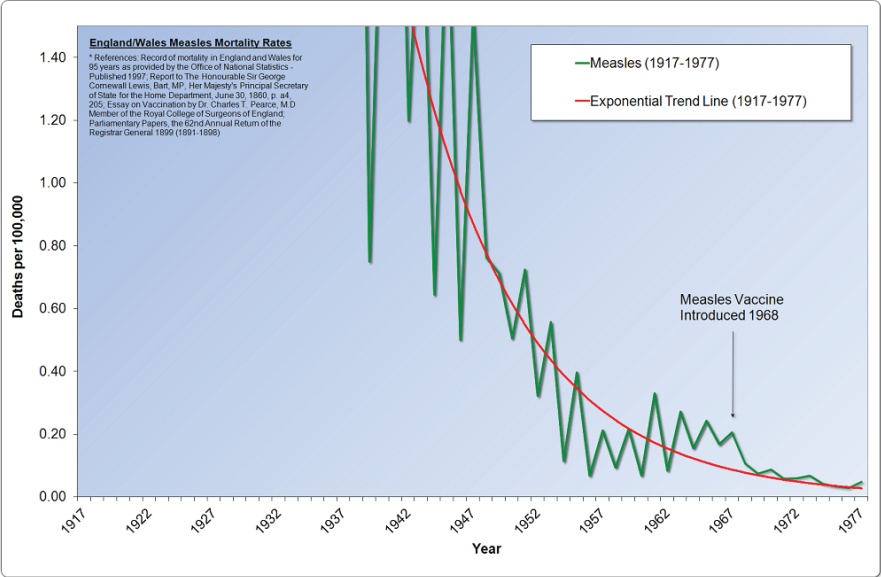


Figure 5

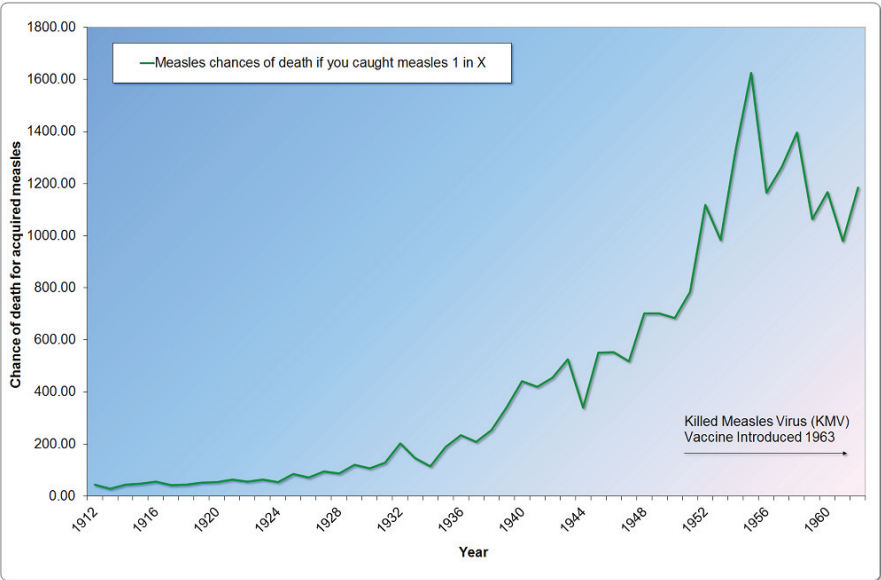


Figure 6

can gain a little perspective on the risk if we had no measles vaccine program at all (Figure 7).

As with other Western countries, the mortality rate from measles had greatly declined in France before the vaccine became available in 1966 (Figure 8). Yet, after its introduction vaccination rates remained low. In 1983 the vaccination rate was less than 20%.¹⁵ In that year there were 20 deaths attributed to measles out of a population of over 54 million, which is a rate of 0.037 per 100,000 or approximately 1 in 2.7 million.

By 1989 the vaccination rate was still less than 40%.¹⁶ In that year, there were 3 deaths attributed to measles, which is a rate of .005 per 100,000 or 1 in 19.37 million (Figure 9). Again, to put this in perspective by comparing it to National Safety Council statistics, you were more than 3 times as likely to be killed by being hit by lightning (1 in 5,506,120) than dying from measles in France in 1989 (1 in 19,370,000) when the vaccination rate was well below what would be considered as sufficient for “herd immunity.”

Vaccination vs. Natural Infection

Also, the less than perfect history of the measles vaccine is never mentioned. The first measles vaccine, which was a killed measles virus (KMV) vaccine introduced in 1963, caused serious problems¹⁷ and even deaths.¹⁸ After millions of children were injected with it, the vaccine was quickly but quietly scrapped and a live vaccine was introduced in 1967 with proclamations made that a single shot would give lifelong immunity.¹⁹ A grandiose and unproven proclamation was made that measles would be eliminated from the United States by 1967.²⁰ Today, all children have to receive 2 doses of the vaccine. Additional shots are recommended to adults by the CDC.²¹

Contracting natural measles generally gave you solid lifelong immunity.²² The vaccine doesn't and will require revaccination throughout life. Because of this artificially generated situation, we could see large scale epidemics due to less than perfect immunity from the vaccine:

Because measles-specific antibody titer after vaccination is lower than after natural infection, there is concern that vaccinated persons may gradually lose protection from measles.

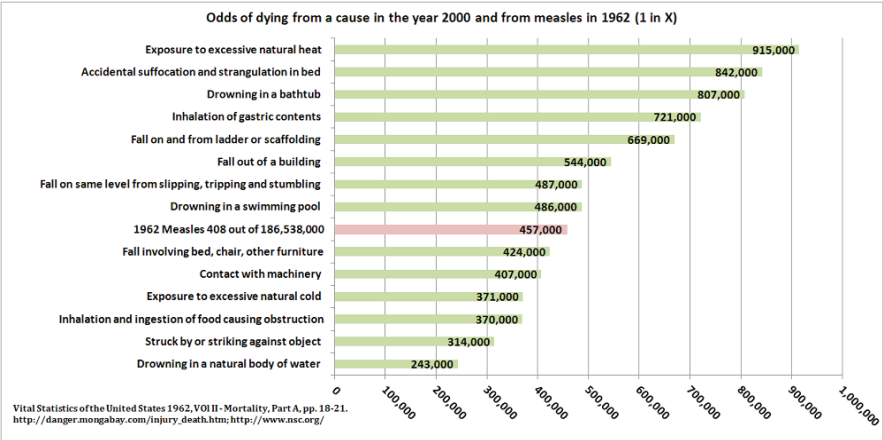


Figure 7

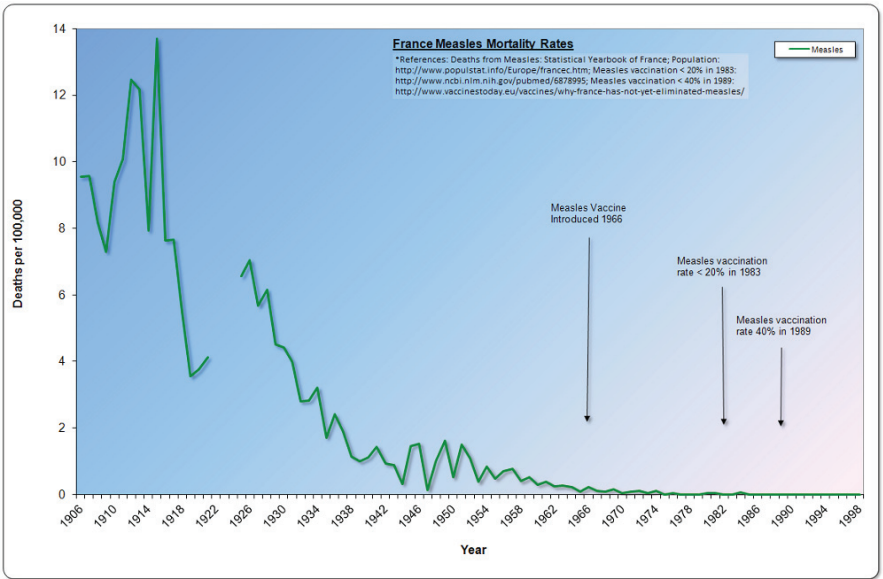


Figure 8

Secondary vaccine failure (loss of immunity over time), in contrast to primary vaccine failure (no protection immediately after vaccination), is a concern because of the potential insidious challenge to measles elimination. For instance, if vaccine-induced immunity wane to nonprotective levels in a high proportion of vaccinated adults, the level of population protection might decline to allow recurrence of endemic disease. By means of statistical modeling, Mossong et al. predicted waning of vaccine-induced immunity 25 years after immunization.²³

Could we have done something different than vaccinating every human being on the planet multiple times against a relatively mild infectious disease? Was there another path we could have taken in the 1960s? The truth is that there was never a serious study of why there was such a massive decline in deaths before the vaccine. Once there was a vaccine, virtually everyone jumped onto the bandwagon promoting and creating laws to enforce this paradigm. But in 1967, scientists knew that antibodies (the thing that measles vaccine stimulates and which is measured as a mark of immunity) weren't even needed for normal recovery from measles.²⁴ Experiments done in the 1940s showed that vitamin C was extremely effective against measles, especially when used in higher doses.²⁵ Vitamin A also led to a dramatic decline in measles mortality:

Combined analyses showed that massive doses of vitamin A given to patients hospitalized with measles were associated with an approximately 60% reduction in the risk of death overall, and with an approximate 90% reduction among infants.... Administration of vitamin A to children who developed pneumonia before or during hospital stay reduced mortality by about 70% compared with control children.²⁶

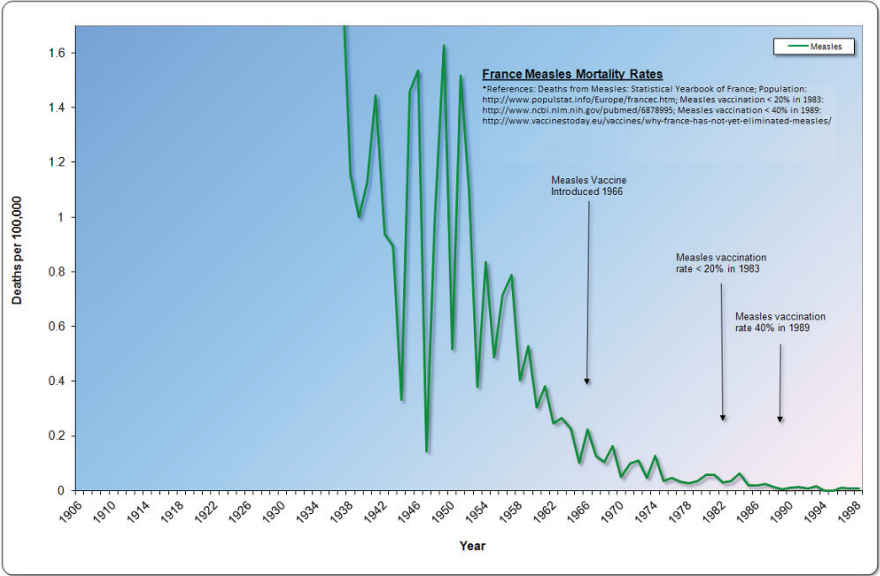


Figure 9

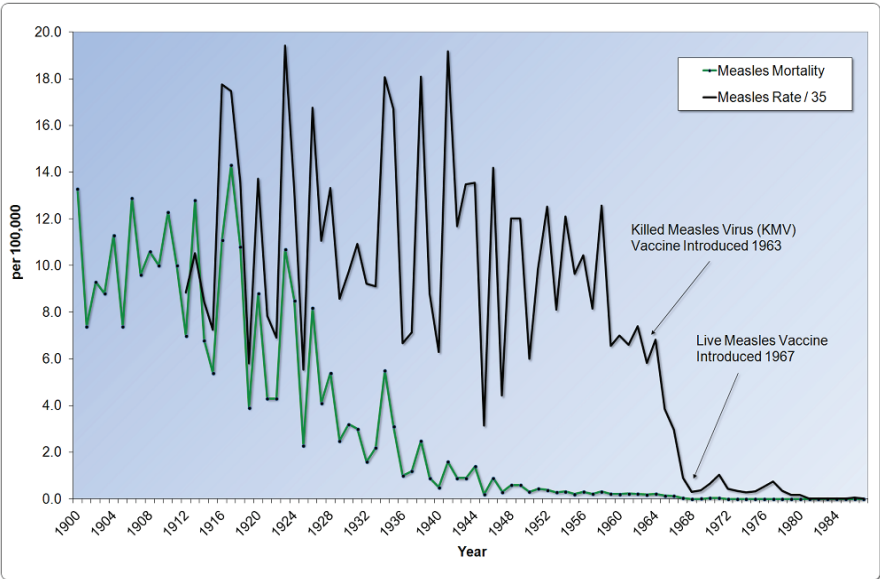


Figure 10

Trading Places: Lower Disease Incidence vs. Weaker Immunity

Although the mortality rate had decreased over time to very low levels, the incidence of the disease had only slowly declined by 1963. After the introduction of the vaccine, there is a precipitous decline in cases of recorded measles (**Figure 10**). Some of this decline in incidence is because of how diseases are measured. If you had gotten a vaccine and actually did worse than if you caught natural measles by having a higher fever or atypical measles, you were still counted as not having measles. With the KMV vaccine, forty-eight percent of people had a rash, and 83 percent had fevers up to 106°F post-injection.²⁷ Yet with the measles vaccine, there was an interruption of viral transmission which reduced wild measles to the very low levels we see today. So the vaccine ultimately did what it was designed to do—reduce the cases of wild measles—even if it took a lot longer and many mistakes along the way to do it.

VAERS ID: 354340 <small>(history)</small>		Vaccinated: 2009-07-23		Life Threatening? No	
Age: 1.0	Onset: 2009-07-23, Days after vaccination: 0	Died? Yes		Date died: 2009-07-23	
Gender: Female	Submitted: 2009-08-13, Days after onset: 21	Days after onset: 0		Permanent Disability? No	
Location: Foreign	Entered: 2009-08-17, Days after submission: 4	Recovered? No		ER or Doctor Visit? No	
		Hospitalized? No		Previous Vaccinations:	
		Other Medications: Concomitant therapy included PARACETAMOL.		Current Illness:	
		Diagnostic Lab Data: None provided.		CDC Split Type: GBWYEG04228309	

Vaccination	Manufacturer	Lot	Dose	Route	Site
MMR: MEASLES + MUMPS + RUBELLA (NO BRAND NAME)	UNKNOWN MANUFACTURER			IM	UN
PNC: PNEUMO (PREVNAR)	PFIZER/WYETH			IM	UN

Administered by: Unknown **Purchased by:** Unknown

Symptoms: [Anaphylactic reaction](#), [Circulatory collapse](#), [Death](#)

SMQs: Anaphylactic reaction (narrow), Shock-associated circulatory or cardiac conditions (excl torsade de pointes) (narrow), Torsade de pointes, shock-associated conditions (narrow), Hypovolaemic shock conditions (narrow), Toxic-septic shock conditions (narrow), Anaphylactic/anaphylactoid shock conditions (narrow), Hypoglycaemic and neurogenic shock conditions (narrow), Hypersensitivity (narrow)

Write-up: This case was considered medically important and fatal. Information regarding PREVNAR was received from a healthcare professional via a regulatory authority (MHRA ref. 20469393), regarding a 1-year-old female patient who experienced sudden collapse with no other reason except for an anaphylactic reaction and died. The patient received a dose on 23-Jul-2009. Additional suspect medication included MMR. The patient experienced sudden collapse one and a half hours after vaccination, with no other reason except for an anaphylactic reaction, on 23-Jul-2009. Full resuscitation was performed for one hour, but not successful and the patient died, on the same day. The cause of death was reported as anaphylactic reaction and the post mortem revealed inconclusive findings, date unspecified. No additional information was available at the time of this report.

Figure 11

Today, the vaccine is not risk-free. How much risk is carried with it? It's hard to tell because the only tracking of problems is done through a completely voluntary reporting system called the Vaccine Adverse Event Reporting System (VAERS). Even the FDA states it receives less than 1% of suspected serious adverse drug reactions.²⁸ This means only a small

fraction of the events that happen are actually reported. Even so, you can still search the VAERS database²⁹ and quickly discover deaths or other serious problems that are associated with vaccines (**Figure 11**).

The odds of death are probably low from the vaccine, but then again, so is a death from measles itself. So we're trying to prevent a relatively low-risk disease that provides stronger immunity with a vaccine that has a low risk of causing problems. Because of this weaker vaccine immunity, there will be calls for vaccinating more and more adults for measles when in the past it was rare for anyone to get measles except as a child. Also keep in mind that maternal antibodies of the vaccinated that are passed to a baby are far weaker than those of people who attained natural immunity.³⁰ Because of this, babies are now more vulnerable to measles when in the past they would have been protected by stronger maternal antibodies. Now there are considerations for giving the MMR to children at a younger age or their mothers in an attempt to correct this unexpected problem.³¹ And these issues are just part of the story.

In the 1950s, it was also observed that mothers often commented on "how much good the attack (of measles) has done their children."³² We're learning today that exposure to microbes is beneficial because it actually stimulates the immune system, reducing allergies and asthma.³³ Was measles a benefit for those who were well nourished? Could we have taken on an approach of evaluating and ensuring the health of children to help them attain lifelong protection from measles while boosting their immune systems? Was this an approach that would not only have benefited children in dealing with measles but simultaneously with other infectious diseases and other health conditions?

In fact there is research showing just that: measles infection had a whole host of positive immune modulating effects that have been shown to be beneficial to people:

There was evidence of association between a negative history of measles, exposure in early life, and development of immunoreactive diseases, sebaceous skin diseases, degenerative diseases of bone and cartilage, and certain tumours.³⁴

A reduced risk of Parkinson's disease was associated with most childhood viral infections. The negative association was statistically significant for a history of measles prior to college entrance.³⁵

Our results pointed out a protective role of childhood infectious diseases on the risk of CLL [chronic lymphoid leukaemia] in adults.³⁶

Measles and mumps, especially in case of both infections, were associated with lower risks of mortality from atherosclerotic CVD [Cardiovascular Disease].³⁷

In the 1970s, measles infections were observed to cause regression of pre-existing cancer tumors in children.³⁸

So were the mothers of the 1950s right that an attack of measles had provided their children a benefit? Did the perhaps laudable goal of eliminating measles result in a number of unanticipated increases of other more serious diseases? It certainly appears that by vaccinating with the idea of protecting against measles scientists have been modifying the immune system without fully comprehending what they have been doing and with very few understanding the immunologic blowback.

Fear as a Pretext for Infringing on Individual Rights

Is it really so clear-cut that the CDC and WHO should insist on vaccinating everyone in the United States for measles? Is it reasonable to have politicians who generally don't understand any of this and who defer to people who have an extreme pro-vaccine bias to make decisions to force everyone to follow a set plan? Keep in mind the CDC states that before the vaccine there were 500 deaths a year from measles³⁹ and 1-2 children out of a 1,000 (or 1 in 500) will die from the disease.⁴⁰ Yet, the actual numbers are a little different than what you see presented. Looking at the data from 5 years before the vaccine, the average number of deaths was 440, not 500. And there is every probability that this number would

have continued to decline. The chances of dying if you caught the disease using the same 5 years before the vaccine had an average of 1 in 1,157 not 1 in 500 or even 1 in 1,000. And the odds may have been even better. Some have suggested that the chances of dying from measles were at a much lower rate of 1 to 3 in 10,000.⁴¹

In the 1920s, the United States was gripped by a Red Scare.⁴² President Wilson's Attorney General, A. Mitchell Palmer conducted a series of raids on individuals he believed were dangerous to American security. He deported immigrants without just cause. Federal agents broke into the homes of suspected anarchists without search warrants, jailed labor leaders, and held about 5,000 citizens without respecting their right to legal counsel. Palmer thought that American civil liberties were less important than rooting out potential wrongdoers.

Today, we're in the midst of a new red scare in the form of fear of a red measles rash where there are large numbers of people that think that freedom and self determination is less important than being vaccinated. This red scare has led people to propose mandating all vaccines for everyone without exception. Proposals have been made to legally sue those who don't vaccinate and are blamed for infecting someone else.⁴³ Ironically, those who are harmed by a vaccine are actually prevented by law from directly suing the vaccine manufacturer.⁴⁴

How long before this hysteria results in parents having their children taken away by the state? Or actually throwing parents in jail for trying to do what's best for themselves and their children? Do we want to create a society of totalitarian medical rule where you don't have a choice in anything that is dictated to you by the government and pharmaceutical companies? In the early 1900s, compulsory vaccination laws were used as a justification for forced sterilization of the unfit based on a later-discredited science of eugenics.⁴⁵ Tens of thousands of people were forcibly sterilized in the United States, all based on this notion that the State has supreme rights to compel you to get vaccinated.

Shouldn't we be putting our efforts into things that are far more dangerous than measles? Every year in the United States nonsteroidal anti-inflammatory drugs (NSAIDs) kill 16,500 people through gastrointestinal complications alone.⁴⁶ Secondhand smoke kills 42,000 non-smokers.⁴⁷ Hospital-acquired pressure sores kill 60,000 people.⁴⁸ Hos-

pital-acquired infections kill 100,000 people,⁴⁹ and one study estimates there are as many as 400,000 premature deaths from preventable medical harms associated with hospital care.⁵⁰ The odds of dying because of medical harm associated with hospital care is 1 in 790—a far cry from the 1962 chance of dying from measles at 1 in 457,000. And ironically those pediatric offices where you're getting your vaccine to protect your healthy child from measles was recently reported at causing 700,000 flu-like illnesses each year in children and family members within two weeks of the visit.⁵¹ That is higher than the approximately 500,000 measles cases that occurred in 1962.

No one is saying that measles wasn't and isn't a problem. But put into logical perspective, it's not something we need to panic over and allow laws to be put in place that strip us all of our human rights to control our own bodies. As a society, we're far more worried about shark attacks and measles than looking behind the illusions that have led to the deaths of so many more.

Is any of this ever discussed by any of the talking-heads on CNN? Is there an outcry to jail medical professionals for causing so many preventable hospital-acquired harms? Where is the mobilization to stop the 700,000 cases of flu-like illness happening because of pediatric offices? Is Jimmy Kimmel talking about hospitals and how many people die each year because of an infection they acquired in that hospital? No, no, no, and no. Why? Because in large part, many humans react with a primitive fear response instead of objectively looking at facts, examining history, and questioning what they've been told.

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