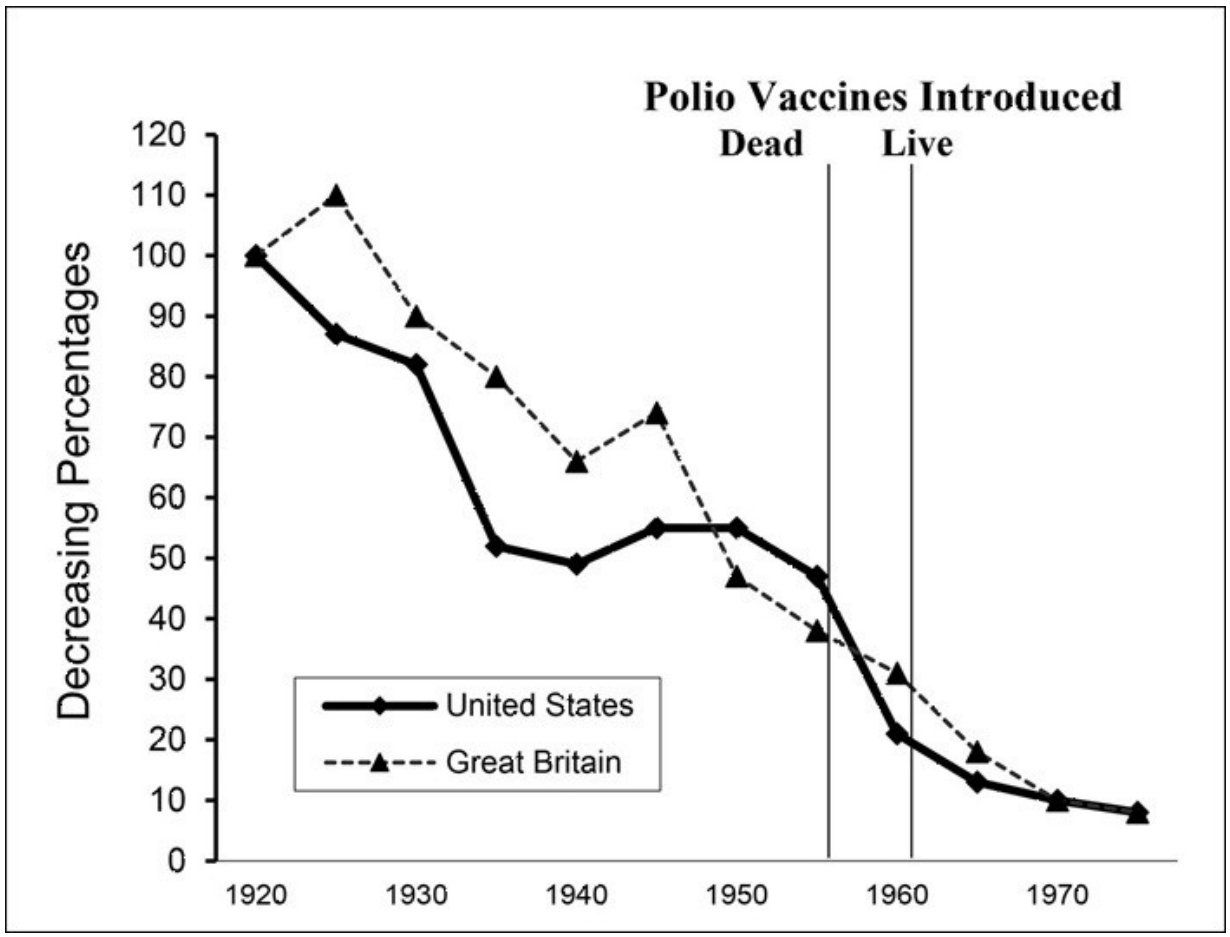
Polio: Pesticides Such as DDT and Heavy Metals under Suspicion

Practically all of the infectious illnesses that infected people in industrialized countries in the decades before World War II (tuberculosis etc.) ceased to cause problems after 1945. For a few years, the major exception was polio (infantile paralysis), which continues to be called an infectious disease. In the 1950s, the number of polio cases in developed countries fell drastically—and epidemic authorities attributed this success to their vaccination campaigns. But a look at the statistics reveals that the number of polio victims had already fallen drastically when vaccination activities started (see diagram 2).

Many pieces of evidence justify the suspicion that the cause of infantile paralysis (polio) is not a virus. Many experts, like American physician Benjamin Sandler, believe a decisive factor is a high consumption of

refined foods such as granulated sugar.[312] Others cite mass vaccinations. Indeed, since the beginning of the 20 th century, it has been known that the paralysis so typical of polio have often appeared at the site where an injection has been given.[313] Additionally, the number of polio cases increased drastically after mass vaccinations against diphtheria and whooping cough in the 1940s, as documented in *the Lancet* and other publications.[314 315 316]

Diagram 2 Polio death rates began to decline long *before* major inoculation campaigns were started



From 1923 to 1953, long before large-scale polio vaccinations began to be carried out in the mid-1950s, mortalities attributed to polio had already decreased substantially: in the USA by 47 percent; in Great Britain by 55 percent; in other European countries, the statistics are comparable. This diagram was reproduced with permission from the following book: Vaccines: Are They Really Safe and Effective*? © by Neil Z. Miller, all rights reserved.*

Polio, like most diseases, may be conditional on various factors. It makes particular sense, however, to take poisoning by industrial and agricultural

pollution into consideration, to explain why this nervous disease first appeared in the 19th century, in the course of industrialization. It spread like wildfire in the industrialized West in the first half of the 20 th century, while in developing countries, in contrast, there was no outbreak.

In the 19th century, the disease was named *poliomyelitis*, referring to degeneration of spinal column nerves (myelitis is a disease of the spinal cord) typical of polio.[317] Orthodox medical literature can offer no evidence that the poliovirus was anything other than benign until the first polio epidemic, which occurred in Sweden in 1887. This was 13 years after the invention of DDT in Germany (in 1874) and 14 years after the invention of the first mechanical crop sprayer, which was used to spray formulations of water, kerosene, soap and arsenic.

"The epidemic also occurred immediately following an unprecedented flurry of pesticide innovations," says Jim West of New York, who has extensively investigated the subject of polio and pesticides. "This is not to say that DDT was the actual cause of the first polio epidemic, as arsenic was then in widespread use and DDT is said to have been merely an academic exercise. However, DDT or any of several neurotoxic organochlorines already discovered could have caused the first polio epidemic if they had been used experimentally as a pesticide. DDT's absence from early literature is little assurance that it was not used."[318]

Nearly ten years before, in 1878, Alfred Vulpian, a neurologist, had provided experimental evidence for the poisoning thesis when he discovered that dogs poisoned by lead suffered from the same symptoms as human polio victims. In 1883, the Russian Miezeyeski Popow showed that the same paralysis could be produced with arsenic. These studies should have aroused the scientific community, considering that the arsenic-based pesticide Paris green had been widely used in agriculture to fight "pests" like caterpillars since 1870.[319]

"But instead of prohibiting the insecticide Paris green, it was replaced by the even more toxic pesticide: lead arsenate, which likewise contained heavy metals, in the state of Massachusetts in 1892," according to a 2004 article in the British magazine *The Ecologist*. [320] Indeed, a polio epidemic

broke out in Massachusetts two years later. Dr. Charles Caverly, who was responsible for the tests, maintained that a toxin was more likely the culprit than a virus, stating emphatically that, "we are very certainly not dealing with a contagious disease."

Within a short time, however, lead arsenate became the most important pesticide in the industrialized world's fruit cultivation. It was not the only toxic substance used in agricultural industries.[321] In 1907, for example, calcium arsenate was introduced in Massachusetts [322] and was used in cotton fields and factories. Months later, 69 children who lived downstream from three cotton factories suddenly became sick and suffered from paralysis. Meanwhile, lead arsenate was also being sprayed on the fruit trees in their gardens.[323] But microbe hunters ignored these legitimate "cluster" factors, and instead continued searching for a "responsible" virus.[324]

A cornerstone for the polio-as-virus theory was laid down in 1908 by scientists Karl Landsteiner and Erwin Popper, both working in Austria. [325] [326] The World Health Organization calls their experiments one of the "milestones in the obliteration of polio."[327] That year, another polio epidemic occurred and once again there was clear evidence that toxic pesticides were at play. But, astoundingly, instead of following up this evidence, medical authorities viewed the pesticides as weapons in the battle against the arch enemy microbes. They even neglected to give the children suffering from lameness treatments to alleviate the pesticide poisoning and, thus establish whether their health could be improved this way.[328] (In 1951, Irwin Eskwith did exactly that and succeeded in curing a child suffering cranial nerve damage—bulbar paralysis, a particularly severe form of polio[329]—with dimercaprol, a detoxification substance that binds heavy metals like arsenic and lead).[330] [331] [332]

Landsteiner and Popper instead chose to take a diseased piece of spinal marrow from a lame nine-year-old boy, chopped it up, dissolved it in water and injected one or two whole cups of it intraperitoneally (into the abdominal cavities) of two test monkeys: one died and the other became permanently paralyzed.[333] [334] Their studies were plagued by a mind-boggling range of basic problems. First, the "glop" they poured into the

animals was not even infectious, since the paralysis didn't appear in the monkeys and guinea pigs given the alleged "virus soup" to drink, or in those that had it injected into their extremities. [335] Shortly after, researchers Simon Flexner and Paul Lewis experimented with a comparable mixture, injecting this into monkeys' brains. [336] Next, they brewed a new soup from the brains of these monkeys and put the mix into another monkey's head. This monkey did indeed become ill. In 1911, Flexner even boasted in a press release, that they had already found out how polio could be prevented, adding, of course, that they were close to developing a cure.[337]

But this experiment shows no proof of a viral infection. The glop used cannot be termed an isolated virus, even with all the will in the world. Nobody could have seen any virus, as the electron microscope wasn't invented until 1931. Also, Flexner and Lewis did not disclose the ingredients of their "injection soup." By 1948, it was still unknown "how the polio virus invades humans," as expert John Paul of Yale University stated at an international poliomyelitis congress in New York City.[338]

Apart from that, it is very probable that the injection of foreign tissues in the monkeys' craniums triggered their polio-like symptoms (see Chapter 5: BSE). And when one considers the amount of injected material, it can hardly be surprising that the animals became ill. Controlled trials weren't even carried out—that is, they neglected to inject a control group of monkeys with healthy spinal cord tissue. Neither were the effects of chemical toxins like heavy metals injected directly into the brain. [339] [340] All of these factors make the experiments virtually worthless.

Although many scientific factors spoke against the possibility that polio was an infectious viral disease, [341] these studies would become the starting point of a decade-long fight, which concentrated exclusively on an imaginary polio virus. [342] Anything and everything, like brain parts, feces, and even flies were chased into the monkeys' brains in an attempt to establish a viral connection. Later these monkeys were even captured *en masse* in the Indian wilderness and transported overseas to the experimental laboratories—with the single aim of producing paralysis. And where virus hunters were working, vaccine manufacturers were not far away.

By the end of the 1930s, vaccine researchers had allegedly discovered a whole range of virus isolates. But these could not have been real isolates. The same holds for the photograph from 1953 that was said to be the first electron microscopic depiction of a polio virus. But the photograph shows nothing but white dots. In order to call these dots polio viruses with any certainty, the particles would have had to be purified, isolated, imaged with an electron microscope and precisely biochemically characterized. But no scientist has ever undertaken this, not even the so-called pioneers of polio research at the beginning of the 20th century, such as Karl Landsteiner, Erwin Popper, Simon Flexner and Paul Lewis; nor, decades later, Renato Dulbecco, Gilbert Dalldorf and Grace Sickles; nor Nobel laureates John Enders, Thomas Weller and Frederick Robbins.

The researchers did spiritedly claim that they had "isolated" a virus; but in truth, they had done nothing more than take a sample of spinal tissue or even feces from a person or animal affected by polio, and inject this mix (which could have been laced with all sorts of things) into the brains of test animals. If the animals ultimately became ill, the researchers just assumed that a virus was responsible. But whatever ultimately made the animals ill; there was no proof that it was due to a virus, because the basic requirement of virus isolation (as described above) simply has not been fulfilled.[343]

And another problem cropped up along the way: the monkeys didn't get sick when they were orally administered the "glop." These researchers could only produce paralysis by injecting into the brain large amounts of substrates of unknown contents. [344] In 1941, the polio virus hunters had to accept a bitter setback, when experts reported in the scientific journal *Archives of Pediatrics* that, "Human poliomyelitis has not been shown conclusively to be a contagious disease." Neither has the experimental animal disease, produced by the so-called poliomyelitis virus, been shown to be communicable. In 1921, Rosenau stated that "monkeys have so far never been known to contract the disease 'spontaneously' even though they are kept in intimate association with infected monkeys." [345] This means that if this was not an infectious disease, no virus could be responsible for it, so the search for a vaccine was a redundant venture.

But virus hunters didn't even consider factors that lay outside of their virus obsession. So it happened that, in the middle of the 20 th century, researcher Jonas Salk believed he had conclusively found the polio virus.[346] Even though he could not prove that what he called the polio virus actually triggered polio in humans, he still somehow believed he could produce a vaccine from it.[347]

Salk alone is said to have sacrificed 17,000 test monkeys (termed "the heroes" by one of Salk's co-workers) on the altar of vaccine research during the most heated phase of his research;[348] in total, the number of slaughtered monkeys reached into the hundreds-of-thousands.[349] But critics objected that what Salk termed the polio virus was simply an "artificial product of the laboratory."[350] Consequently, to this day, it is a huge challenge to find what is termed the polio virus where the patient's nerve cells are damaged, that is to say, in spinal cord tissue.[351]

In 1954, Bernice Eddy, who was then responsible from the US government's vaccine safety tests, also reported that the Salk vaccine had caused severe paralysis in test monkeys. Eddy was not sure what had triggered the paralysis symptoms: a virus, some other cellular debris, a chemical toxin? But it contained something that could kill. She photographed the monkeys and submitted them to her boss—but he turned her down and criticized her for creating panic. Instead, of course, he should have taken her misgivings into account and started extensive inquiries. But Eddy was stopped by the microbe establishment and even had to give up her polio research shortly before her warnings had proven themselves justified.[352]

On 12 April 1955, Salk's vaccine was celebrated nationwide as a substance that completely protected against polio outbreaks. US President Dwight Eisenhower awarded Salk a Congressional Gold Medal. American and Canadian television joined in the celebration. And on 16 April, the *Manchester Guardian* joined the party, stating that "nothing short of the overthrow of the Communist regime in the Soviet Union could bring such rejoicing to the hearths and homes in America as the historic announcement last Tuesday that the 166-year war against paralytic poliomyelitis is almost certainly at an end."[353]

But the triumph was short-lived. Medical historian Beddow Bayly wrote that "Only thirteen days after the vaccine had been acclaimed by the whole of the American Press and Radio as one of the greatest medical discoveries of the century, and two days after the English Minister of Health had announced he would go right ahead with the manufacture of the vaccine, came the first news of disaster. Children inoculated with one brand of vaccine had developed poliomyelitis. In the following days more and more cases were reported, some of them after inoculation with other brands of the vaccine." According to Bayly, "Then came another, and wholly unlooked-for complication. The Denver Medical Officer, Dr. Florio announced the development of what he called 'satellite' polio, that is, cases of the disease in the parents or other close contacts of children who had been inoculated and after a few days illness in hospital, had returned home [and] communicated the disease to others, although not suffering from it themselves."[354]

Within only two weeks, the number of polio cases among vaccinated children had climbed to nearly 200.[355] On 6 May 1955, the *News Chronicle* quoted the US government's highest authority on viruses, Carl Eklund, who said that in the country, only vaccinated children had been afflicted by polio. And only, in fact, in areas where no polio cases had been reported for a good three-quarters of a year. At the same time, in nine out of ten cases, the paralysis appeared in the injected arm.[356]

This triggered panic in the White House. On 8 May, the American government completely halted production of the vaccine.[357] A short time later, a further 2,000 polio cases were reported in Boston, where thousands had been vaccinated. In "inoculated" New York, the number of cases doubled, in Rhode Island and Wisconsin, they jumped by 500 percent. And here as well, the lameness appeared in the inoculated arm in many children.[358]

Apart from that, an objective look at statistics would have shown that there was no reason to celebrate Salk's vaccine as the great conqueror of an alleged polio virus. "According to international mortality statistics, from 1923 to 1953, before the Salk killed-virus vaccine was introduced, the polio death rate in the United States and England had already declined on its own

by 47 percent and 55 percent respectively," writes scientific journalist Neil Miller (see diagram 2).[359]

In the Philippines, only a few years before the US catastrophe, the first polio epidemic in the tropics occurred spontaneously, in fact, with the introduction of the insecticide DDT there. [360] Around the end of World War II, US troops in the Philippines had sprayed masses of DDT daily to wipe out flies. Just two years later, the well-known *Journal of the American Medical Association* reported that lameness among soldiers stationed in the Philippines could not be differentiated from polio, and it had advanced to become the second most common cause of death. Only combat exercises were said to have claimed more victims. Meantime, populations in neighboring areas, where the poison had not been sprayed, experienced no problems with paralysis.[361] [362] This is further evidence that DDT poisoning can cause the same clinical symptoms as polio (which is claimed to be conditional upon a virus).

Young people in industrialized countries are hardly acquainted with DDT anymore. It stands for dichlorodiphenyltrichloroethane, and is a highly toxic substance first synthesized at the end of the 19th century, in 1874, by Austrian chemist Othmar Zeidler. Paul Hermann Müller of Switzerland discovered its insect killing property in 1939, for which he received the Nobel Prize for Medicine in 1948.[363] This resulted in its widespread for pest control, even though there was already strong evidence that it was a severe neurotoxin, dangerous for all forms of life and associated with the development of herpes zoster (shingles), produces paralysis, has carcinogenic potential and can be fatal.[364] [365] [366]

DDT is also problematic because it biodegrades very slowly in nature with a half-life of 10-20 years. Additionally, through the food chain, it can become concentrated in the fatty tissue of humans and animals. But this toxic substance wasn't outlawed until 1972 in the USA and even later in most other countries in the prosperous northern hemisphere. Today, its use is prohibited in a large part of the world and it one of the "dirty dozen" organic toxins banned worldwide at the Stockholm Convention on 22 May 2001.[367]

Industrial production of DDT started at the beginning of the 1940s. It was first used to fight malaria, and later became a sort of "all-purpose remedy" against all sorts of insects.[368] There was also military use of DDT. US army recruits were powdered with it to protect them from lice, and they additionally received DDT-sprayed shirts.[369] When the Second World War was over, DDT was sold on stock markets round the globe, even though strong warnings about its toxicity had been issued. "In the mid-40s, for example, the National Institutes of Health demonstrated that DDT evidently damaged the same part of the spinal cord as polio," writes research scientist Jim West of New York.[370] [371] [372]

The classic *Harrison's Principle of Internal Medicine* states, "Lameness resulting from heavy metal poisoning is clinically sometimes difficult to differentiate from polio."[373] Endocrinologist Morton Biskind came to the same conclusion in his research papers describing the physiological evidence of DDT poisoning that resembles polio physiology: "Particularly relevant to recent aspects of this problem are neglected studies by Lillie and his collaborators of the National Institutes of Health, published in 1944 and 1947 respectively, which showed that DDT may produce degeneration of the anterior horn cells of the spinal cord in animals. These changes do not occur regularly in exposed animals any more than they do in human beings, but they do appear often enough to be significant."[374]

Biskind concludes: "When in 1945 DDT was released for use by the general public in the United States and other countries, an impressive background of toxicological investigations had already shown beyond doubt that this compound was dangerous for all animal life from insects to mammals. It was even known by 1945 that DDT is stored in the body fat of mammals and appears in the milk. With this foreknowledge the series of catastrophic events that followed the most intensive campaign of mass poisoning in human history, should not have surprised the experts."[375]

Despite the fact that DDT is highly toxic for all types of animals, the myth has spread that it is harmless, even in very high doses. It was used in many households with a carefree lack of restraint, contaminating peoples' skin, their beds, kitchens and gardens.[376] In Biskind's opinion, the spread of

polio after the Second World War was caused "by the most intensive campaign of mass poisoning in known human history."[377]

Along with DDT, the much more poisonous DDE was also used in the USA. Both toxins are known to break through the hematoencephalic barrier, which protects the brain from poisons or harmful substances. Nonetheless, housewives were urged to spray both DDT and DDE to prevent the appearance of polio. Even the wallpaper in children's rooms was soaked in DDT before it was glued on the wall.[378]

What from today's perspective seems like total blindness was at that time an everyday practice, not only in the United States. After 1945, DDT powder was used in Germany to fight a type of louse said to carry typhus.[379] And in agriculture, including fruit and vegetable cultivation, DDT was likewise lavishly dispersed for so-called plant protection. Through this, DDT gradually replaced its predecessor, lead arsenate, a pesticide containing heavy metals.[380]

A look at statistics shows that the polio epidemic in the USA reached its peak in 1952, and from then on rapidly declined. We have seen that this cannot be explained by the Salk-inoculation, since this was first introduced in 1955. There is a most striking parallel between polio development and the utilization of the severe neurotoxin DDT and other highly toxic pesticides like BHC (lindane), which was also hard to degrade and actually much more poisonous than DDT. While use of DDT was eventually drastically reduced because of its extreme harmfulness, the use of BHC was curbed because it produced a bad taste in foods[381] (see diagrams 3 and 4).

"It is worth noting that DDT production rose dramatically in the United States after 1954," Jim West remarks, "which is primarily connected to the fact that DDT was increasingly exported to the Third World, to be used primarily in programs to fight malaria or in agriculture." As West points out, the following factors contributed to its changed use patterns in the US:

1. An altered legislation led to the use of warning labels, which in turn raised public awareness of DDT's poisonous nature.

2. Eventually, the use of DDT on dairy farms was prohibited. Earlier, Oswald Zimmerman and his fellow research scientists had even advised the daily spraying of a 5 percent DDT solution directly on cattle and pigs, their feed, drinking water, and resting places.[382] In 1950, it was officially recommended to US farmers that they no longer wash cattle with DDT, but at first this advice was largely ignored. In the same year, cows' milk contained up to twice as much DDT as is necessary to trigger serious illnesses (diseases) in humans.[383]

3. In advertisements and press releases, DDT was no longer celebrated as being "good for you," "harmless," and a "miracle substance."[384]

4. From 1954, concentrated DDT was only used on crops that did not serve food production (for example, cotton).

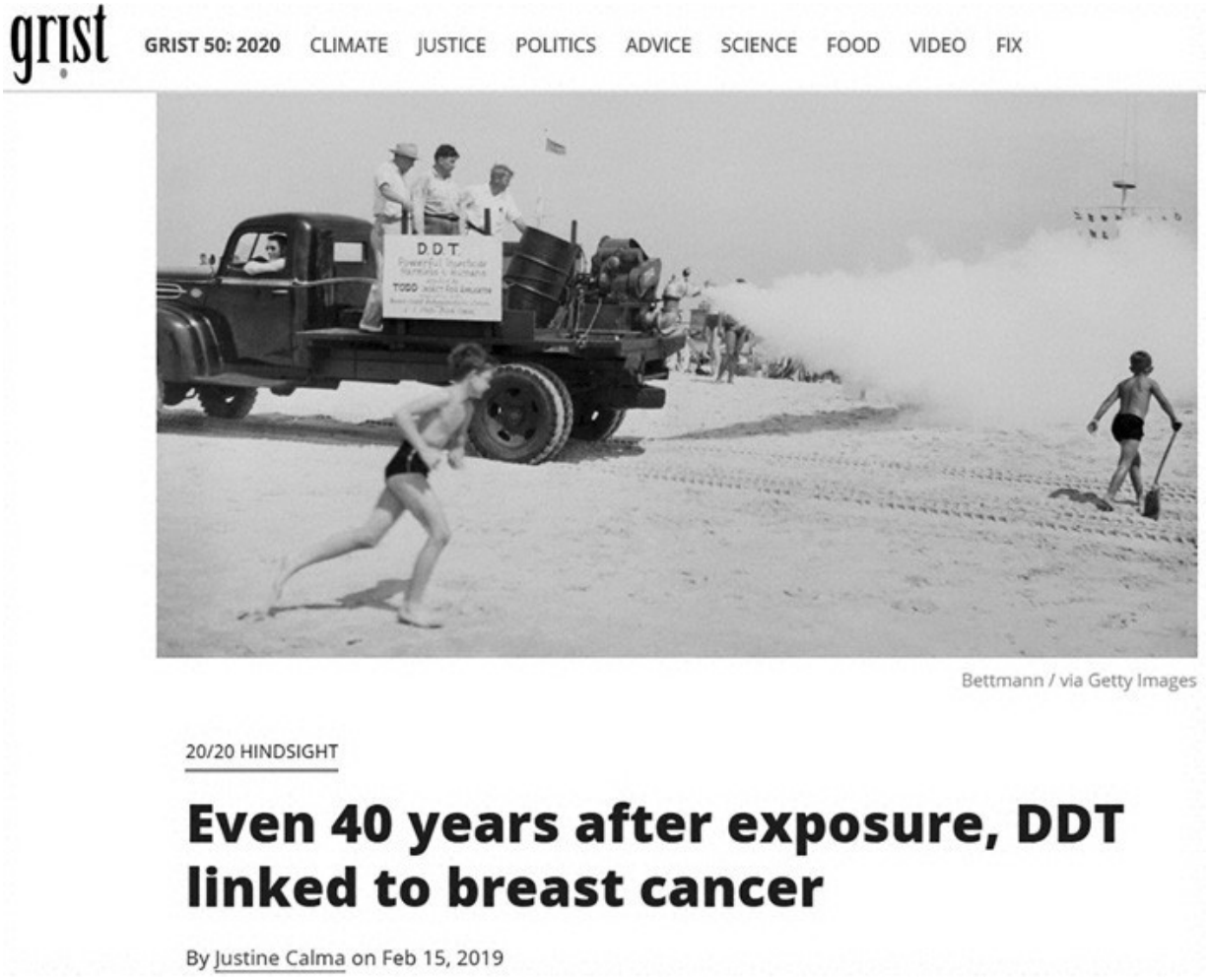
5. DDT was used with more caution, something that caused decreased human intake of the poison through foodstuffs.

6. The use of DDT was extended to nationally sponsored forestry programs, so, for instance, entire forests were sprayed with it by airplane.

7. DDT was gradually replaced by allegedly "safe" pesticides in the form of organophosphates like malathion, but their uncertain toxicological effects and the new pesticide laws merely changed the type of neurological damage from acute paralysis to less-paralytic forms, such as chronic, slow-developing diseases which were difficult to define. This made it particularly difficult to prove in legal disputes or studies, that these pesticides contributed to or directly caused the illnesses in question (see also Chapter 5, section: "BSE as an Effect of Chemical Poisoning" for more on the organophosphate phosmet).

Finally in 1962, US biologist Rachel Carson published her book, *Silent Spring*, in which she gives a vivid account of the fatal repercussions of extensive spraying of plant toxins on insects and particularly on birds, and predicts the consequence of a "silent spring" (without any songbirds). Through this, the public was made aware of the dangers of DDT. But public reaction was slow, because 800 chemical companies reacted hysterically to

Carson's book, prophesizing hunger and destruction if farmers were no longer permitted to use any pesticides. "The goal was very obviously to create panic and drive farmers into the arms of the chemical industry," as Pete Daniel, expert on the history of pesticides, writes in his 2005 book, *Toxic Drift*.[385]



On 15 February 2009, the American non-profit online magazine Grist *published the article "Even 40 years after exposure, DDT linked to breast cancer." The article is opened with a photo on which a pick-up truck can be seen, from which a beach with children playing is sprayed with DDT. The sign on the pick-up truck reads: "DDT—Powerful Insecticide, Harmless to Humans." The article states: "DDT was so widely used in the United States between the 1940s to 1970s that pretty much everyone at the time was exposed to some degree. The health risks associated with it were so poorly understood (and some say, overlooked) that it was sprayed directly on playing children. Author and scientist Rachel Carson called attention to growing concerns over the chemical with her seminal book, Silent Spring, published in 1962. But it would take another 10 years before DDT was banned in the U.S… According to a new study published this week in the* Journal of the National Cancer Institute*, women exposed to the pesticide DDT are still at risk for developing breast cancer four decades later. The findings are based on a 50-year longitudinal cohort of over 15,000 pregnant women, many of whom had been exposed to the pesticide before it was banned in the 1970s." Source:* grist.org

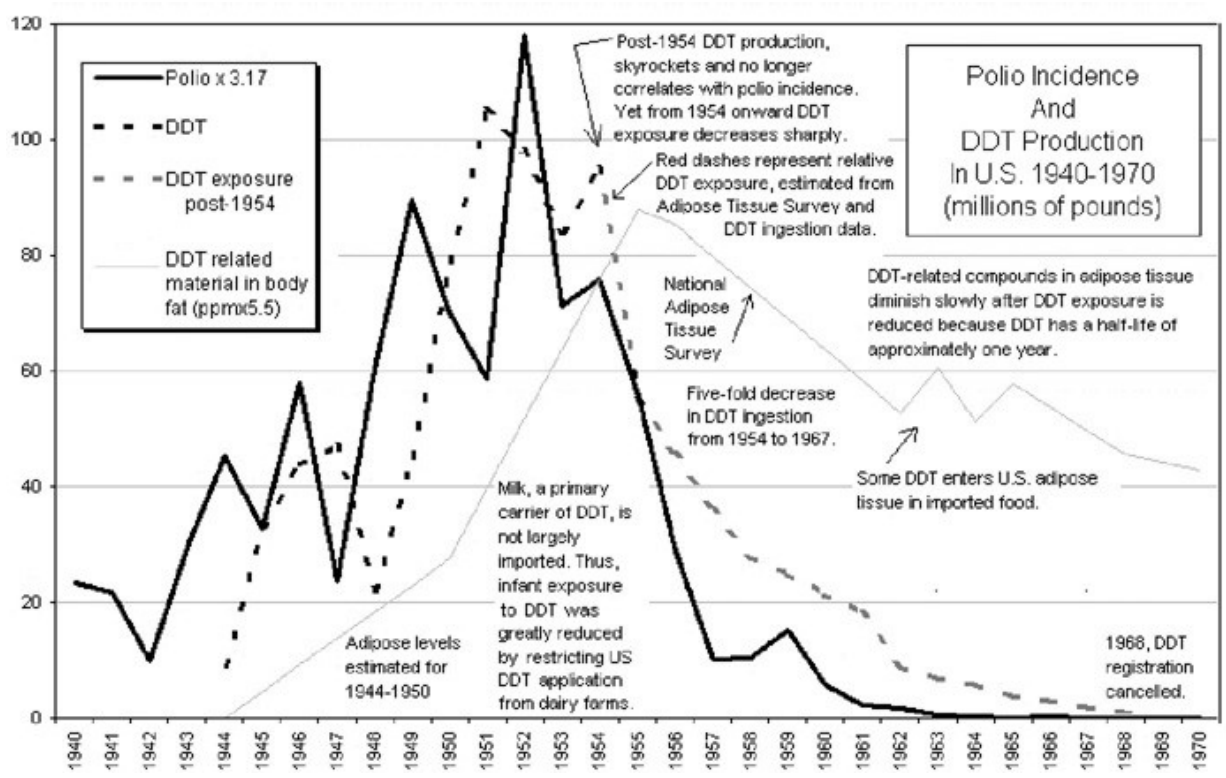
In 1964, a North Carolina turkey breeder named Kenneth Lynch wrote to the Ministry of Health, stating that, since 1957, his home town of Summerville had been enveloped in a mist of DDT or malathion (an

insecticide which can have wide-ranging neurotoxic and fatal effects[386] every summer, in order to kill mosquitoes. And over the past years, his turkeys had "more or less abruptly developed advanced paralyses and, even though they had originally been in good health, died within two or three days."

At the same time, the fertility of the eggs had declined from 75 percent to 10 percent. "The evidence clearly indicated that the fog of insecticide is to blame," writes Lynch. With the help of a chemistry professor, he turned to the Public Health Service (PHS) and suggested carrying out corresponding studies. The national authorities, however, showed no interest whatsoever. "It seems to me [that the ministry's behavior] can hardly be interpreted as anything other than a case of bureaucracy being blinded by its own past mistakes," opined Clarence Cottam, a biologist honored by the National Wildlife Federation as a protector of nature.[387] [388]

In their refusal, political decision-makers and the chemical industry's lobbyists[389] referred primarily to the "prisoner studies" of PHS scientist Wayland Hayes.[390] In these experiments on prisoners, Hayes had aimed to show that it was completely harmless to ingest 35 milligrams of DDT per day.[391] But critics like Cottam objected that every test subject could release him/herself from the experiments at any time. And indeed, "there were a fair number who withdrew when they became a bit ill."

Diagram 3 Polio cases and DDT production in the USA, 1940-1970



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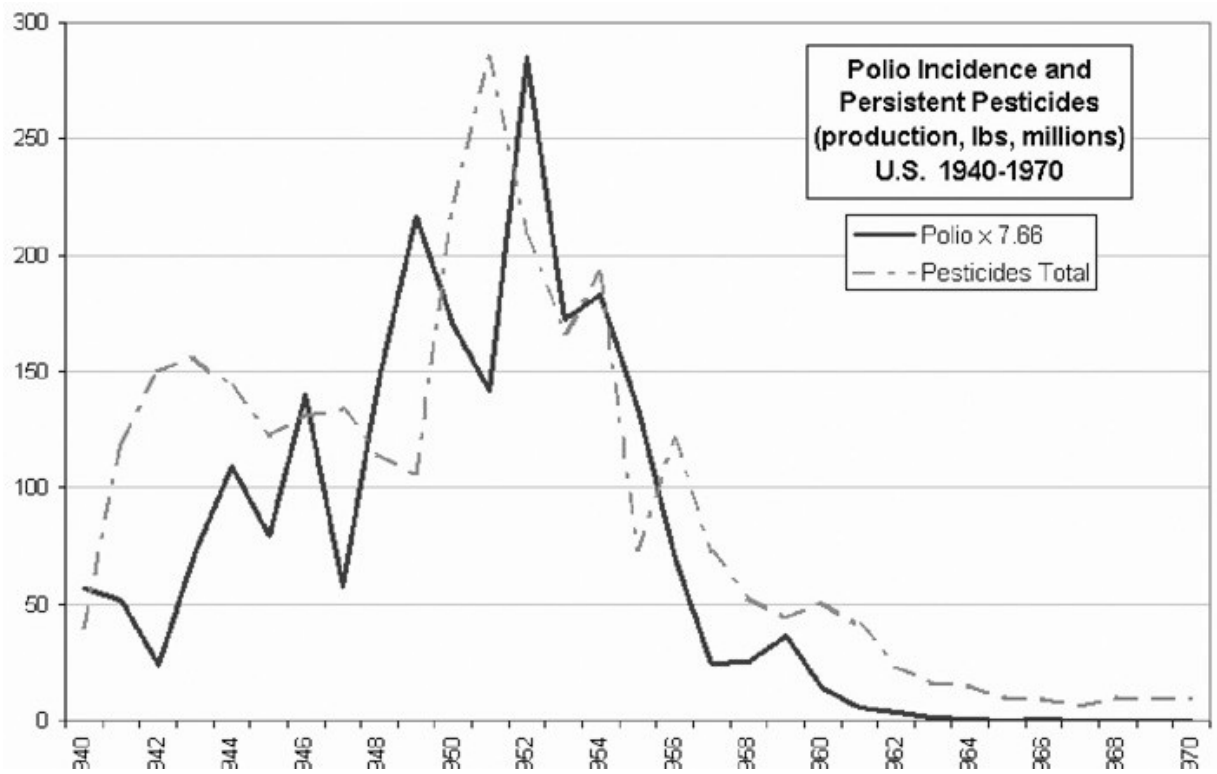

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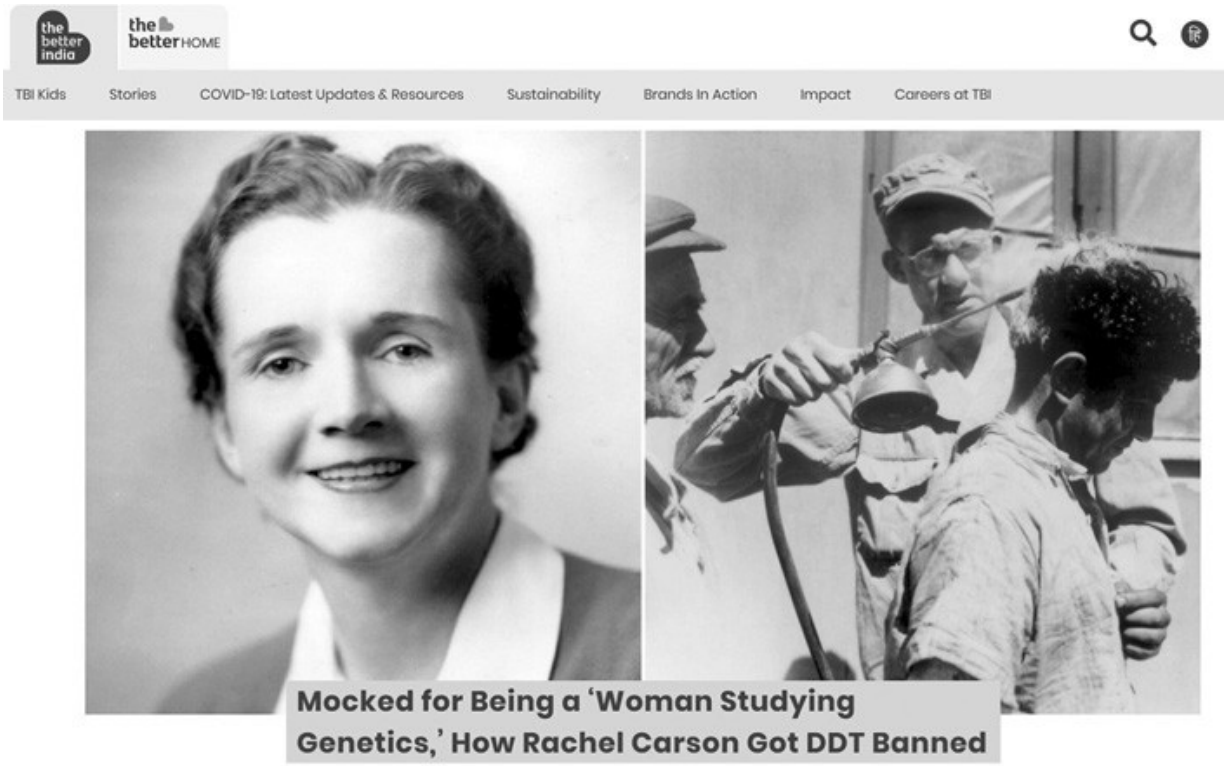
Sources: West, Jim, Pesticides and Polio, Townsend Letter for Doctors and Patients*, June 2000, p. 68-75; West, Jim, Images of Poliomyelitis;* Handbook of Pesticide Toxicology*, Eds.: Hayes, Wayland; Laws, Edward, Academic Press Inc., Harcourt Brace Jovanovich, Publishers, San Diego, 1991, p. 769; Historical Statistics of the US (1975), US Government Printing Office; Scobey, Ralph, Is Human Poliomyelitis Caused By An Exogenous Virus?,* Archives of Pediatrics*, 1954. © Jim West, http://harvoa.org/polio/overview.htm*

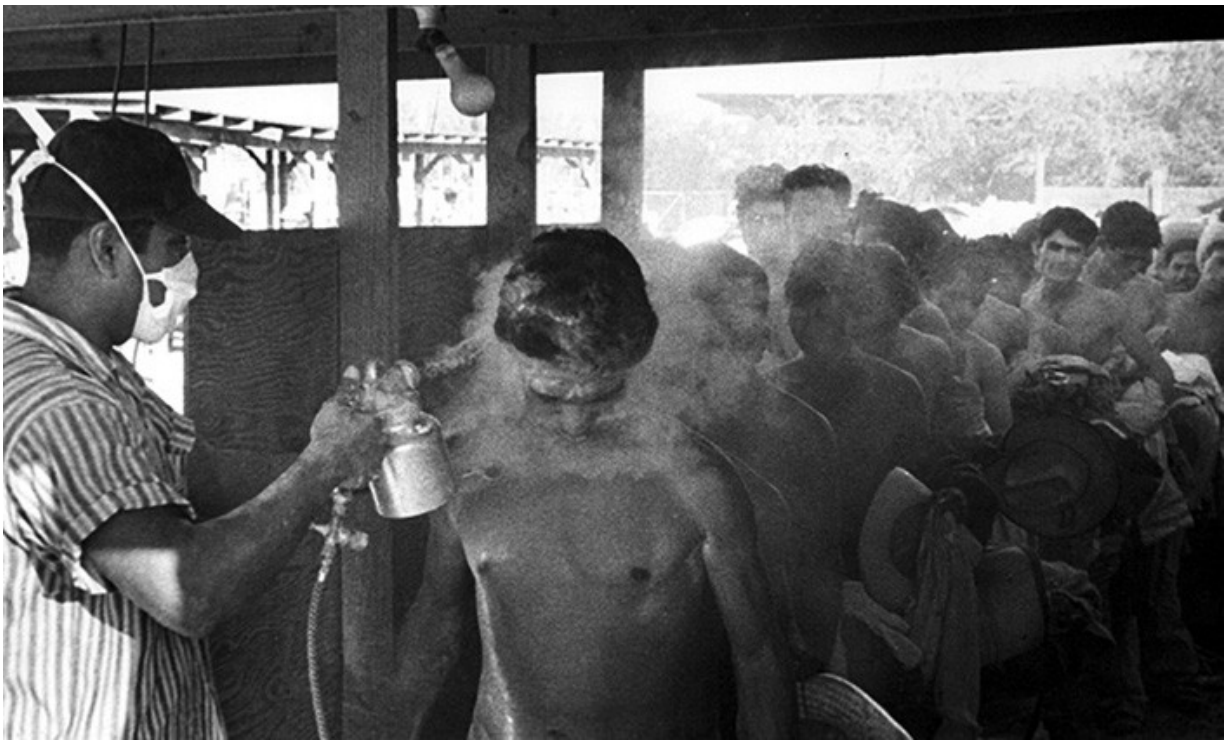
Since a number of prisoner test patients dropped out of the study, data on adverse effects were largely eliminated, so the study's results were worthless. Cottam points out that Hayes had most likely engaged in researcher bias to substantiate his initial views on pesticides: "Perhaps he is like many human beings who when subjected to criticism become more and more dogmatic in maintaining their initial stand." Pesticide historian Pete Daniel goes a step further in saying that "[the officials in charge] knew better, but the bureaucratic imperative to protect pesticides led the division into territory alien to honesty."[392]

It would be years before the US government held a hearing on DDT and even longer until they finally prohibited it in 1972. Unfortunately, the government discussions were not widely reported, so the general public remained unaware of the connection between polio (in humans!) and pesticides, or other non-viral factors. To achieve this, in the beginning of the 1950's, ten years before Carson's *Silent Spring*, someone would have had to have written a bestseller which described the repercussions of DDT (and other toxins) in humans. Unfortunately, this was not the case; and even later on such a book has not appeared.

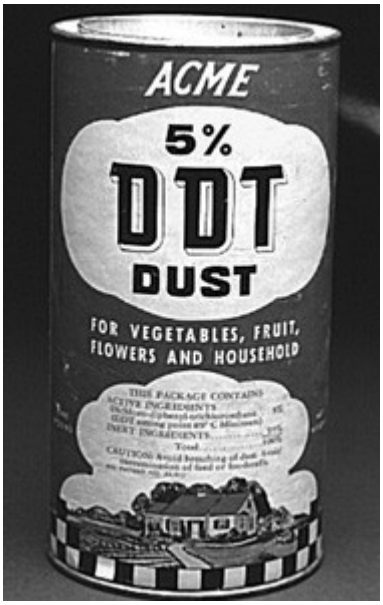


On 19 August 2017, thebetterindia.com *dedicated an article to "Silent Spring", one of Rachel Carson's groundbreaking books that marked a new public awareness about the use of chemical pesticides, especially DDT, being published in 1962. In the article it says: "Carson was mocked and humiliated. A propaganda campaign was designed to discredit her findings, her publisher was bullied, some went as far as disregarding her qualification, only because she was a woman… It was only in 1963, that Silent Spring gained President JF Kennedy's attention who called for a hearing to investigate and regulate the use of pesticides. An unwell Rachel prepared a 55 paged note with a list of eminent scientists who read and approved her manuscript. Her justifications and evidence, were strongly supported as right by President Kennedy's Science Advisory Committee. Silent Spring marked the beginning of an environmental movement, and DDT's agricultural use in the United States was banned in 1972. But unfortunately Rachel did not survive to see the day. She was posthumously awarded the Presidential Medal of Freedom." Source:* thebetterindia.com

"Carson's book was good, but it was restricted to the damage to animals, whereas one looks in vain for descriptions of statistical trends or analyses in the work," says Jim West. "Even the research scientists Biskind and Scobey, who had clearly described the damage that DDT causes in humans in his 1952 study "The Poison Cause of Poliomyelitis And Obstructions To Its Investigation,"[393] were practically unmentioned by Carson. Now who knows what kind of editorial censoring process her book had to go through before its publication."



Bracero workers being fumigated with DDT in 1956 as part of the entry process into the US. © Smithsonian Institution/Leonard Nadel



DDT dust " for vegetables, fruit, flowers, and household." © From the collection of the Wisconsin Historical Museum, catalogue #1999.143.20

"Blitz Fog" pesticide package (one percent DDT, plus the suspected carcinogens chlordane and lindane) from Northern Industries, Wisconsin, USA; Milwaukee, in gardens, the insecticide was dispersed with an atomizer ("Blitz Fog" thermalized insecticide dispenser) fastened to a motor-operated lawnmower's exhaust opening; in the early 1950s, the American chemical industry produced around 100 million pounds of DDT a year. © From the collection of the Wisconsin Historical Museum, catalogue #1999.143.22

This photograph was taken on 13 April 1955 and is featuring a beaming nurse showing a newspaper headline to a polio patient hooked up to a respirator. The caption reads: "Vaccine 'Triumph' Ends Polio Threat." In her gleefulness, the nurse entirely overlooks the psychological effect that the headline must have upon the seriously ill patient laying before her. It was too late for him to take this (purported) medical triumph, so he would have had to continue eking out his life as a paraplegic. Of course, there was, as shown, no vaccine triumph whatsoever, for the polio fuss had largely passed before mass inoculations were finally carried out. © March of Dimes Canada

The Observer
Vaccines and immunisation

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A jab for Elvis helped America beat polio. Now doctors have recruited him again...

Film of Presley's 1956 publicity campaign is posted online to boost immunisation crusade against today's global threats

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▲ Elvis Presley receives a polio vaccination from doctors at the CBS studios, New York, in 1956. Photograph:

In 1956, megastar Elvis was roped in for pushing the polio vaccine. The Observer *reported about it in 2016: "It was one of Elvis Presley's more unusual ventures. The king of rock'n'roll had just been enjoying his first taste of success with singles such as Heartbreak Hotel, and was about to appear on the Ed Sullivan Show in 1956, when he was given an unexpected medical challenge. Would he agree to be vaccinated against polio in front of the press before the show? He did. The resulting photographs were published in newspapers across the US. The publicity was part of a bid" to get more teenagers vaccinated against polio. Unfortunately,* The Observer *not only kept silent about that the polio vaccine had nothing to do with the drop of polio cases, but also that test monkeys and children inoculated with the vaccine had developed the disease itself: poliomyelitis. Source: screenshot of* theguardian.com

West points out that this type of censorship became the norm in future virus research: "One needs only consider that her work had been financed by the Rockefeller Foundation. This makes one sit up and take notice, for the Rockefeller Foundation has supported the significant orthodox epidemic programs, including the HIV = AIDS research and numerous vaccination programs. And William A. Rockefeller Sen. (18101906) had made his money by selling snake venom and pure mineral oil as anti-cancer drug. Carson's book prompted public outcry, which contributed to DDT's

ultimate prohibition. But this was a deceptive victory, which only helped to secure the public belief that democratic regulative mechanisms still functioned effectively. In actual fact, the chemical industry—because the public thought the poisonous demon had then been defeated—was able to establish its likewise highly toxic organophosphate on the market without a problem. And, fatally, nobody discussed its important central topic: that poisons like DDT could cause severe damage like polio."

Gajdusek's "Slow Virus": Infinite Leeway for Explanations

The virus hunters still had many weapons to pull from their box of tricks. Such as the concept of the "slow virus": a virus capable of "sleeping" in a cell for years before striking with its pathogenic or fatal effects. The claim that a disease takes a very long time (decades) to "break out" gained popularity in the 1960s, when virus hunters convinced the medical establishment that the virus concept could even be imposed on cancer[394] [395] —that is, a disease that generally appears after years or decades.[396]

But despite a most arduous search, researchers were simply unable to find any active viruses in tumors. The disappointment and frustration was correspondingly great.[397] But a new theory was soon developed: that a virus could provoke an infection, then lie dormant in a cell for as long as it wanted—and finally, at some point, even trigger cancer, and even when the virus is no longer present. Just as with polio earlier, the nucleic acids of a so-called slow virus have never been isolated and the particles have never been imaged with an electron microscope,[398] but the virus hunters embraced this suspect theory and adapted it to a number of modern ailments.[399]

Scientist Carleton Gajdusek prodded the slow virus concept along to serve not only an explanatory model for HIV/AIDS.[400] In the 1970s in Papua New Guinea, Gajdusek researched a sponge-like alteration in brain tissue associated with dementia, which was predominantly spread among the female population there.[401] The disease, called kuru, was only observed in two clans; they often intermarried, and, according to Gajdusek, maintained

a cult of the dead ritual that involved eating the brains of their deceased (something which was later revealed as a myth).

These transmissible spongiform encephalopathies (softening of the brain), as they are called, appear sporadically and end, mostly fatally, within five years. They are generally extremely rare (approximately one case per million people), but are represented within some families with a frequency of 1 in 50, which could point to a genetic disposition.[402] Despite this Gajdusek received the Nobel Prize in 1976 for his slow virus concept. With this endorsement his idea that this spongelike alteration in brain tissue was produced and transmitted by a pathogen achieved widespread acceptance as fact.

A close look at Gajdusek's trials on apes, with which he aimed to show transmissibility, should have shocked the scientific community into disbelief. But instead, they recognized these papers as proof of transmissibility and ignored the fact that neither feeding the apes brain mush, nor injecting them with it had any affect on the chimpanzees. So, Gajdusek conducted a bizarre experiment, in order to finally induce neural symptoms in the test animals.

He ground up the brain of a kuru patient into a mush full of proteins, along with a number of other substances, and poured this into the living apes by drilling holes into their skulls. This so-called disease's alleged transmissibility was founded only upon these experiments! [403] How could it possibly derive proof of Gajdusek's cannibalistic hypothesis? Particularly since the hypothesis indicates that the disease could appear in humans through ingestion of infected brains, and not through direct surgical insertion into the brain.

To compound matters, Gajdusek was the only living witness of cannibalism on Papua New Guinea . He reported on these cannibalistic rites in his 1976 Nobel Prize-winning lecture, even documenting them with photographs. But in the mid-1980s, it was discovered that Gajdusek's photos, with which he aimed to document the cannibalism, actually showed pig flesh, not human flesh. An anthropological team looked into this claim and they did find stories of cannibalism, but no authentic cases.[404]

Gajdusek later had to admit that neither he himself, nor others he met had seen the cannibalistic rites.[405] Roland Scholz, professor of biochemistry and cellular biology (who died in 2011), responded to this revelation by saying that, “the scientific world seems to have been taken in by a myth.”[406]

conditions, even healthy cells produce a whole range of particles that could look like so-called tumor viruses (oncoviruses).[410] [411]

The importance of this process was confirmed at an international meeting of the Pasteur Institute in 1972,[412] [413] and "endured in the early 1980s," according to Val Turner, a physician and member of the Perth Group, an Australian research team.[414] "Viruses are not naked bits of RNA (or DNA). They are particles with particular sizes and shapes and other identifying features, which are obliged to replicate at the behest of living cells. They won't multiply in dead meat like bacteria. So there you have it. This predicates experiments to prove particles are a virus and that hasn't changed in a thousand years and certainly not since the 90s."

Turner uses easy-to-grasp language to describe the science: "Think of it like a paternity suit in which DNA evidence will be used and the accused is HIV and the child is a human. The crux of the case is proof that the DNA you found in the human is the same DNA you found in the accused. For the latter, you have to have rock solid proof the DNA came from the accused. Given that in cell cultures all sorts of particles appear, only some of which are viruses, you have to prove that (a) a particular particle is a virus; and (b) your DNA comes from that particle. How can you prove (a) without using electron microscopy (for many reasons) and without purification? You tell me.

"Frankly we from the Perth Group do not understand this obsession with 'old data' or 'science moves on.' Has Archimedes' principle 'moved on' that says that a body immersed in a fluid is buoyed up by a force equal to the weight of the displaced fluid—the principle applies to both floating and submerged bodies and to all fluids, i.e., liquids and gases? Do solid objects no longer displace their own volume of liquids? If everything has to be 'up to date' then in ten years nothing that is up to date now will be up to date then. Which means as long as time keeps going nothing will be right." [415] This goes for orthodox theories as well!

By soundly characterizing virus structure (virus purification), it is theoretically possible to irrefutably differentiate viruses themselves from virus-like particles. If this has taken place, the next step would be to get an

electron micrograph of the purified virus (of course, proof that a virus exists does not automatically mean that this virus is also infectious, as had already been established in 1960, at a conference sponsored by the New York Academy of Sciences).[416] But this procedure is rarely carried out in modern viral research. Viruses that purportedly threaten to wipe out humanity (H5N1, SARS virus, etc.) have evidently never been seen by anyone.[417]

"Around 1960, before contemporary molecular biology arose, electron microscopy was held to be the best way of identifying viruses in cell cultures," writes pathology professor Etienne de Harven, a pioneer in electron microscopy and virology. De Harven's research career includes 25 years at the Sloan-Kettering Institute in New York, a private cancer research center founded in 1945, which quickly advanced to become the largest of its kind in the United States of America. [418] "For this reason, laboratories all over the world directed their efforts at this time towards observing particles in cancer cells with ever-improved methods of electron microscopy."

In 1962, the central role of electron microscopy was also recognized at the well-known Cold Spring Harbor Conference. André Lwoff, who would receive the Nobel Prize for medicine three years later, was among those who designated electron microscopy as likely the most efficient method of proving viruses' existence; he suggested investigating viruses with this procedure and dividing them into classes.[419]

A focus of medical science then (as now) was cancer. And because cancer researchers had the fixed idea that viruses were definitely cancer triggers,[420] they spent a lot of time proving the presence of viruses in human cancer cells, with the help of electron microscopy. But, these efforts were unsuccessful. "One only found virus-like particles from time to time—while viruses of a certain types could never convincingly be seen," reports de Harven.[421]

Virus hunters were, once again, crushed by this scientific news. But the scientific world tends not to publicize negative results whenever possible—in scientific language, this is called, "publication bias." [422] Yet, whether the research claims promoted as evidence involve new patented drugs said to be superior to existing (cheaper) ones, or genetic markers of disease