The Dangers and Ineffectiveness of Vaccines

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These notes are not compiled by a medically trained person nor are they meant as medical advice or as a substitute for such advice. Instead, these notes have been compiled by an intelligent lay person from publicly available materials (see references below), many of them produced by various health professionals. These notes are meant to prompt you to do your own research into the dangers and ineffectiveness of vaccines, particularly research outside of the mainstream organisations, and to reach your *own* conclusions. An abbreviated version of this paper entitled *The Dangers and Ineffectiveness of Vaccines: Some Essential Points* is also available at spriritualityandsoul.com

1. The Absent, Flawed or Corrupt Research Regarding the Safety of Vaccines

1.1. The most fundamental and essential type of scientific research to test the safety and efficacy of a medication or drug is where one group receives the drug and another group, the control group, receives a placebo, that is, a neutral or harmless substance such as saline solution. Ideally, the participants taking part in the trial and the researchers observing the participants are both unaware of who is taking the drug or the placebo. Unbelievably, this fundamental and gold-standard research is not undertaken to test the safety of vaccines, one of the most widely used medical interventions. Thus, in 2012 Dr Colleen Boyle, a senior official at the Centre for Disease Control (CDC), admitted under oath before a US Congressional Committee that the CDC, the Food and Drug Administration (FDA), the National Institute of Health (NIH), and drug manufacturers *routinely avoided* using unvaccinated control groups i.e. control groups using placebos. Of this situation Dr Richard Moskowitz MD, a long-time family physician, and author of the recent book *Vaccines: A Reappraisal*, stated, "With very few exceptions, almost all vaccine safety studies are conducted *without* a control group of unvaccinated individuals receiving nothing but an inert placebo." [29, p. 30]. The CDC and FDA are the main bodies in the US which are *supposed* to regulate the safety and efficacy of vaccines (and other medications or drugs). As we shall see in due course, with regard to vaccines they are both what are called *captured* agencies, that is, effectively controlled by the pharmaceutical companies.

Instead, of using control groups which take an inert or harmless placebo, the so-called 'control' groups in the so-called 'safety' trials for vaccines are given either another type of vaccine, which itself has *not* had its safety properly tested, and which has a known side-effect profile, or, given a substance found in vaccines, commonly an aluminium compound which also has a known side-effect profile (because it is toxic). [4; 29, chapter 3]. (Aluminium is used in vaccines as an adjuvant to help elicit an immune response.) Thus, in the 2017 study entitled *Behavioural Abnormalities in Female Mice Following Administration of Aluminium Adjuvants and the Human Papillomavirus (HPV) Vaccine Garadsil*, and published in the *Journal of Immunologic Research*, it was stated "Today most vaccine trials utilize aluminium (Al) adjuvants as placebos despite much evidence showing that Al in vaccine-relevant exposures can be toxic in humans and animals." [1A p. 330]. Why are the so-called safety trials for vaccines conducted in this way where the 'control' group is not taking a harmless placebo but, instead, another vaccine or vaccine constituent? As we shall see, all vaccines are filled with an array of toxic substances which cause a vast array of adverse and often serious side effects up to and including death (if we wish to call death a 'side-effect'). The presence of these toxic substances in vaccines and the harm they cause means that the pharmaceutical companies who actually or effectively conduct or control almost all of the safety testing on vaccines cannot afford to conduct proper, scientific safety trials using control groups receiving a harmless placebo; for any such trials would clearly and dramatically show that each vaccine tested causes an array of adverse side effects, often serious in nature, sometimes death. Therefore, the drug companies conduct 'safety' trials where the so-called control group receives a toxic substance, either another type of vaccine or a toxic constituent of a vaccine such as an aluminium compound. In this situation, both the control group and the test group receiving the new vaccine show an array of side-effects, and perhaps deaths, but do so more or less *equally*, and therefore, the drug companies can say that the vaccine (being tested) causes no more side effects than the control group, and therefore, the vaccine is safe! [4]. Of course, this is scientific, professional and moral corruption

and fraud. In his work *Vaccines: A Reappraisal* Dr Richard Moskowitz MD provides a summary of the so-called safety trials for many of the major vaccines now in use. They show that the so-called control groups, instead of receiving a placebo, receive instead a vaccine, a vaccine constituent, or an "unspecified" placebo. For some safety trials there are *no* control groups. (29, pp. 34-6).

1.2. Let's look at some of the examples of pseudo or so-called safety testing of vaccines. 1) In the 'safety' testing of the pneumonia vaccine, Prevnar, the so-called control group was given the meningitis C vaccine. Note: at this time the meningitis C vaccine *was no longer approved for use in the US*—that is to say, the so-called control was given a *banned* vaccine. Not surprisingly for a banned substance, the meningitis C vaccine caused side-effects in the control group, thus both the control and test groups had a similar side-effect profile. [4]. The Gardasil vaccine is given for the Human Papilloma Virus (HPV) which can cause cervical cancer. In the majority of the Gardasil vaccine trials the so-called control groups were injected with the vaccine constituent, and known neurotoxin, aluminium. This aluminium adjuvant caused side effects in the control group similar to those in the test group injected with the vaccine, thereby masking this vaccine's harmful effects. [1A p. 332]. In a supposed safety trial of the Gardasil vaccine by the company which produces it, Merck, the so-called control group received aluminium (250 mcg or more) in combination with polysorbate 80. In this trial *each* group—the control group and the test group—developed various autoimmune diseases (at a rate of 2.3%), many of which were serious, and over 3% required medical procedures or surgeries. *Half* of the girls in both groups reported serious adverse effects. Overall, 100 girls aged between nine and 26 years were affected. [29, chapter 3; 1e; 4; 1A pp. 115, 619-26, 641-2]. In *just one* of the Gardasil vaccine trials the aluminium adjuvant was *not* given to the control group. This group had just *half* the adverse events of the test group, but Merck hid the results. Indeed, the control group would have had even less adverse events if the other toxic substances in their injections had been omitted along with aluminium. [1A p. 623-4]. In fact, in the only trial (called Protocol 18) by Merck on children in the age group for which the Gardasil vaccine is used, nine to 15 years, Merck used a *different* Gardasil vaccine formula than the formula which is actually given to the public—this different formula had only *half* the amount of aluminium of the vaccine given to the public. Why? To reduce adverse events in the test group and give a 'better' test outcome. [1A p. 623-4]. 3) In the testing of the Haemophilus Influenzae type B vaccine (or Hib vaccine) produced by Sanofi-Pasteur we find another egregious example of 'safety' testing. The test group receiving the Hib vaccine was *also* given the DTP (diphtheria, tetanus, pertussis) vaccine while the control group was given both the DTP and either the *oral* polio or hepatitis B vaccines. Note: both the DTP and *oral* polio vaccines had *long* been discontinued in the US due to their adverse side effects. The DTP had been discontinued decades before due to the large number of court settlements in the 1980s for *brain damage*. Predictably, serious adverse reactions occurred in these trials of the Hib vaccine but, due to the false nature of the 'control' groups the adverse reactions were more or less the same in both the control & test groups. Adverse reactions here included urticaria, seizures, renal failure and Guillain-Barre Syndrome which is a crippling and sometimes fatal polyneuropathy (multiple nerve damage). [29, chapter 3].

1.3. When participants in vaccine safety trials have adverse reactions they are often *dropped* from the trials and not counted in the final results. For example, people who had seizures, reactions requiring hospitalisation, and autoimmune reactions during the testing of the Prevnar vaccine (for pneumonia) and who could not continue with the study were *not* counted in the final results. [4]. This practice obviously generates misleading conclusions regarding the safety of the vaccine being tested.

1.4. Vaccine research is conducted on *healthy* people, but the vaccines are then given to the general public including people with all sorts of diseases, illnesses, disabilities and genetic susceptibilities. [4]. In particular, there are a number of studies which now show that some people have genetic susceptibilities to the various ingredients in vaccines and which lead to increased adverse outcomes for these people. For example, some people have a decreased capacity to excrete metals, or increased sensitivity to mercury (still a constituent in some vaccines) and, as a consequence, are clearly more likely to get autism from vaccines. [1A p. 432ff]. A 2018 article by Dr James Lyons-Weiler, entitled *Autism is An Acquired Cellular Detoxification Deficiency Syndrome with Heterogeneous Genetic Predisposition,* brought together a good deal of the information on genetic predisposition and biochemical factors in the aetiology (or cause) of

autism. It has 230 references. In the conclusion Lyons-Weiler states that "Much additional research is consistent with the vaccine/autism hypothesis, which should now be formally adjusted to "Vaccines may induce autism in a genetic minority of patients." " [1A p. 439]. (The fact that vaccines *are* a cause of autism is covered in detail in section 3 of this paper.) Vaccines are supposed to be a medicine, and the simple truth is that, like other medications, to be both safe and effective they would need to be adjusted to the requirements of each individual with his or her more or less unique health and physical status.

1.5. Has there been any vaccine safety trials done with infants below six months? No. With young children? Relatively few. This is understandable, for what sane parent would want to subject his or her child to experimentation? And yet, in the US the Centre for Disease Control (CDC) recommends 69 doses of 16 different vaccines for children, starting from the day of *birth* through to the age of 18. Fifty of these 69 doses of vaccines are supposed to be given before the age of six. [1a].

1.6. Vaccines are generally tested one at a time. Yet when vaccines are given to the public a person, usually an infant or child, will often receive multiple, up to eight, vaccinations *at one time*. The Vaccine Adverse Event Reporting System (VAERS) is a surveillance program set up in the US for people to report adverse reactions/events to vaccines. It is jointly run by the Centre for Disease Control (CDC) and the Food and Drug Administration (FDA). An *independent* analysis of the VAERS data has shown that there is a statistically significant positive correlation between the number of severe adverse reactions (those requiring hospitalisation) suffered by infants and the number of vaccinations they receive at *one* time. [1e]. One of the most damning studies here was done by Neil Miller in 2016. It was *entitled Combining Childhood Vaccines at One Visit Is Not Safe*, and was published in the *Journal of American Physicians and Surgeons*. The study considered 38,801 adverse events associated with infants one year or less, and reported between 1990 and 2010. (We shall see later that only 1% to 10% of adverse reactions to vaccines are in fact reported to the VAERS.) In an analysis of the VAERS data the study found a significant linear correlation: the more vaccines a child received at *one* visit then the greater the chance of death or hospitalisation. Selecting some of the findings from the study, we find that if a child has two vaccinations at one time/visit it has an 11% chance of hospitalisation, four doses 14.4%, and eight doses 23.5%. Of the 38,801 children suffering an adverse event, of those who received one to four doses at one time 423 died with a 3.6% mortality rate. Of the children who received five to eight doses in one sitting 1,458 died with a mortality rate of 5.4%. The study also found that the younger the infants were the more likely they were to be hospitalised or die. *And yet the CDC allows infants of just two months of age to have up to eight vaccinations at once*. And yet there has been no safety testing *at all* on the adverse effects of administering multiple vaccines at once. [1A p. 279ff]. Further, as we have just seen, there are no safety studies of infants under 6 months.

1.7. There are also *no* studies or trials which look at the effects of multiple vaccines given *over* time i.e. for cumulative impact, neither in children nor in adults. This is especially important, for a number of the toxic substances in vaccines, not least aluminium and mercury, are not readily excreted from the body and accumulate. [1A pp. 210-220, 226]. (The proven role of mercury and aluminium in vaccines in causing a wide variety of injuries and diseases, particularly those related to the central nervous system, is discussed in sections 2 and 3 below.) The number of vaccines and vaccine doses has risen dramatically for children in developing countries. For example, in the US in 1983 a child had 22 douses of seven vaccines before the age of six, but by 2017 this has ballooned out to 50 doses of 14 vaccines by the age of six, and by 18 years of age it is 69 doses of 16 vaccines. [1A p. 283]. A study entitled *Do Aluminium Adjuvants Contribute to the Rising Prevalence of Autism?* and published in the *Journal of Inorganic Biochemistry* noted that in some developed countries a child, by the age of four to six years, will have received some 126 antigenic (immune stimulating) compounds from vaccines, including high levels of aluminium. In turn, these antigens could lead to permanent changes to the brain and immune system including autoimmunity resulting in autoimmune diseases. The authors of the study conclude that "a rigorous evaluation of the vaccine-related adverse health impacts in the paediatric population is urgently needed." [1A pp. 297-8]. However, the studies of the synergistic i.e. enhancement by working together, toxicity of vaccines and the cumulative impact of vaccines that infants and children are required to have under the CDC schedule, and by other regulatory bodies, have *never* been done. [1A p. 282]. Although the studies on the cumulative impact of the CDC

schedule of vaccines have not been done, in due course we shall see abundance evidence that the cumulative adverse impact of vaccines is massive and appalling.

1.8. Most vaccine safety trials only observe participants for adverse reactions for two weeks or less. This period is not nearly long enough. [29, chapter 3; 4]. Vaccines intentionally cause antibody responses—by the immune system—to the viruses and bacteria they contain, albeit these viruses and bacteria in vaccines are in an attenuated and modified form. (An antibody is a protein produced by the immune system to help rid the body of an antigen, that is, a substance the body regards as foreign.) Indeed the vaccines contain substances called adjuvants to facilitate this antibody/immune response. The vaccines *also* intentionally or unintentionally cause antibody responses to a host of other toxic substances which they contain. These antibody responses are responsible for a host of adverse side effects and ongoing chronic conditions including autoimmune diseases, that is, diseases where the body's own immune system attacks tissues in the body. Many of the autoimmune diseases which are caused or triggered by vaccines are listed on the vaccine's package insert (or information that comes with the vaccine); many others are linked to vaccines by research studies and not yet included on the package inserts. (Many of these autoimmune diseases and their relation to vaccines are discussed below in section 2.) However, it takes *at least* 14 days for a primary antibody response to an antigen encountered for the first time. This is to say, it takes *at least* 14 days, but usually longer, for the adverse effects from vaccines, due to their production of antibodies, to become clinically significant. Obviously, these adverse reactions, including vaccine induced autoimmune diseases, will fall *outside* the normal 14 day (or less) observation period used for most vaccine safety trials, and therefore, these adverse reactions will not be captured and recorded by the safety trials, and will not be considered as caused by the vaccine in question. [29, chapter 3]. In fact, a 2018 study from the journal of *Clinical Rheumatology*, entitled *The Autoimmune/inflammatory Syndrome Induced by Adjuvants (ASIA)/Shoenfeld's Syndrome: Descriptive Analysis of 300 Patients from the International ASIA Registry*, found that autoimmune responses to vaccines ranged from three days to five years with an average time of 16.8 months. ASIA/inflammatory syndrome induced by vaccine adjuvants is where exposure to the adjuvant contained in the vaccine leads to an autoimmune response. [1A pp. 300-1]. Why don't drug companies conduct long-term safety trials with vaccines, as they do with other drugs? Is it that the results would be so damming?

In light of points 1 to 8 above it is not that surprising that in 2013 the Institute of Medicine, of the National Academy of Sciences, concluded that the CDC's vaccine schedule for children from birth to six years in the US had not been adequately tested for safety, and that further studies were needed in the areas of: 1) long-term cumulative effects of vaccines 2) timing of vaccinations in relation to the health and age of the child 3) effects of total load of vaccines given at one time 4) effects of certain vaccine ingredients in relation to health outcomes and 5) biological mechanisms of vaccine associated injury. [1A p. 454]. Not an insignificant list of essential and needed research.

1.9. Most of the research on vaccines is being conducted by the pharmaceutical companies that produce them such as Merck or GlaxoSmithKline who have multi-billion dollar investments at stake. In 2016 the profits from vaccines for the four biggest vaccine manufacturers Merck, GlaxoKlineSmith, Pfizer and Sanofi was over $24 billion, by 2023 this is projected to be around $30 billion. [1A p. 693.] These companies are commonly and successfully sued for multi-million dollar or even billion payouts due to civil and criminal breaches; cases which clearly illustrate that they have no ethics—something which will become increasingly clear as this paper unfolds—and therefore, they cannot be trusted to conduct proper research. Here are some examples of their 'ethical standards'. In 1987 a Measles-Mumps-Rubella or MMR vaccine called Trivirix was developed by the drug company SmithKlineBeecham and used in Ontario, Canada. It caused a meningitis outbreak (due to this bacterium being accidentally included in the vaccine during its production). Trivirix was withdrawn from use in Ontario but then *re-released* in the UK under a different name, Pluserix. Not surprisingly it caused another meningitis outbreak and had to be withdrawn. However, SmithKlineBeecham then proceeded to give the vaccine to developing countries like Brazil where it predictably caused an epidemic of meningitis. [3]. Another example: GlaxoSmithKline agreed to a record three billion dollar settlement in 2012 after admitting to the biggest health fraud case in US history relating

to bribing doctors, the illegal promotion of prescription drugs, failing to report safety data, and promoting medicines for unlicensed uses. The four major pharmaceutical companies, Merck, GlaxoKlineSmith, Pfizer and Sanofi, are all convicted felons and in the last ten years have collectively paid out some $35 billion in civil and criminal damages for fraud, blackmail and killing and injuring people with their products. [35].

1.10. It may be countered that much of the research conducted on vaccines is not performed by the drug companies and therefore is independent. Nothing could be further from the truth. Dr Peter Frost, a former vice president of the massive pharmaceutical company Pfizer, catalogued in minute detail the aggressive marketing strategies that he himself had devised, and which are in flagrant violation of the ethical guidelines of Pfizer itself. Of the safety trials he said "[They] are supposedly third-party and independent, but the money won't keep coming unless they [i.e. the researchers] support your drug, unless they say what you what them to say. Everybody knows that this is how things work. The drug companies know it, and you know it; only the public does not know it." (My interpolations.) [29, p. 33]. Dr Marcia Angell MD had a distinguished medical career, including being the editor of the prestigious *New England Journal of Medicine* for around two decades. She was sacked after the publication of her prize-winning book *The Truth About Drug Companies: How They Deceive Us And What To Do About It* (2005). She stated: "Most clinical trials are funded by the pharmaceutical industry. Since drug companies don't have direct access to human subjects, they contract with academic researchers to conduct trials on patients… Often academic researchers are little more than hired hands who supply human subjects and collect data according to instructions from corporate paymasters. The sponsors [i.e. drug companies] keep the data, analyse it, write papers, and decide whether, when, and where to submit them for publication." She then proceeds to list a whole range of ways in which academic researchers are fused with and compromised by the drug companies including: financial ties (payment, shares, gifts) to companies, sitting on the boards or management of companies, serving as consultants to companies whose products they evaluate, agree to be listed as authors to articles ghost-written by companies, etc. [29, chapter 3]. Indeed as Angell states, the medical journals themselves have become corrupted: "It is simply no longer possible to believe that much of the clinical research that is published, nor to rely on trusted physicians or authoritative medical guidelines. I take no pleasure in this conclusion which I have reached slowly and reluctantly in my two decades of the *New England Journal of Medicine*." Again, this time from Richard Horton in 2004 as editor of the prestigious journal *Lance*t: "Journals have devolved into information laundering operations for the pharmaceutical industry." [1A p. 350].

1.11. The pharmaceutical industry in the US has an estimated 1.300 lobbyists in Washington; puts four times as much money into lobbying as the defence and aerospace industry; spends twice as much on advertising than on research; and has increased its expenditure on direct advertising in the US from 791 million in 1996 to 3.8 billion in 2004. [15]. Of the pharmaceutical industry Dr Marcia Angell states that it is "Now primarily a marketing machine to sell drugs of dubious benefit, this industry uses its wealth and power to co-opt every institution that might stand in its way, including Congress, the FDA, academic medical centers, and the medical profession itself." [1A p. 78]. The journals are corrupted in a variety of ways, in particular, by receiving huge advertising deals with drugs companies in exchange for only publishing articles and studies favourable to vaccines. [1A p. 356].

1.12. But surely, the regulatory agencies in the US step in to oversee the safe testing and rollout of vaccines in the US, and therefore, in much of the world which takes its lead from the US? Unfortunately this is not the case. In the US the Centre for Disease Control (CDC) has the *central* role in researching, approving and regulating the safety of vaccines. This organisation has been conclusively shown to have withheld, manipulated, omitted and destroyed the original research data from vaccine research in an attempt to hide adverse findings. Further, they have intentionally and fraudulently manufactured false studies to hide death, injury and harm caused by vaccines. One of the most egregious examples was the CDC's attempt to destroy, hide, manipulate and fabricate its own research data—from 1999 to 2004—to hide the finding that mercury containing vaccines caused autism in infants and young children. [2, 1b; 29, chapter 6]. This corruption is discussed in detail below in the section 3 of this paper. What is the source of this corruption in the CDC? Basically, the CDC or aspects of it have been captured by the massive pharmaceutical companies or what is colloquially known as Big Pharma. Here are but a few examples—others are given later in this paper. There

is a clear and documented history of a revolving door situation between CDC officials and Big Pharma executives, which means that many CDC executives have serious conflicts of interest. For example, Julie Gerberding was the director of the CDC during the period this agency, on the one hand, covered up its own research proving that the mercury in vaccines caused autism and, on the other hand, fabricated research that mercury-containing vaccines did not cause autism i.e. committed fraud. After leaving the CDC Gerberding was appointed vice-president Merck's vaccine division (whose products she was formerly and supposedly regulating) where she received a salary of $2.5 million a year plus $38 million in stock options. In fact, the CDC is *in* the vaccine business: it *sells* 4.6 billion in vaccines each year, while pretending to regulate the safety of such products. Further, it actually holds patents on over 50 vaccines! [1f; 1A p. 355, 361-2, 632]. Further still, while claiming to accept no funding from the pharmaceutical industry the CDC has a foundation, the CDC Foundation, which raised 42 million in 2016 alone from 'donations' from companies including the drug and vaccine companies Merck, Pfizer, and Bayer. Merck has representatives sitting on the Foundation's board. The Foundation's corporate partners also include such companies. Not surprisingly, the CDC has been the subject of no less than *four* scathing government reports which have identified corruption, mismanagement, dysfunction, and conflict of interests suborning its research and regulatory and policy-making functions. A summary of these reports by Robert Kennedy Jr. can be found in the article *RFK, Jr Manifesto on Mercury and Vaccines*. [1A p. 157]. An extensive overview of the conflicts of interest and corruption of the CDC in regard to vaccines can be found in the e-book *Truth Will Prevail: 1,200 Studies That Refute Vaccine Claims.* [1A p. 354ff]. Again, unfortunately what happens (or does not happen) in the US regarding vaccine research, rollout and regulation has a huge influence on the rest of the world.

What about the Food and Drug Agency in the US whose role it is to regulate the safety of food and drugs? Robert Kennedy Jr. reports that the panel within the FDA that licence's and anoints vaccines as safe is called the Vaccines and Related Biological Products Advisory Committee. In 2000 this committee was investigated by the US Congress for allegations of fraud. The Congressional Inquiry found "The overwhelming majority of [VRBPAC] members, both voting members and consultants, have substantial ties to the pharmaceutical industry." For example, three of the five members of the VRBPAC who voted to approve the rotavirus vaccine had financial ties to the pharmaceutical companies developing the vaccine. One of the members had a nine million dollar contract if the vaccine was produced. [1A p. 630]. 45% of the FDA's funding comes from the pharmaceutical industry running into billions. [1A p. 632].

1.13. If not the supposed safety testing by drug companies and medical researchers, or the oversight of the regulatory bodies like the CDC and FDA, then surely the courts protect the public from death and injuries caused by vaccines? No: in the late 1980s legislation called the National Childhood Vaccine Injury Act was introduced in the US which gave US drug companies *legal immunity* from prosecution for death and injury caused by their vaccines. Why do the drug companies need immunity if their vaccines are so safe? Of course, they are not safe. Indeed it was in response to an avalanche, thousands in fact, of lawsuits in the 1970s and 80s against the drug companies due to deaths and injuries—in particular brain damage caused by the mercury-laden (25mcg) DTP vaccine—that the immunity legislation was introduced. Basically, the drug companies said, 'If we are not given immunity we will not continue to produce vaccines.' In place of prosecution of the drug companies by the courts a Vaccination Injury Compensation Program (VICP) was set up in the US, and which ostensibly made it easy for people to get compensation for death and injuries from vaccination. The truth is the exact opposite. [29, chapters 6 and 8]. Not surprisingly, once the pharmaceutical industry could not be sued for death and injury from its vaccines then its safety testing standards and manufacturing safety standards would be even worse. For example an FDA review of one of Merck's biggest vaccine factories found contaminated children's vaccines and failure to follow good manufacturing process—there were 49 areas of concern. Merck's actual response was "Nobody's perfect." [1A p. 370]. Why shouldn't vaccine companies be held legally accountable for the safety and efficacy of their products just like any other manufacturer of medical products?

1.14. What about the media, will they critically report on the adverse effects of vaccines on children and adults and hold the pharmaceutical companies to account? Not likely. Robert F. Kennedy Jr estimates that 70% of the advertising revenue for network news in the US comes from the drug companies. [1A p. 281].

He states that each year 5.4 billion goes from the pharmaceutical companies to advertising on television, radio, newspapers and the web. [1A p. 633].

Note: Much of the prior information related to vaccine research is directly related to the US. However, it is also relevant to Australia (and other countries) because Australians use vaccines that are licensed in the US and approved in Australia under a different name but without further testing. [26]. More generally, other countries take their lead in many ways from the US where the big pharmaceutical companies are located.

2. The Toxic or Poisonous Substances in Vaccines and the Consequent Death, Injuries and Adverse Effects They Cause

2.1. The US Supreme Court has ruled that "vaccines are unavoidably unsafe". [1a]. Court actions in the UK, Italy, Sweden, India, Nepal, Hungary, France, US and other nations have proved instances of injury caused by the following vaccines: polio, mumps, measles, MMR (measles, mumps, rubella), H1N1 swine flu, seasonal flu, tetanus, DPT (diphtheria, pertussis (whooping cough), tetanus), varicella (chicken pox), and the HPV vaccine. [25].

2.2. Vaccines can and do cause death and a long list of adverse effects, including permanent injuries. Many of these adverse reactions are listed on the package inserts, or manufacturer's information, accompanying the vaccine; others are causally linked to the vaccines by independent scientific studies and researchers using a variety of approaches including clinical research, epidemiological (or population studies), and animal and human physiological testing. Overall, some 200 adverse side effects can be caused by the current vaccines. These include: death, seizures, seizure disorders, autoimmune reactions and diseases, neurological disorders (for example the autism spectrum disorders), aplastic anaemia, rashes, convulsions, fainting, pneumonia, allergic reaction, allergies, anaphylactic shock, a range of inflammatory conditions e.g. of the bowel or pancreas, paralysis, diabetes, speech disorders, tics, Tourette's Syndrome, SIDS, narcolepsy, Guillain Barre Syndrome (an acute or subacute peripheral polyneuropathy cause by an autoimmune response), asthma, acute disseminated encephalomyelitis (a crippling and potentially blinding disease which is a documented side effect of virtually every vaccine), CNS demyelinating diseases e.g. multiple sclerosis, encephalopathy and encephalitis i.e. brain inflammation (for example, as listed on Merck's MMR package insert or the *Merck Manual*). [1a; 1b; 1d; 20; 29; 39; 1A pp. 419-20, 667-8]. (Many other adverse effects of vaccines are discussed or listed in the course of this paper.) Of course, prior to being vaccinated many or most people and parents are *not* informed or *fully* informed about these adverse effects or the possibility of death.

2.3. As previously mentioned, the Vaccine Adverse Event Reporting System (VAERS) is a surveillance program for adverse reactions to vaccines in the US, and jointly run by the CDC and the Food and Drug Administration (FDA). As of 31/12/2016 VAERS had recorded a total of 43,532 adverse reactions to vaccinations. [1e]. This is a small proportion of the approximately 60,000 people who report vaccine injuries to the VAERS each year. In 2016 there were 59,244 reports to VAERS and 56,263 in 2017 [1A p. 372, 375]. Here are some specific examples from the VAERS. By January 2018, 412 deaths, approximately 5,500 hospitalisations, and 15,000 plus emergency department admissions had been reported in association with the HPV Gardasil Vaccine. (See sanevax.org for the statistics.) The VAERS also shows that as of November 2018 there have been 93,179 reports of adverse events to the MMR vaccine, including 459 deaths, 6,936 hospitalisations and 1,748 disabilities. [1A p. 490, 567]. The CDC, FDA, and the American Association of Physicians and Surgeons have stated that 90 to 99% of the adverse reactions to vaccines are *not* reported. The former commissioner of the FDA, David Kessler, puts the figure at 99%. Partly this lack of reporting is because doctors are generally not trained in the area of identifying adverse reactions to vaccines, nor are they trained or encouraged to report adverse reactions. [1a; 29; 1A pp. 372-4]. If the CDC and others are correct then the simple mathematics means that each year approximately 600,000 to 6,000,000 people should/could report vaccine adverse events each year. Also, the above numbers of deaths and injuries for the HPV, MMR, and other vaccines can be multiplied by some nine to 99 times to arrive at a more accurate picture of the plague of death and injury vaccines are inflicting, mainly upon children. Not surprisingly, the

CDC has ignored a request for the automation of reporting to VAERS which would surely make it easier for clinicians to report adverse events and therefore give more accurate numbers. [1A p. 374].

2.4. In Australia, the equivalent of the VAERS is the Database of Adverse Event Notifications (DEAN) where reports are made to the Therapeutic Goods Administration (TGA) by patients, consumers, health professionals and sponsors of medicines. Since 1971, DEAN has recorded 48,617 reports, showing that 32,950 of these cases were the likely result of the single medical intervention itself i.e. the vaccine dose. Despite this, the Australian government currently says that the evidence associated with adverse reactions to vaccines is not sufficient to prove conclusively a direct link between vaccines and the reports! Why? Part of the reason is that there is currently no framework to *analyse* links between vaccines and adverse events. [26]. Thus the government can technically, albeit not plausibly, say that the evidential or causal links between vaccines and the reported adverse events are not established in these cases. Like its VAERS counterpart in the US, we can safely assume that the DEAN in Australia will only record between one to ten percent of the adverse reactions to vaccines. The fact that DEAN is a passive system (where the onus is on people to voluntarily report adverse events) and not an active one conducted by the government only adds to this assumption. There is no surveillance system in Australia for the *long-term* adverse effects from vaccines. [27].

2.5. As previously mentioned at the end of section 1, in place of prosecution of the drug companies a Vaccination Injury Compensation Program (VICP), or Vaccine Court, was set up in the US. Ostensibly this court was to make it easier for people to get compensation for death and injuries from vaccination. The truth is the exact opposite. [29, chapter 8]. As of July 2015, 16,038 claims were filed with the court including 1,164 for death. Over that period there were 4,150 awards for compensation totalling approximately $3.18 billion dollars. By 2018 the Vaccine Court had awarded around $3.5 billion to vaccine victims; even though approximately three quarters of vaccine injured plaintiffs are denied compensation. [10; 29, chapter 8]. The Vaccine Court has now paid out some $4.2 billion. [1A p. 355, 367]. In the years 2016, 2017 and 2018 there were 3,601 claims made to the Vaccine Court. The number of successful claims has been increasing yearly since 2004. There was almost $111 million paid out in the first two months of 2019. There is a cap on an award at $250,000 and yet it takes an estimated $2.5 million to raise an autistic child. [1A pp. 367-8]. Here is a specific example relating to the VICP and drawn from its website. Between Oct 1988 and June 2015 in relation to the DTP (diphtheria, tetanus, pertussis) vaccine there were 3,286 claims of injury including 696 deaths of which 1,271 cases were compensated. For the same period, for the newer DTaP (diphtheria, tetanus, acellular pertussis) vaccine there were 382 claims including 79 deaths of which 185 were compensated. Bearing in mind that only one to ten percent of adverse events are reported, multiplying conservatively by 10, in the US alone we would have had—in this 1988 to 2015 period alone—around 7,000 or so deaths being brought before the Vaccine Court from the DPT vaccine, 800 or so deaths from the DTaP. Further, in light of the figures previously given in this paper 4,590 deaths from the MMR vaccine, and 4,120 deaths from the HPV vaccine would have been reported to the VAERS. Further, *vaccines are ineffective* and are *not* preventing deaths. We shall see in section 4 that vaccines provide *little or no* effective protection from various infections. A short note about the DTaP vaccine: it is not recommended during pregnancy, but is recommended for infants as young as two months. So it must be asked ‘If there is a risk to the foetus if this vaccine is given to the mother, where, via the mother, the foetus absorbs some but not all of the vaccine, how can it be safe for a two month old baby to get the *full* dose of the vaccine direct into its bloodstream?’ [1A p.271].

2.6. The reason why vaccines cause so many deaths and adverse reactions, many serious and permanent, is because they are full of toxic substances including: the attenuated and modified viruses or bacteria which constitute the active ingredients of the vaccine; animal and human matter including proteins, cells, DNA and animal viruses; unique animal derived retroviruses (that have been found in human tumours); preservatives or germicides such as formaldehyde, glutaraldehyde, benzethonium chloride, and the mercury-containing thimerosal; the aromatic hydrocarbons such as 2-Phenoxyethanol and phenol (or carbolic acid); adjuvants to stimulate immune responses to the vaccine, most notably various aluminium compounds; detergents and emulsifiers such as polysorbate-80; the herbicide glyphosate; the surfactant Triton X-100; antibiotics such as

neomycin, polmyxin B, gentamicin and kanamycin (to prevent bacterial contamination); and an array of substances used in the culture media, preparation and stabilizing of vaccines including monosodium glutamate (MSG), phosphate, sulphate, chloride salts, ammonium sulphate, squalene, ethyl glycol (anti-freeze), glutamate, etc. etc. No testing or independent testing of the effects of many or most of these toxic substances as part of vaccines has ever been undertaken; despite this the CDC 'assures' the public that they are safe. [15; 18; 25; 29, chapter 10; 1A pp. 110-11]. There is a little more. In 2017 an article was published in the *International Journal of Vaccines and Vaccination* entitled *New Quality-Control Investigations on Vaccines: Micro- and Nanocontamination*. 43 vaccines were randomly selected from batches. They were all found to be contaminated with non-biocompatible particulates including lead, stainless steel, tungsten, silicon, gold, silver, nickel, chromium, iron, copper, strontium, platinum, etc. The authors stated that these substances will cause inflammatory reactions and "they should not be present in any injectable medicament, let alone in vaccines, more in particular those meant for infants." [1A p. 133]. All the vaccines and their package inserts can be found at www.immunize.org/fda/. Let us look at some of the toxic substances found in vaccines in more detail.

2.7. Outside of radioactive substances mercury is the most neurotoxic substance known to the human body. It readily binds to molecules, cells and tissues thereby disrupting cell function to, in turn, cause oxidative stress, and dysfunction of mitochondria in cells (which produce some 90% of the body's energy). (Oxidative stress is where there is in over-abundance of free radicals, that is, oxygen molecules which have lost one or more electrons making them highly reactive with and damaging to other bio-molecules such as DNA and RNA.) Mercury hinders the production and function of neurotransmitters thereby causing behavioural, neurological, mood and mental health disorders. Mercury depletes or renders inactive a range of nutrients or antioxidants in the body including zinc, magnesium, sulphur and selenium. Chronic exposure to mercury disrupts insulin. There are many other adverse effects. [19]. The available literature indicates a linear relationship between mercury intake and IQ deficit, and therefore, a safe limit of mercury cannot be calculated. [1A p. 262]. Mercury has no established toxicologically safe level of exposure for humans. [9].

Mercury in vaccines is contained in thimerosal, a mercury-containing compound used as a preservative. Its preservative power rests in the fact that its toxicity prevents the chemical processes of breakdown to proceed. There has never been a randomized, placebo-controlled study to determine the safety of injecting either mercury or aluminium adjuvants into human infants or pregnant women. [39; 1c]. (Which sane mother, informed about the hazards of mercury or aluminium, would offer her unborn child for such trials i.e. experimentation?) The Institute of Medicine in the US has explicitly acknowledged that thimerosal, the mercury containing preservative in vaccines, is a "known neurotoxin"; that some of the mercury from thimerosal exposure "accumulates in the brain"; and that "heavy metals, including thimerosal, can injure the nervous system." Furthermore, the Food and Drug Administration also acknowledged in the peer-reviewed medical literature that "similar toxicological profiles between ethylmercury and methylmercury suggest that neurotoxicity may also occur at low doses of thimerosal". Furthermore, "no controlled studies have been conducted to examine low-dose thimerosal toxicity in humans". [39]. A 2015 article in the *International Journal of Clinical Chemistry* entitled *Thimerosal: Clinical, Epidemiologic and Biochemical Studies*, found "The culmination of the research that examines the effects of thimerosal in humans indicates that it is a poison at minute levels with a plethora of deleterious consequences, *even at the levels currently administered in vaccines*." (My italics.) [1A p. 87]. Likewise, see the article *Low Dose Thimerosal In Paediatric Vaccines: Adverse Effects in Perspective* (2017). [1A p. 88].

Mercury-containing thimerosal, and ethylmercury derived from thimerosal, harms the body in a wide range of ways. It is a known human carcinogen, mutagen (changing genetic material), immune system and reproductive system disruptor, it damages the kidneys, spleen, bone marrow and central nervous system, adversely affects fertility, causes premature puberty and birth defects. Thimerosal-derived ethylmercury has also been proven to be a mitochondrial toxin in human brain cells. [9; 1A p. 87, 89-91]. Mice and rat studies, plus a study of human tissue, have found that thimerosal causes brain and spinal cord damage in proportion to its content of ethylmercury. It does so mainly by causing inflammation; it causes excessive secretion of inflammatory cytokines such as interleukin-6 which promote inflammation in brain tissue.

Ethylmercury is also a potent anti-oxidant which inhibits oxidative phosphorylation which is the basic aerobic (oxygen) pathway of energy production in the body. This antioxidant effect is centred in the mitochondria, which are the parts of cells where phosphorylation is mainly carried out. The result of this anti-oxidation activity caused by ethylmercury is ultimately shrinkage and disintegration of the cells. Regarding grosser neuro-pathological changes, ethylmercury causes ischemic degeneration of neurons in the hippocampus, cerebellum, and prefrontal cortices of the brain; atrophy of glial cells in the hippocampus and cerebellum of the brain; and degenerative changes in the accompanying blood vessels. [29, chapter 10].

Almost 500 peer-reviewed studies of thimerosal are covered in the book *Thimerosal: Let the Science Speak*, edited by the lawyer and activist Robert F. Kennedy Jr. [32]. Virtually all are saying that thimerosal is a potent neurotoxin and does great damage to the brain and other organs in the body. 240 studies show thimerosal is neurotoxic and causes brain injury, Attention Deficit Disorder (ADD), Attention Deficit Hyperactivity Disorder (ADHD), autism and neurological developmental disorders and delays. 81 studies alone show a link of thimerosal with autism. [1b]. Regarding the latter condition, in 2003 a US Congressional Report was released which considered mercury in vaccines. In part it concluded "Thimerosal used as a preservative in vaccines is likely related to the epidemic of autism. This epidemic in all probability may have been prevented or curtailed had the FDA not been asleep at the switch regarding the lack of safety data regarding injected thimerosal and the sharp rise of infant exposure to this known neurotoxin." The Report also condemned the CDC. Among other things the Report recommended that mercury be eliminated from medicines and stated that "No amount of mercury is appropriate in any childhood vaccine." [1A p. 93]. In fact as far back as 1999 the US Public Health Service and the American Academy of Paediatricians recommended to manufacturers and the CDC to get ethylmercury from thimerosal out of vaccines because it was putting children at risk. [1A p. 455]. (The relationship between mercury and autism is discussed in detail section 3 below.)

One point is worth clarifying. The mercury associated with thimerosal in vaccines is ethylmercury. Some advocates of vaccines assert that this form of mercury is not as dangerous as the normal form of mercury, methylmercury. However, this is simply not true. A recent 2017 study conducted by the CDC, entitled *Alkyl Mercury-Induced Toxicity: Multiple Mechanisms of Action*, concluded among its findings that thimerosal (producing ethylmercury) is extremely toxic at very low exposures and is more dangerous than methylmercury in some studies. For example, ethylmercury is even more destructive to mitochondria in cells than methylmercury. In particular, the study meticulously details identical pathways of toxicity shared by *both* forms of mercury. [1A p. 106, 454-6]. (In addition, many of the studies and reports concluding that mercury in vaccines is unsafe, and discussed in the previous paragraphs of this paper, refer to thimerosal and thus ethylmercury derived from thimerosal.)

According to the CDC between 1999 and 2001 thimerosal was removed or reduced to trace amounts in all childhood vaccines *except* some multi-dose vaccines including some flu vaccines. [lb, 1d]. However, even the trace amounts of thimerosal are up to 600 parts per billion (ppb), or 0.3 micrograms. [1A p. 101]. However, 2 ppb is the safe limit in drinking water and if something has 200 ppb it is considered a toxic hazard. [1A p. 108]. One study shows that thimerosal at 1 ppb or less is toxic to neurons [1b; 1A p. 106]. Some multi-dose flu shots contain 25 micrograms (mcg) or the equivalent of 50,000 parts per billion of mercury! [1d]. The Environmental Protection Agency in the US has set the safe toxicity level of *ingested* methylmercury at mercury at 0.1 microgram per kilogram of body weight. [1A p. 177]. Actually there is no safe level of exposure. [15]. At 25 mcg of mercury the DTP vaccine/shot alone would give a 5 kg baby 49 times above the safe level of mercury, *not ingested*, but shot straight into the bloodstream! It is estimated that less than 1% of ingested mercury is absorbed. Of course what is put directly into the bloodstream is, by definition, 100% absorbed. Remember, it was due to the appalling number of deaths and injuries from the DTP vaccines and the consequent lawsuits that resulted in the pharmaceutical companies getting immunity from prosecution for injuries caused by their vaccines. The GlaxoSmithKline flu vaccine contains mercury levels 100 times above that found in fish. The EPA warns pregnant mothers not to eat fish due to mercury and yet vaccines with 100 times that level are shot straight into the bloodstream of mothers! [1A p. 175, 178]. The lawyer Robert F Kennedy Jr states that uncovered documents from the FDA and CDC showed

that as far back as 1999 both agencies knew that American children were being exposed to levels of mercury far above the safe limit but concealed this truth from the public. [1A p. 17]. While mercury/thimerosal containing vaccines have been progressively banned in first-world countries tragically, unbelievably, they are still being used in developing countries such as India and Africa, primarily by the Bill and Melinda Gates Foundation and the WHO—more about this later. [1A p. 88; 35; 40].

2.8. Aluminium or aluminium compounds are used in many vaccines as an adjuvant, that is, as a substance to enhance the effectiveness of the vaccine to elicit an immune system (antibody) response. Along with mercury, aluminium is probably the most hazardous substance commonly found in vaccines. There are literally thousands of studies on aluminium toxicity and books written on the subject. A PubMed search on August the 9th 2018 revealed 5,262 articles associating toxicity and aluminium. [1A pp. 195-6]. The central nervous system is particularly susceptible to the deleterious effects of aluminium. [1A p. 229]. Thus, the authors of the 2018 study from the *Journal of Surgical Neurology International* and entitled *Immunoexcitotoxicity As the Central Mechanism of Etiopathology and Treatment of Autism Spectrum Disorders: A Possible Role of Fluoride and Aluminium* state, "Many investigations show that Al3+ [i.e. Aluminium]…acts as a hormone disruptor, a neurotoxin, and elicits intense and prolonged activation of brain inflammation." [1A p. 233]. Aluminium causes inflammation of the brain when it, or other metals or foreign substances such as fluoride, excite the release of neurotoxic concentrations of substances, such as pro-inflammatory cytokines, from the microglia of the brain as part of an over-excited immune response. This process is called immunoexcitotoxicity. The authors of the study believe that they provide sufficient evidence to show that immunoexcitotoxicity produced by aluminium from vaccines, probably acting in concert with other neurotoxic substances such as fluoride, leads to inflammation, neurodegeneration and in turn the pathological changes seen in ASD [i.e. Autism Spectrum Disorder]. [1A pp. 231-3]. Other studies such as the *Role of Microglia in Autism: Recent Advances*, published in 2015, reach the same conclusion. [1A pp. 248-9]. One such study concludes that "Activation of microglia is a hallmark of brain pathology." [1A p. 253]. Another mechanism of inflammation is where aluminium, mercury and other metals produce reactive oxygen species, also known as free-radicals, which damage DNA, RNA and proteins. In fact, aluminium in the body produces up to seven times more free-radicals than mercury. The authors of one of the relevant studies here, entitled *Metals, Oxidative Stress and Neurodegenerative Disorders*, conclude that oxidative stress, caused by metals, is the underlying causative factor in neurological disorders. [1A pp. 195, 206, 242]. A third mechanism of inflammation and damage is where aluminium causes autoimmune responses in the body where the immune system attacks tissues in the body. [1A p. 210, 293-5].

Furthermore, both mercury and aluminium are not readily excreted from the body and accumulate in the brain, kidneys, bones and other organs for months or years. [39; 1A pp. 210-220, 226]. Thus even in low doses they can eventually accumulate in neurotoxic concentrations. [1A p. 233]. World-leading researchers Dr Lucia Tomljenovic and Christopher Shaw have found that aluminium can stay within the body *for decades* where it can cause prolonged hyper-activation of the immune system and chronic inflammation. One reason for this the long retention is the affinity or attraction of aluminium nanoparticles (minute engineered particles) found in vaccines to bind tightly with the vaccine antigen (the attenuated or modified virus or bacterium) and other toxic vaccine constituents. [29, chapter 5; 1A p. 213]. The nanoparticles are used because they excite a stronger antibody response. [1A p. 236]. Also, the aluminium salts in vaccines, and the complexes in the body they form, have been shown to readily cross the blood-brain barrier which protects the brain from toxic substances passing into it from the blood. [29, chapters 5 and 10]. A 2018 study, entitled *Size-Dependent Neurotoxicity of Aluminium Oxide Particles: A Comparison Between Nano- and Micrometer Size On the Basis of Mitochondrial Damage*, found that nanoparticle aluminium caused the most oxidative stress or production of free radicals and was most destructive on the brain probably due to greater penetration into the brain. [1A p. 235]. There are now a number of studies which show that oxidative stress damages the mitochondria in the cells, that approximately half of autistic children have mitochondrial dysfunction, and, that aluminium is the cause of this damage to the mitochondria. [1A p. 407ff].

Aluminium damages all systems or levels of the central nervous system. [1A p. 210]. Dr Lucia Tomljenovic and Christopher Shaw have demonstrated that the brain and central nervous bear the brunt of aluminium

toxicity which can cause a variety of neuropathic states including learning disabilities, memory loss, impaired concentration, speech defects, seizures, confusion, anxiety, repetitive behaviours and insomnia. Other studies have conclusively linked aluminium toxicity to Alzheimer's, other forms of dementia, Parkinson's, ALS, multiple sclerosis, autism and indeed the whole spectrum of brain damage and neurological diseases seen in children. [29, chapter 5; 15; 1A p. 214]. Likewise, a 2013 study entitled *Aluminium in the Central Nervous System: Toxicity in Humans and Animals, Vaccine Adjuvants and Autoimmunity* stated in the abstract "The literature demonstrates clearly negative impacts of aluminium on the nervous system across the age span." Among these negative impacts were Alzheimer's, ALS, autoimmune reactions and autism. With regard to the latter the authors stated "In young children, a highly significant correlation exists between the number of paediatric aluminium-adjuvanted vaccines administered and the rate of autism spectrum disorders." [1A pp. 196-7]. (The topic of autism and vaccines is taken up in the next section.) Professor Christopher Exley, of Keele University, is the world's *leading* researcher in the area of aluminium and health; he and his teams have published over 200 papers in this area over 35 years. His research has shown that the amount of aluminium in vaccines, up to one milligram (see below), is acutely toxic in some individuals. He said that "vaccines that include aluminium adjuvants are not safe products." [34]. In 2017 Exley wrote to the CDC to say that he strongly supported the contention that aluminium may have a role in the aetiology (cause) of Autism Spectrum Disorder and more research is urgently required. [1A p. 225]. Exley's research has *conclusively* shown aluminium to be a cause of dementia. [34]. In fact, there are now a whole series of studies which provide evidence to show that exposure to aluminium causes neurodegeneration leading to dementia and other forms of neurodegenerative disease. A 2017 study entitled *Aluminium in Brain Tissue in Familial Alzheimer's Disease* and which looked at aluminium levels in the brain tissue of people with dementia, the first study of its type, found "extremely high" concentrations of aluminium in the brains. The authors concluded: "Aluminium is neurotoxic and concentrations of aluminium found in these familial AD brains are unlikely to be benign and are indeed highly likely to have contributed to both the onset and the aggressive nature of and ongoing AD in these individuals. These data lend support to the recent conclusion that brain aluminium will contribute towards all forms of AD under certain conditions." [1A p. 317].

Now, according to the Food and Drug Administration (FDA) the amount of aluminium per day, *not given orally*, should not exceed 25 mcg per day. Also, aluminium should not exceed 5 mcg per kilogram of weight per day. [1A p. 197]. *Since aluminium is a known neurotoxin there is no safe level*. Here are the levels of aluminium in a number of vaccines. I will allow you to do most of the mathematics to determine just how much the amount of aluminium in vaccines *vastly* exceeds the safety limits. Here are some examples of aluminium containing vaccines and, for some, the number of doses recommended by the CDC: the Hepatitis B vaccine (at least three doses by 18 months recommended) and Hepatitis A vaccine (two doses by 24 months) each have 250 mcg of aluminium; the DTaP (Diphtheria, Tetanus, acellular Pertussis) vaccine (five doses by six years of age) has 170-625mcg of aluminium; the Pneumococcal vaccine (4 doses by 15 months) has 125mcg; the Hib (Haemophilus influenza) vaccine (4 doses by 18 months) has 225mcg; the Pediarix (DTaP, Hep B, Polio) vaccine has 850mcg; Pentacel (DTaP, Hib, Polio) vaccine has 330mcg; the Meningitis B (Bexsero) vaccine has 500mcg; and the new Gardasil vaccine (three doses by 12 years) contains 500mcg of aluminium. Further, it is common for child check-ups at 2, 4, 6 etc. months to involve as many as 8 vaccinations at any one visit amounting to more than 1000 mcg of aluminium (at a visit). [1A p. 199]. In total the 2018 CDC immunization schedule requires a child to have up to 35 vaccine doses in the first 18 months of life amounting up to 5,825 mcg of aluminium. [1A p. 199]. In 2018 the CDC schedule requires a child to have up to 44 doses of vaccine by the age of 6 years and about 74 doses by the age of 18. [1A p. 241]. At present there are 26 vaccines on the US market that contain aluminium. [1A p. 202]. Currently there are 80 vaccines licenced for use in the US, and, there are 300 or so further vaccines in research and development. [1A p. 684].

At birth 99% of children in the US are given the Hepatitis B vaccine which, as just stated, contains 250mcg of aluminium. The CDC schedule calls for three doses of Hep B by 18 months and for pregnant mothers to have the vaccine. [1A p. 536]. Weighing on average about eight pounds or three and half to four kilograms, this means that with just one dose the newborn baby is given about *eleven times above the safe level of*

aluminium. The kicker here is that the child can only get Hep B if the pregnant mother has it (where it can only be acquired through sexual contact, sharing of needles, or sharing of infected blood.) So why not screen for mothers with positive Hep B and give these children the vaccine rather than all children? [1A p. 536, 695]. Not surprisingly, a 2010 study entitled *Hepatitis B Vaccination of Male Neonates and Autism Diagnosis, NHIS 1997-2002* found that boys vaccinated for Hep B in the first month of life, versus those who were not vaccinated in the first month, had three times the rate of autism. Despite the Hep B vaccination program being in place since 1981 cases of hepatitis B continue to *rise* in the US. [1A pp. 539-42]. The Pediarix (DTaP, Hep B, Polio) vaccine has 850mcg of aluminium and may be given to an infant at 6 weeks. If the child weights 5.5 kg that means he or she gets 34 times more than the safe limit set by the FDA. [1A p. 199]. One more calculation: if a child of 5 kg receives at her two month check-up a possible 1000 mcg of aluminium she gets a dose of aluminium 40 times above the safe level. "A single vaccine, given to a six-pound newborn…[can be] the equivalent of giving an 180-pound adult 30 vaccinations in the same day."—Dr Boyd Haley, toxicologist and retired Professor of Chemistry, University of Kentucky. (My interpolation.) [15; 1A p. 209]. Children are more susceptible to metal and heavy metal exposure than adults, and foetuses and neonates even more so. Thus, what is safe exposure for an adult may not be for a child, and what is toxic will be more so for a child. [1A p. 211]. Further, babies, infants and children, because their kidneys are not yet fully functioning, have less capacity to clear and excrete aluminium and other toxins. [1A p. 328].

Before moving on, one point is worth stressing: not only are vaccines full of toxins, they are injected directly into the body and via this into the bloodstream without the chance of being filtered or neutralised by various protection mechanisms in the body such as the lining of the gut. Any studies which conclude that aluminium or other toxic substances are safe in the amounts found in vaccines *must distinguish* between that substance which is taken in and ingested via the gut and that which is injected directly into body and blood stream. Only 0.25% of aluminium ingested *orally* is absorbed systemically, whereas soluble and injectable aluminium hydroxide, the commonest form found in vaccines, is absorbed into the blood *almost entirely* and more readily accumulates in the brain and other organs. [29, chapter 5; 1A p. 201]. Before moving on, I would like to remind the reader that adjuvants containing 250 mcg of toxic aluminium are commonly used in so-called vaccine safety trials where they are given to members of the so-called control group, but where a control group is supposed to receive an inert or harmless placebo! According to the FDA a placebo is "an inactive pill, liquid or powder that has no treatment value." [1A p. 200].

2.9. Let's look at some more of the toxic substances in vaccines including polysorbate 80, formaldehyde, glyphosate, monosodium glutamate, glutaraldehyde, 2-phenoxyethanol, phenol or carbolic acid, antibiotics and Triton X-100. Polysorbate 80 (or Tween 80) and its close cousin Tween 20 are contained in 18 different vaccines. [1A p. 113]. In pharmacology polysorbate-80, an emulsifier, is also used to assist drugs to pass through the blood brain-barrier, and in doing so enhance the efficacy of the drug in question. Polysorbate 80 does this by attaching to the drugs and by opening up the blood-brain barrier to transport them into the brain. Likewise, in vaccines polysorbate-80 attaches to the toxic products found in them, including aluminium and probably mercury, and enables these toxins to pass from the blood, through the blood-brain barrier, and into the brain. [29; 1A pp. 112-113, 642]. It has been known since at least 1993 that polysorbate-80 causes damage to the ovaries. [1A p. 643]. Animal studies have also shown polysorbate 80 to cause infertility and testicular atrophy. For this reason it is *banned* in Europe. Formaldehyde is a known and potent carcinogen (cancer causing agent). The International Agency for Research on Cancer, the National Academy of Sciences, and the Institute of Medicine all classify formaldehyde as a carcinogen. The FDA states that the amount of formaldehyde in vaccines is safe. However, there are *no* studies to support this assertion, especially with regard to young children and pregnant women. [15; 1b; 1A p. 115-6]. The herbicide glyphosate is also a carcinogen. It opens up the gut lining and the blood-brain barrier thereby allowing toxic substances to gain immediate entry into the blood and brain. Monosodium glutamate is a brain toxin. All of this, and yet there are *no* studies on whether the toxic contents of vaccines enter the brain or *are* safe. [1a, 1b; 29, chapter 10]. Compounding the damage here is the fact that it takes infants *several years* to develop an efficient blood-brain barrier. [29, chapter 10; 1A pp. 89, 113]. Glutaraldehyde is used as a disinfectant or germicide in vaccines. It is a known allergen (a substance evoking an immune response) linked to a variety

of allergic and hypersensitive responses in up to 10% of people. The aromatic hydrocarbon 2-Phenoxyethanol is a preservative and disinfectant used as an alternative to thimerosal (also a preservative). It has been shown to inhibit the glutamate and aspartate receptors in the brain leading to impaired memory and learning capacity, altered sensory processing, ataxia, and other neurological disturbances and neuro-pathological changes. [29, chapter 10]. Phenol or carbolic acid is regarded by the EPA as "an extremely hazardous substance." It is a known mutagen i.e. causes mutations to cells, teratogen i.e. causes birth defects, and it crosses the placental barrier where it is known to be toxic to the foetus. Further, phenol is incompatible with formaldehyde, metals and metal alloys (contained in vaccines). [1A p. 118]. Four antibiotics, neomycin, polmyxin B, gentamicin and kanamycin, are found in flu vaccines which are given to pregnant women, and yet, all of these antibiotics are *contraindicated* for pregnant women or nursing mothers. [1A p. 121]. Triton X-100 is a known endocrine disruptor (so too mercury and aluminium). [1A p. 448]. Again, while the CDC assures the public that these substances are safe in vaccines, it provides no evidence. [29, chapter 10].

2.10. All vaccines contain human and/or animal proteins, cells, DNA and commonly, viruses. Today at least 23 vaccines contain human tissue. [1A p. 183]. This is due to the fact that they are cultured or grown in aborted human foetal tissue, chicken embryos/eggs, monkey or dog renal tissue, monkey brain tissue, mouse brain tissue, insect tissue, etc. When the vaccine which is either a live (albeit attenuated) or dead virus or bacterium is taken, for further preparation, from the human or animal tissue in which it is cultured, then human and animal proteins, DNA, cells, bacteria and viruses more or less come with it. But why don't they filter out the foreign viruses? Vaccines *cannot* be generally filtered for viruses because this would filter out the vaccine itself which is in most cases an attenuated and modified virus. Thus, vaccines are, in the words of the industry, only 'minimally purified'. [5; 29, chapter 10]. Regarding vaccines being grown in and containing aborted *human* foetal tissue, we have Dr Stanley Plotkin, a key figure in the production of new vaccines, testifying on video (YouTube), in court, that this is indeed the case. Also, the article *Development of Vaccines from Aborted Babies* (2011) by Jessica Farnsworth M.D. provides a history of using aborted foetal tissue in vaccines. [1A p.112]. Examples of vaccines cultured in aborted human foetal tissue include some polio vaccines, adenovirus vaccines, rubella vaccines, and Hepatitis A and measles vaccines. [41]. Human DNA is also put into some vaccines as an adjuvant. [1A p. 129].

The FDA said in 2005 that it does not know what effects animal DNA (contained in vaccines) may have on the body—no studies have been done. [1a; 1b; 1A p.187]. However, as Dr Richard Moskowitz states, "nobody has ever plausibly explained how mainlining foreign cells, DNA and protein antigens directly into the bloodstream [via vaccines] could fail to elicit a harvest of immune and autoimmune responses…" (My interpolation.] [29, p. 173]. Indeed DNA is known to be a powerful immune stimulant. [1A p. 188]. Dr Theresa Deisher, with a distinguished career in molecular and cellular physiology, states that she and her team have found that human foetal DNA fragments from aborted babies used to culture several vaccines are triggering autoimmune responses in susceptible individuals. [1A p. 186]. Despite the overall lack of testing for the adverse effects of human and animal cells, DNA, viruses, etc. contained in vaccines, some predictably atrocious outcomes have been discovered. It has been conclusively established through research by Dr Judy Mikovits—a scientist who worked for the National Cancer Institute for almost three decades—and Frank Rosetti, that vaccines such as the MMR contain retroviruses which are causative of various cancers and neurological disorders. The government attempted but failed to suppress the damning findings of these scientists. [1f]. A notable example of an animal virus in vaccines was the SV40 virus found in the polio vaccine. SV40 came from rhesus monkeys. It have been reliably shown to be causative of cancerous tumours. [29, chapter 10]. Since the 1990s some 60 independent labs from around the world have discovered the SV40 virus (or DNA) in brain, blood and bone cancers. It was discovered that 40-60% of brain tumours in children contain this virus, and was found in about 50% of Non-Hodgkin's Lymphoma cases. Likewise 45% of some kidney diseases have this virus in the tissues. At least another 26 viruses from monkeys were later found in the various polio vaccines. In 2004 the Australia newspaper the *Sydney Morning Herald* reported that in 1962 the Australian government agency, the Commonwealth Serum Laboratories, *knowingly* released 700,000 doses of polio vaccine contaminated with SV40. [33]. During an interview with the long-time medical researcher Jon Rappoport, a vaccine industry insider, who understandably wished to remain

anonymous, provided some examples of the foreign viruses which he and his colleagues found in the vaccines which they were producing: various chicken viruses in the Rimavex measles vaccine; acanthamoeba or the so called 'brain-eating' amoeba and simian cytomegalovirus in the polio vaccine; simian foamy virus in the rotavirus vaccine; bird cancer viruses and pestvirus in the MMR vaccine; and duck, dog and rabbit viruses in the flu vaccines. [41]. The possible role of human DNA in vaccines causing autism is discussed in section 3 of this paper.

2.11. Overall, *independent* testing of the contents of vaccines has been lacking. However, On December 13, 2018, Corvelva, an *independent* scientific research group, announced it had received €10,000 (US $11,350) from the Italian National Order of Biologists with plans to use the money to test the contents of every vaccine currently on the market. The first vaccine which they thoroughly tested was Infanrix Hexa, a six-in-one vaccine manufactured by GlaxoSmithKline (GSK) that is *supposed* to contain the following antigens (or substances to evoke immune system responses): tetanus, diphtheria and pertussis toxoids; inactivated poliomyelitis viral strains 1-2-3; and hepatitis B surface antigen. Shockingly, Corvelva found *none* of these antigens in the vaccine. This means that no antibodies—produced by the immune system in response—to the intended antigens will be created. This is to say that the supposed vaccine is *useless*. In addition to no vaccine antigens, they found the following: 1) traces of 65 chemical cross-contaminants from other manufacturing lines 2) chemical toxins 3) *unrecognizable* macromolecules 4) various free bacterial peptides that are potential allergens and are capable of inducing autoimmune reactions. [28; 1A p. 136]. A document from GlaxoSmithKline subpoenaed by an Italian court, and then leaked, showed that within a two year period a total of 36 infants died after receiving the 6-in-1 Infanrix Hexa vaccine. This 1,271 page document detailed 1,742 reports of adverse reactions to the vaccine including 503 serious adverse reactions and the 36 deaths. The document showed that the number of deaths in the first 10 days, 97%, was vastly greater than in the next 10 days, 3%, thereby ruling out coincidence between the deaths and the administration of the vaccine. [29, chapter 7]. Since Infanrix Hexa testing, Corvella have moved on to test other vaccines such as Gardasil 9 with similar shocking results. Dr Alan Palmer states "That on the one hand the news is shocking but on the other it isn't. With zero accountability or oversight for the production, quality or damage caused by the vaccines, the manufacturers have no motivation to produce safer or more effective products. They are making HUGE amounts of money with no liability." [1A p. 139].

2.12. Sudden Infant Death Syndrome or SIDS is a situation where infants die suddenly without a known, or apparently known, cause. SIDS is defined in advance as a death without a known cause, and therefore, is *not* counted as an adverse reaction to a vaccine no matter how soon it comes after vaccination. [29, p. 131]. However, the evidence shows that vaccines certainly are responsible for many SIDS deaths. In the 1982 study by Dr William Torch, *DPT Immunization: A Potential Cause of Sudden Infant Death Syndrome,* and found in the journal *Neurology,* it was shown that 61% of SIDS deaths occurred within 14 days of the DPT vaccination and 76% within 21 days. In Japan, between 1970 and 1974 there were 57 cases of brain damage and 37 of sudden death following the DPT vaccination. Accordingly, the Japanese government postponed all DPT shots until after two years of age. *As a result all SIDS disappeared.* In 1985 an Australia study into SIDS was conducted by Dr Viera Scheibner, a senior government research scientist. The study tracked the breathing of infants by using a simple monitoring device invented for the purpose. It found that when the children were stressed their breathing patterns became shallow and sometimes stopped. An unintended and serendipitous finding of the study was that the DPT vaccination was shown to cause babies a lot of stress in the form of major bouts of shallow breathing and apnoea for at least 45-60 days after the vaccination. It was also learned that parents involved in the study who had lost a previous child to SIDS most commonly did so after it had the DPT vaccination. Unfortunately, and unbelievably, there was no follow up study. [29 chapter 7]. A 2015 study in the journal *Paediatrics* and entitled *Adverse Events Following Haemophilus Influenzae Type B Vaccines in the Vaccine Adverse Event Reporting System, 1990-2013,* found of the 896 reports of death following Hib vaccines 384 or 51%—which had autopsy reports—were reported as SIDS deaths. A number of studies have shown an increase in SIDS deaths following 5 or 6-in-1 vaccines. A leaked document from GlaxoKlineSmith revealed that for the period of 2009-2012 the company had received reports of 503 serious adverse reactions and 36 deaths, mainly sudden, following the 6-in-1 Infanrix Hexa vaccine. Because only 1% to 10% of adverse reactions to vaccines are reported these figures can by

multiplied by ten or so. [1A p. 354]. A 2006 German study in the journal *Vaccine* and entitled *Unexplained Cases of Sudden Infant Death Shortly After Hexavalent Vaccination* found, in their small sample population, an increase from one to six SIDS deaths from 2001-2004, thereby indicating a 1,300% increase in SIDS following the hexavalent vaccine. Autopsies of six of the deceased infants revealed a possible cause of death: up-regulation of immune activity in the brain leading to swelling in the brain stem, in particular the pons, which regulates breathing, cardiac functions and consciousness. Even more alarming is a 2005 study from *the European Journal of Paediatrics* entitled *Sudden and Unexpected Deaths After the Administration of Hexavalent Vaccines (Diphtheria, Tetanus, Pertussis, Polymyelitis, Hepatitis B, Haemophilius Influenzae): Is There A Signal?* This study found that the hexavalent vaccine given in the second year of life caused mortality rates on the first day after vaccination that were 31.3 times greater than normal national rates; and 23.5 times greater on the second day! To answer the question posed by the study, 'Yes, I 'think' we have a signal!' [1A pp. 423-430]. The package-insert information for the vaccine for whooping cough produced by Pediarix lists SIDS as a possible 'side effect'. The propensity for vaccines to cause or provoke apnoea, bradycardia, cyanosis, oxygen de-saturation, and other life threatening complications in prematurely born babies has been confirmed by numerous studies. [29, chapter 9, pp. 154-9].

2.13. The study entitled *Pilot Comparative Study On the Health of Vaccinated and Unvaccinated 6- to 12-year old U.S. Children* by Anthony Mawson et al. from Jackson State University, and published in the *Journal of Translational Sciences*, is one of the very few studies comparing vaccinated and ***fully*** unvaccinated people. The study compared 261 unvaccinated and home-schooled children with 405 fully or partially vaccinated children from four states in the US. Among the findings were that vaccinated children were: 1) over four times more likely to be diagnosed with Autism Spectrum Disorder (ASD) 2) 30-fold more likely to be diagnosed with allergic rhinitis (hay fever) 3) five-fold more likely to be diagnosed with a learning disability 4) nearly three and half times more likely to be diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) 5) nearly six times more likely to be diagnosed with pneumonia (despite being 'vaccinated' against it) 6) 3.8 times more likely to be diagnosed with a middle ear infection 7) seven times more likely to have had ear surgery to insert ear drainage tubes 8) and nearly two and a half times more likely to be diagnosed with chronic illness. Both vaccinated and unvaccinated groups had about the same rate of infection from measles, mumps, Hepatitis A and B, influenza, rotavirus, meningitis (viral and bacterial). [1A pp. 668-73].

Many other studies have found increased vaccinations correlate with increased worse health outcomes for children. One such study is entitled *Relative Trends in Hospitalisations and Mortality Among Infants by the Number of Vaccine Doses and Age, Based on the VAERS Reporting System, 1990-2010* and found in the journal *Human Experimental Toxicology*. The researchers found that of 39,000 adverse events reported to VAERS between 1990 and 2010 infants receiving five to eight vaccine doses *simultaneously* were significantly more likely to be hospitalised afterwards than those receiving two to four doses, and that infants receiving five to eight vaccine doses *simultaneously* were significantly more likely to die afterwards than those receiving one to four doses. In a another study which analysed the health records of nearly 325,000 American children under two years of age, researchers found the under-vaccinated children were significantly less likely to require outpatient visits, ER visits, and hospitalisations than those who were up-to-date with their CDC schedule of vaccinations. Those who were vaccinated the least showed the greatest reductions. This 2013 study is entitled *A Population-Based Cohort Study of Under-Vaccination in 8 Managed Care Organisations Across the United States*, and found in the journal *JAMA Paediatrics*. [29, chapter 9]. Likewise, a host of epidemiological studies show that asthma, allergies, seizures, epilepsy, diabetes type 1, and haemorrhagic diseases all show significantly increased rates in vaccinated versus unvaccinated children. [29, Chapter 9, pp. 154-9].

2.14. Autoimmune diseases and conditions are where the immune system attacks the body's own tissues. Autoimmune diseases have reached epidemic proportions in the US. The American Autoimmune Related Diseases Association estimates that around 50 million or one in six Americans have an autoimmune disease. 80 to 100 different autoimmune diseases have been identified. [1A p. 292]. The numbers of people with autoimmune disease have been rising rapidly, showing that they are of environmental, not genetic, origin. In

the last three decades the average number of cases per year has increased by 19.1%. [1A p. 292]. A huge variety of autoimmune diseases and conditions are caused by, or may be causally linked to, vaccines, either as stated by the manufacturers themselves or by the scientific literature. For example, the scientific literature had linked at least 18 autoimmune diseases or conditions to the hepatitis B vaccine: multiple sclerosis, pericarditis; demyelinating polyneuropathy, cerebellar ataxia, bullous pemphigoid, lichen planus, dermatomyositis, Reiter's Syndrome, uveitis, retinal vein thrombosis, glomerulonephritis, demyelinating CNS disease, asceptic meningitis, toxic granuloma, erythema multiforme, nephritic syndrome, cryoglobulinemia, rheumatoid arthritis and thyroiditis. One study showed that you are five times more likely to get multiple sclerosis after the Hep B vaccine than other vaccines. [1A p. 421]. Other vaccines shown to be trailing a host of autoimmune disease and disorders behind them are the DTaP, MMR, HPV, pneumococcal, varicella, rotavirus and flu vaccines. [29, chapter 5; 1A p. 299, 420-1]. The Vaccine Court in the US has paid out compensation for autoimmune diseases caused by vaccines. [1A p. 372].

Why is the immune system attacking the body's own tissues as part of autoimmune diseases and conditions? The answer is obvious: something has modified or been added to the body's tissue so that it is now recognised as alien and harmful to the body by the immune system. Quite clearly the administration of various vaccines can bring about this pathological change in the body's tissue which the immune system then recognises as foreign and attacks it. Basically, the situation is that the toxic substances in vaccines find their way into the body's tissues where these tissues impregnated with the toxic substances are now recognised as foreign by the immune system which thereby attacks the tissues, an autoimmune response, resulting in an autoimmune disease. Professor Yehuda Shoenfeld is perhaps the world's *foremost* authority on autoimmune phenomena. He states that people have genetic predispositions to autoimmune diseases typically requiring some environmental trigger to evolve into a full-blown disease; that the viruses, bacteria, adjuvants and other toxic substances in vaccines can and do play this role; and that this has been evidenced by both animal and human studies. He states, "What is obvious is that the typical vaccine contains all the necessary biochemical components to induce autoimmune manifestations." [29, p. 77]. Focusing on aluminium he states: "Experimental research shows clearly that aluminium adjuvants have a potential for inducing serious immunological disorders in humans, and for autoimmunity in particular, with inflammation of the brain, long-term neurological complications, and thus profound consequences for health." [29, p. 226]. Likewise, we find the following 2014 study in the *Journal of Molecular Genetics* entitled *Review of Vaccine Induced Immune Overload and the Resulting Epidemics of Type 1 Diabetes and Metabolic Syndrome, Emphasis On Explaining the Recent Accelerations in the Risk of Prediabetes and other Immune Mediated Diseases*, where the authors state in the abstract: "There has been an epidemic of inflammatory diseases that has paralleled the epidemic of iatrogenic [i.e. medical intervention induced] immune stimulation with vaccines. Extensive evidence links vaccine induced immune over load with the epidemic of type 1 diabetes." (My interpolation.) Later in the article they state that "The increase in immunization has been followed by a huge increase in inflammation associated disorders. Diseases like type 1 diabetes, autism, asthma, food allergies, many autoimmune diseases, obesity, type 2 diabetes, NASH and metabolic syndrome have increased many fold in children." [1A pp. 315-6].

Closely related to autoimmune diseases are food allergies. They occur when there is hypersensitivity of the body's tissues to an antigen, in this case a food substance. Restated, there is an immune response to food particles in the tissues where these food particles are, for some reason, recognised as foreign. The symptoms from this hypersensitivity or adverse reaction to the food particles vary and include anaphylaxis which can be life-threatening. Vaccines definitely cause food allergies. How do we know this? Scientists who study food allergies *induce* them in laboratory animals such as rats by injecting them with a combination of a food protein and an aluminium adjuvant. This is precisely what is found in many vaccines: an aluminium adjuvant plus various food proteins or other substances. [45]. Quite clearly, the aluminium adjuvant is converting the food particle in some way, or locating the food particle in the tissues in some way, so that it is now recognised as foreign by the immune system and inducing an immune reaction.

2.15. Since 1989 there has been a steep increase in childhood illnesses and disabilities in the US, particularly neurological disorders such as seizures, autism, Attention Deficit Disorder (ADD), Attention Deficit

Hyperactive Disorder (ADHD), speech disorders, tics, Tourette's Syndrome, SIDS, food allergies, narcolepsy and asthma. This correlates with the increasing regime of vaccinations which also rose sharply from the same time. There is now science to support that all of these conditions are caused or exacerbated by the contents of vaccinations such as mercury and aluminium. [1a, 1b]. Various neuropsychiatric conditions have now been shown to be positively correlated with, hence we may add, probably caused by, vaccinations. In 2017 a study entitled *Temporal Association of Certain Neuropsychiatric Disorders Following Vaccination of Children and Adolescents: Pilot Case-Controlled Study* looked at the incidence of obsessive compulsive disorder (OCD), anorexia nervosa (AN), anxiety disorder, tic disorder, attention-deficit hyperactivity disorder, major depression and bipolar disorder of 6-15 year olds in the 12 months following several types (only) of vaccination. The study, conducted by researchers from a number of leading U.S. universities, found that all of the conditions bar the last two were higher in the children who had vaccinations than those who did not. In particular they found that receipt of a vaccine in the previous six months was highest in AN (21.4%), OCD (15.9%) and Tic (15.8%). Dr Ian Palmer, commenting on the study, decisively asks what the outcome would have been if one, the other/remaining vaccines in the CDC's schedule has *also* been correlated with these conditions (for the study only looked at some types of vaccines) and two, if the children were followed for a longer period than twelve months. [1A pp. 310-12]. The rates of seizures has also been shown to be 3.5 times higher in vaccinated versus unvaccinated children. [1A p. 313].

2.16. A final and important point about the two neurotoxins mercury and aluminium should be made: aluminium and mercury *together* potentiate or enhance their dangerous property of killing nerve cells. [1b]. Mercury and aluminium are highly reactive together and studies show that they work together to cause *more* brain damage than apart—that is, they work synergistically to cause more damage. [1A pp. 237-8]. After discussing much of the research into the mechanisms by which thimerosal and aluminium adversely affect the brain and body, with particular reference to causing autoimmune phenomena, Dr Richard Moskowitz summarises his findings: "[T]he [mercury-containing] preservative thimerosal and various aluminium adjuvants have been shown to damage brain tissue especially, as well as other organs and tissues in every other part of the body, by essentially the *same mechanism*, namely, hypersecretion of interleukins (inflammatory cytokines) and the excitatory neurotransmitters glutamate and aspartate, which promote autoimmune inflammation and infiltration by lymphocytes and macrophages, interrupt aerobic energy production in the mitochondria, and ultimately can result in brain damage, whether in the form of autism, encephalopathy, or demyelinating and degenerative diseases." [29, p. 176]. (My italics.) In another summarizing statement he states: "We have seen that autoimmune phenomena, including proliferation of inflammatory cytokines, and excitatory neurotransmitters, blocking oxidative phosphorylation in the mitochondria, and circulating auto-antibodies in the blood and brain tissue, keep popping up in every kind of adverse reaction to vaccines, and to the thimerosal and aluminium adjuvants themselves…" [29, p. 166]. In short Moskowitz is saying, in accord with what has previously been stated in this section, that mercury-containing thimerosal and aluminium used (as an adjuvant) in vaccines are using the same or similar mechanisms (or pathological processes) to collectively produce the various and often the same diseases and types of degeneration in the body. In short, these fundamental and interrelated mechanisms are 1) inflammation of the brain and nervous system caused, in particular, by mercury and aluminium provoking an over-excited immune response in the brain releasing toxic concentrations of bio-chemicals—a process now called immunoexcitotoxicity 2) the blocking of the oxidative pathway producing energy in the mitochondria—the main energy producing centres of the cells—leading to their malfunction and death 3) the production of auto-antibodies i.e. antibodies which attack the body's own tissues. 4) oxidative stress or the over-production of free radicals i.e. oxygen containing molecules which have lost one or more electrons and which are consequently highly reactive with and damaging to other bio-molecules such as DNA or RNA.

2.17. Next, with regard to the damage done by vaccines, we must take seriously the thousands upon thousands of testimonies of parents saying that they had a perfectly normal child prior to vaccination and then their child developed symptoms, illnesses and disabilities after vaccination, some acute, some progressive, and some upon re-exposure to a vaccine. Many of these testimonies, including before and after profiles of children recorded in home movies, can be accessed on YouTube. In 2011 National Public Radio in the U. conducted a national survey of 3,000 parents regarding their attitudes to vaccines. It found that just

over one quarter of parents were concerned about the safety or efficacy of vaccines; and almost 50% were concerned about side-effects and long-term health effects. [1A p. 79]. A 2017 study from the *Journal of International Research* and entitled the *Role of Oxidative Stress, Inflammation and Acetaminophen Exposure from Birth to Early Childhood in the Induction of Autism* found that "At present, half of all parents of children with autism suspect vaccines as an underlying cause of their children's condition." [1A p. 287].

But maybe we should leave the last word to doctors and nurses. In their study entitled *Vaccination Practices among Physicians and Their Children*, and published in the *Open Journal of Paediatrics* in 2012, Martin, M., and Badalyan, V. found that 10% of general paediatricians and 21% of a sub-specialist paediatricians admitted they would *not* follow the CDC mandates in vaccinating *their* children, that they planned to postpone the MMR vaccine to after 18 months, and to reject rotavirus, meningococcal and hepatitis A vaccines altogether. (I wonder if they were advising parents to do the same?) Another study of Swiss paediatricians discovered that 32% shied away from the Hep B vaccines for their children, 29% from the Hib, while only 13% gave their kids the flu shot, 5% the pneumococcal vaccine, and 3% the varicella or chicken pox vaccine. A 2008 CDC study found that 11% of paediatricians and family physicians no longer urge parents to give their children all the recommended vaccines. A 2009 survey of 1,017American registered nurses found that 41% of the respondents declined their flu shot citing adverse reactions and lack of effectiveness. In 2014, a group of 22,000 nurses spread over the US, calling itself *Nurses Against Mandatory Vaccines*, protested against hospitals requiring flu shots for employees. [29 chapters 4 and 14].

3. Vaccines and Autism

3.1. The first recorded case of autism in the US was around 1931. It seems to have been unheard of prior to this time. In 1943 the psychiatrist Leo Kanner identified the autism syndrome (constellation of conditions) for the first time. The rate of autism continued to be around 1 in 10,000 until around 1990 and since then has exploded exponentially in the US and other countries such as Australia and continues to do so. The increase in autism according to the CDC was 1 in 2000 in 1983, 1 in 88 in 2008 and 1 in 45 in 2014. This is a 40 fold increase between 1983 and 2014. [29, chapter 6]. In 2016 two independent studies, one in the journal *Paediatrics* and the other in the *Journal of the American Medical Association Paediatrics* put the autism rate at 1 in 40. [1A p. 347]. Today, the autism rate in the US is 1 in 34. [44; 1A p. 347]. In 2017 more than 3.5 million Americans live with an autism spectrum disorder; this includes approximately 1,725,297 children in the 3-17 year old age group. [1A p. 141, 147]. Some estimates are that by 2032 1 in 2 boys in the US will have autism spectrum disorder. [1A p. 148]. Australia has experienced a similar explosion in autism and the current rate is about 1 in 100 or higher. Further, according to the CDC, in 2008 about 15% of children, or one in six, between the ages of 3 and 17 years had one or more developmental disorders. [1A p. 149]. Goodness knows what it is now. This rapid explosion in autism could not possibly be genetically caused, for increases from genetic causes take a very long time to develop; instead, the increase is *environmentally* caused. Nor could such an explosion be due to somewhat improved screening since 1990. It is a fallacious argument to say that children were being largely missed in screening prior to 1990—screening or no screening you cannot miss noticing most children with autism. Further, the doubling in rate of autism between 2008 and 2014 could not have possibly been to due to improved screening which would have already been well established by, and more or less the same as what it was in, 2008.

3.2. The massive explosion in autism in the US since 1990 has coincided with a steep increase in the number of vaccines given to children since this time. The *Mercury in Medicine Report* released in 2003 by a Congressional Subcommittee stated that in the late 80s children were exposed to dramatically increased mercury in vaccines and "It was during this period of increased exposure to thimerosal and its ethylmercury component that the growing wave of late-onset autism became apparent." The committee went on to note that after 1986 children in their first six months went from getting a dose of 25 mcg of mercury a day and a cumulative does of 75 mcg to getting 62.5 mcg in a day and 187.5 mcg in the first six months. [1A p. 176]. In particular, after the introduction of the MMR vaccine in the UK we find the same dramatic increase in autism, and at the same rate, as was found in the US population after the introduction of the MMR vaccine. Similarly, a 2011 article published in the *Journal of Toxicology and Environmental Health*, and entitled *A*

Positive Association Found Between Autism Prevalence and Childhood Vaccination Uptake Across the US Population concluded that "A positive and statistically significant relationship was found: the higher the proportion of children receiving recommended vaccinations, the higher was the prevalence of AUT [autism] or SLI [speech or language impairment]. A 1% increase in vaccination was associated with an additional 680 children having AUT or SLI." (My interpolations.) [1A p. 194].

3.3. It has been long *known* in the US that vaccines can and do cause autism. In particular the Centre for Disease Control (CDC) in the US verified the causative link between thimerosal in vaccines and autism from 1999 onwards but *suppressed* these findings. The cover-up was exposed in 2014 by a whistle-blower from the CDC by the name of Dr William Thompson. This story begins however with research conducted by the gastroenterologist Dr Andrew Wakefield that prompted the CDC to commence its research into the link between thimerosal and autism. In 1995 Wakefield published a study in the prestigious medical journal *Lancet* which showed that children vaccinated with the measles, mumps and rubella vaccine (MMR) were two times more likely to develop ulcerative colitis and three times more likely to develop an inflammatory autoimmune condition called Crohn's Disease. There was a follow-up study by Wakefield on a small group of eight children all of whom had autism. There was a possible link then between the MMR vaccine and autism. The study was later retracted by the editor of *Lancet*. The retraction was *not* due to flaws in the research which was impeccable, which has never been refuted, and where the UK courts upheld that Wakefield's research protocols were properly observed. The study was retracted because Wakefield had failed to disclose a conflict of interest. Wakefield's latter study concerning the autism link has been replicated and validated by no less than 28 other studies from around the world. In light of his findings, Wakefield suggested that *separate* vaccines, and not the three-in-one MMR vaccine, might be safer for children. Alas, the separate vaccines were immediately taken off the market by the vaccine manufacturers! Later the causative relationship between MMR vaccine and autism was proven (see below). Other diseases, conditions and consequences which have been shown to be caused by the MMR vaccine include: death, Guillain-Barre syndrome, acute disseminated encephalomyelitis, encephalopathy (brain damage), epilepsy, inflammatory bowel disease, diabetes, arthritis, serious blood disorders, sensory impairment, a wide variety of autoimmune diseases, severe allergic reactions, and atypical measles. [29, chapters 6 and 11; 1c, 1f].

In response to the controversy which erupted from Wakefield's findings, in 1999 the CDC commissioned an in-house researcher, Thomas Verstraeten, to perform a series of vaccinated versus unvaccinated studies using the CDC's giant database called the Vaccine Safety Datalink (VSD). *The results showed a positive correlation between thimerosal, or mercury, containing vaccines and autism*. In particular, one study showed that children given the Hepatitis B vaccine in the first 30 days after birth has a massive 1,135% greater chance of an autism diagnosis five years later in life than children who were not so vaccinated. [35]. Since then other studies comparing vaccinated and unvaccinated or partially groups have been conducted. They show significant correlations between vaccination and various disabilities and diseases. The results of many of these studies are summarised in the articles *Fully Vaccinated vs. Unvaccinated—Parts 1, 2 and 3* by Robert F. Kennedy Jr. These and further such articles are available on Kennedy's website called Childrens' Health Defense. [30]. What follows are some of the results of these studies. Please bear in mind that the results are from a *number* of different studies and so the results, while uniformly damning, are not always identical. The citations for the studies are given in the articles by Kennedy. From part three of his article we have the following results: thimerosal containing Hepatitis B vaccines, when compared to children vaccinated without thimerosal, increased the incidence of ADHD by 1.9x/times; the highest levels of thimerosal exposure from vaccines increased autism by 11.35 x/times, sleep disorders by 4.6x, ADD by 3.66x, speech and language disorders by 1.95x, and where risk increases with exposure (this was one of the Verstraeten studies of 1999); two H1N1 vaccines prior to pregnancy increase miscarriage by 7.7x. From part two of the Kennedy article: the Hep B vaccine increased autism by 7.6x, sleep disorder by 5x, speech disorder by 2.1x, and neurodevelopmental disorders by 1.8x (also a Verstraeten study); hepatitis B vaccines increase risk for special education by 8.63x; hepatitis B vaccines in male newborns increased autism by 3x; the DTP vaccine increased mortality by 10x in girls; vaccination of premies (premature babies) increased the chance of neurodevelopmental disorders by 6x; vaccination (generally) increases autism by 4.2x, risk of allergic rhinitis by 30x, allergy by 3.1x, ADHD by 4.2x, eczema by 2.9x, learning disability by 5.2x, and

neurodevelopmental disorder by 3.7x. (This is the 2017 study by Anthony Mawson et al. discussed in section 2.13.) From part three of the Kennedy article: the thimerosal containing hepatitis B series increases autism by 3.39x; the HPV vaccine increases asthma by 8x; the MMR vaccine increases the risk of Crohn's by 3.10x and ulcerative colitis by 2.53x (this is the 1995 Wakefield study). In particular, we should note that a 2009 study of newborn male infants receiving the hepatitis B vaccine containing thimerosal within the first month of life, demonstrated triple the incidence of autism when compared to unvaccinated controls. This study is Gallager, C. et al, *Hepatitis B Vaccination of Males Neonates and Autism* in the *Annals of Epidemiology*. [29, Chapter 6]. There are no studies showing that vaccinated children are healthier than vaccinated children. [35].

To complete this section the reader is referred to the free e-book entitled *Truth Will Prevail: 1,2000 Studies That Refute Vaccines* by Dr Alan Palmer. In the section entitled *Scientific Evidence Showing A Causal Relationship Between Mercury and Autism* he begins by covering 15 peer-reviewed studies which conclusively show that mercury in vaccines causes autism. [1A p. 159ff]. For example in the study entitled *A Comparative Evaluation of the Effects of MMR Immunization and Mercury Doses From Thimerosal-Containing Childhood Vaccines On the Population Prevalence of Autism* (2004) the authors concluded "epidemiological analyses showed that there was an increased risk for serious neurological disorders including autism, permanent brain damage, ataxia and mental retardation following paediatric MMR immunization." [1A p. 164]. Likewise in the study entitled *A Two-Phase Study Evaluating the Relationship Between Thimerosal-Containing Vaccine Administration and the Risk for An Autism Spectrum Disorder Diagnosis in the United States* (2013), from the *Journal Translational Neurodegeneration*, it was concluded that "In conclusion, the overwhelming preponderance of evidence favours the conclusion that Hg [i.e. mercury] exposure is capable of causing some ASDs [Autism Spectrum Disorders]." (My interpolations.). Further, "one can compute a 41% increased relative frequency of autism diagnosis in the vaccinated versus unvaccinated population in the age range." Further still, "The synergistic and cumulative effects of multiple vaccines would likely lead to nonlinear enhancements of adverse events" [1A p. 165]. Likewise a 2016 review of 91 studies examining the relationship between autism and mercury, *The Relationship Between Mercury and Autism: A Comprehensive Review and Discussion*, found that 74% of the studies supported a link between mercury exposure and ASD. Dr Palmer proceeds to give a link to a further 130 studies linking vaccines to neurological and autoimmune issues common to autism. [1A p. 173].

3.4. What was the response by the CDC to the damning findings of the Verstraeten studies which they had commissioned? According to Robert Kennedy Jr, the world's largest vaccine maker GlaxoSmithKline whisked Verstraeten off to Brussels and the CDC handed over his raw data to his CDC boss, Frank DeStefano, and another researcher, Robert Davis. These two men then tortured the data for four years to bury the autism signal before publishing—in the November issue of *Paediatrics*—a sanitized version purporting to exculpate or free from blame the vaccine. The study, which had Verstraeten's name attached, was called *Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Database* in the journal *Paediatrics*. The CDC then cut off all public access to their huge VSD database which Verstraeten had used for his studies, and to this day aggressively blocks any attempts by researchers to study health outcomes in vaccinated versus unvaccinated populations using the VSD database. [30; 35; 1A p. 97]. Nothing to hide then?

The next or simultaneous move of the CDC was the now infamous Simpsonwood Conference. In June of 2000 there was a meeting at Simpsonwood, Georgia, between members of the CDC, World Health Organisation, Food and Drug Administration, Institute of Medicine, and 75 representatives from vaccine manufacturers to discuss the findings of the Verstraeten studies. Transcripts of the meeting, obtained through freedom of information, include the following statement from Dr Weil, of the American Academy of Paediatrics, about the Verstraeten studies: "The number of dose-related relationships between mercury and autism are linear and statistically significant. You can play with this all you want. But they are linear and they are statistically significant." The transcripts of the meeting also include the statement: "it is impossible to massage this data to make the signal go away and no denying there is a connection between autism and thimerosal in the vaccines." The transcripts also showed that the director/president of the

Institute of Medicine said that his recently born grandson was *not* getting vaccinated, but, also that they must suppress the information from the general public. At the same meeting they recommended giving the flu shot to pregnant women! [1b]. Again, the ethical bankruptcy of the vaccine industry was revealed.

Emails among CDC officials, obtained under freedom of information, and also transcripts from the Simpsonwood conference, show officials plotting to create phony studies to hide the vaccine-autism link. Subsequently the CDC used or hired various researchers to create a series of fraudulent studies. [30]. First, we have Verstraeten himself. The most commonly cited article in support of the conclusion that thimerosal does not cause autism is a 2003 study by Vaerstraten, or at least has his name on it—for by this time he was working at GlaxoKlineSmith—called *Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Database* in the journal *Paediatrics*. Later the director of the CDC Julie Gerberding admitted before the House Appropriations Committee to a series of significant errors in the design and methods of this study. More widely, a 2014 article in *Biomed Research*, entitled *International Methodological Issues and Evidence of Malfeasance in Research Purporting to Show Thimerosal in Vaccine is Safe*, exposes the serious flaws and conflicts of interest in the six studies often used by the CDC to show that thimerosal in vaccines does not cause autism. [1A p. 336]. Related, we have the case of the Danish researcher Poul Thorsen. Poul Thorsen authored or co-authored 21 of the 24 studies considering the link between thimerosal containing vaccines and autism, and which have been relied upon by the CDC to show that there is no link between thimerosal or mercury and autism. Alas, Thorsen was later convicted of 22 counts of fraudulently accepting grants, wire fraud, and money laundering, and is currently being pursued by the FBI and Interpol. His research however was *not* reviewed by the CDC and *continues* to used by the agency to assert that there is no vaccine-autism link. Not surprisingly perhaps, the *data* from the Thorsen studies is unavailable to the public. [15; 30; 29, chapter 6; 3]. One particularly fraudulent study fabricated by Poul Thorsen and his *partner* Kreesten Madsen was entitled *Thimerosal and the Occurrence of Autism: Negative Ecological Evidence from a Danish Population-Based Study*, and was published in *The Journal of Paediatrics* in 2008. The study looked at Danish data between1970-2000. Thimerosal was removed from the Danish vaccines in 1992. The study concluded that autism rates did *not* go down after the removal, in fact the rates of autism actually went up. However, what the study *failed* to report was that these increased rates/cases of autism were due to first, a newly introduced system of *compulsory* reporting of autism in Denmark, and second, a *widened* catchment area (or population) for such reporting, in particular, the inclusion of outpatient departments. [1b; 29, chapter 6; 3]. But once this situation had stabilised, autism in Denmark indeed declined with the removal of thimerosal from the vaccines. This is what a 2003 US Congressional Report into mercury in medicines stated with regard to the CDC's research into the relation between vaccines and autism: "To date, studies funded or conducted by the CDC that purportedly dispute any correlation between autism and vaccine injury have been of poor design, under-powered, and fatally flawed." [1A p. 94].

The cover-up and corruption by the CDC was finally exposed in 2014 by Dr William Thompson, a high-ranking CDC researcher from the Immunization Safety Office of the CDC. Thompson himself had been involved in the fraudulent research concerning thimerosal and autism. In 2004 the CDC published another study regarding the MMR vaccine and thimerosal. Its authors were William Thompson and Frank DeStefano. The study was *MMR Vaccine and Autism: An Update of the Scientific Evidence*. The *data* actually showed an increase in autism of up to 3.36 times among African American boys given the MMR on time. De Stefano ordered his researchers to destroy the hardcopies of the information and put it into a garbage can. Dr Thompson's conscience finally prevailed, and he became a whistle-blower. His contact was a Dr Hooker. Thompson had kept the original data from the 2004 study. It was passed on to and re-examined by Hooker, who indeed confirmed that the earlier the vaccination age the more likely for black American children to have autism. This work by Hooker was first published in 2014 in the journal *Translational Neurodegeneration*, and later in 2018 under a different title, *Reanalysis of CDC Data on Autism Incidence and Time of First MMR Vaccine*—this time in the *Journal of American Physicians and Surgeons*. Thompson also gave associated testimony to Congressman William Posey and was granted Congressional immunity in doing so. He made it clear that the CDC had known about the autism risk posed by MMR vaccine for at least 15 years. The head of the CDC during the period of its cover-up and corruption concerning mercury-

containing thimerosal and autism was Julie Geberding. Thompson had in fact informed her about the damning results of the Verstraeten studies. When Gerberding left the CDC she was appointed as head of the vaccine division of the pharmaceutical giant, Merck where she received an annual salary of $2.5 million and $38 million in stocks. [2; 1f; 29, chapter 6; 1A pp. 556-8]. Also, we may note that Dr Colleen Boyle, Director of the National Center on Birth Defects and Developmental Disabilities at the CDC, perjured herself in a Congressional hearing in 2012 when she said there had been no vaccinated versus unvaccinated studies of children. This is exactly what the Verstraeten studies were, and she knew of these studies. The cover-up and corruption concerning the causative link between autism spectrum disorder and mercury goes far wider than the CDC to embrace research in this area in general. A 2015 study entitled *Systematic Assessment of Research on Autism Spectrum Disorder (ASD) and Mercury Reveals Conflicts of Interest and the Need for Transparency in Autism Research* showed that 86% of the industry research into the relationship between mercury and ASD found no connection, whereas as only 21% of the *independent* research found no connection. [1A pp. 249-250].

3.5. In section 2.5 I discussed the Vaccination Injury Compensation Program (VICP) which was set up in the US, ostensibly to make it easier for people to get compensation for death and injuries from vaccination. The VICP or Vaccine Court is part of the US Health Resources Services Administration (HRSA). As part of a response to a series of questions from a CBS News reporter Sharyl Attkinsson in 2008, a representative from the HRSA, Tina Cheatham, stated in a reply email: "The government has never compensated, nor has it ever been ordered to compensate, any case based on a determination that autism was actually caused by vaccines. We have compensated cases in which children exhibited an encephalopathy, or general brain disease. *Encephalopathy may be accompanied by a medical progression of an array of symptoms including autistic behaviour, autism, or seizures*. Some children who have been compensated for vaccine injuries may have shown signs of autism before the decision to compensate, or may ultimately end up with autism or autistic symptoms, but we do not track cases on this basis." (My italics). Clearly, while attempting to avoid the admission that autism is caused by brain damage from vaccines the representative from HRSA effectively goes on to admit just that. [6]. In the Hannah Poling case, adjudicated upon by the Vaccine Court, it was found that she had developed autism after having five shots containing nine vaccines at once. Her father, a *Harvard neurologist*, was able to present compelling evidence that the vaccine reaction was causative of Hannah's autism. [10]. The then director of the CDC, Julie Gerberding, stated to CBS news that: "Now, we all know that vaccines can occasionally cause fevers in kids. So if a child was immunized, got a fever, had other complications from the vaccines, and if you're predisposed with the mitochondrial disorder, it can certainly set off some damage. Some of the symptoms can be symptoms that have characteristics of autism." (My italics) To be clear, what Gerberding is saying but does not really want to say is that people who are pre-disposed to have a mitochondrial dysfunction can develop autistic conditions following vaccination. Mitochondrial dysfunction is claimed to be rare but is not. It can apply to a minimum of 20% of cases. [6]. In fact, lawyers from the Department of Justice who worked in the Vaccine Court to defeat claims were informed in 2007 by paediatric neurologist Dr Andrew Zimmerman, their expert witness, that in some cases vaccines could induce high fever and immune stimulation and in turn regressive brain disease with features of autism spectrum disorder. For his honesty he was sacked and subsequently misrepresented by the lawyers. [1A pp. 460-1]. Dr Peter Fletcher is the former Chief Scientific Officer at the Department of Health in Great Britain, at one point he was *the* man in Britain to decide if new vaccines were safe. He too has said that there is now overwhelming evidence to show that the MMR vaccine causes brain, gut and immune system damage. "There is far too much to ignore." he stated. But, it is being ignored by the government. Why? "There are very powerful people in great positions of authority in Britain and elsewhere who have staked their reputations and careers on the safety of the MMR and they are willing to do almost anything to protect themselves." [1A pp. 555-6].

Autism is listed as a side-effect on some DTaP vaccines. [44].

3.6. How is autism caused by vaccines? There is damage to the brain. The basic processes by which this occurs were identified in section 2 of this paper, particularly sections 2.7, 2.8 and 2.16. The four fundamental and interrelated mechanisms are one, inflammation of the brain and nervous system caused, in

particular, by mercury and aluminium provoking an over-excited immune response in the brain releasing toxic concentrations of bio-chemicals—a process now called immunoexcitotoxicity; two, the blocking of the oxidative pathway producing energy in the mitochondria—the main energy producing centres of the cells—leading to their malfunction and death; three, the production of auto-antibodies i.e. antibodies which attack the body's own tissues; and four, oxidative stress or the over-production of free radicals i.e. oxygen containing molecules which have lost one or more electrons and which are consequently highly reactive with and damaging to other bio-molecules such as DNA, RNA and proteins. Further, it was also shown that two main substances in vaccines which set these four pathological processes into motion were mercury/thimerosal and aluminium. Further still, a certain amount of research evidence was adduced to show that these four processes, set in motion by the aluminium and mercury in vaccines, can cause autism. I will add a little more.

Perhaps not surprisingly, the presenting symptoms of mercury poisoning are almost identical with those of autism. Citing a 2001 study by Bernard et al, Dr Alan Palmer states that "Not only is every major symptom of autism documented in cases of mercury but also biological abnormalities in autism are very similar to the side effects of mercury poisoning itself." [1A p. 169]. Studies have found high levels of mercury in the blood and low levels in the hair (indicating poor excretion of mercury) of autistic children, for example, De Soto, M et al., *Blood Levels of Mercury Are Related To Diagnosis of Autism* in the *Journal of Child Neurology* 22:1308, 2007. [29, chapter 6; 1A p. 182, 434]. Also a 2018 study entitled *Aluminium in Brain Tissue in Autism* is the first study to measure aluminium levels in brains of deceased people with autism. The study concluded "We have made the first measurements of aluminium in brain tissue in Autism Spectrum Disorder and we have shown that the brain aluminium content is extraordinarily high…. The presence of aluminium…could implicate aluminium in the aetiology of ASD." [1A p. 221]. Accordingly, there has been success in reversing autism in children by detoxifying them of metals and heavy metals such as aluminium and mercury. Dr Rashid Buttar informed the Congressional Reform and Oversight Hearing Subcommittee on Wellness and Human Rights about his amazing results of the recovery of 31 children from autism by removing mercury from their bodies; he also cured his own child from autism using the same treatment.

One important point should be clarified or at least emphasized: as discussed, autism is caused by vaccines in various ways including pathology induced by exposure to mercury and aluminium. Thus, even though mercury has been largely removed from many vaccines, autism continues to rise because the other ways that vaccines induce autism, in particular exposure to aluminium, continue to operate. In fact there has been a steep rise in the number of vaccines and the amount of aluminium in vaccines. Thus a study published in the journal *Environmental Health* and entitled *A Comparison of Temporal Trends in United States Autism Prevalence to Trends in Suspected Environmental Factors* concluded "Other vaccine indices, including cumulative aluminium adjuvants and cumulative total number of immunizations, continue to correlate strongly with autism trends." Likewise a 2016 study in the journal *Environmental International* entitled *Environmental Factors in the Development of Autistic Spectrum Disorder* concluded that "A comprehensive literature search has implicated several environmental factors…in ASD [Autism Spectrum Disorder] aetiology. These include…glyphosate and heavy metals, especially aluminium used in vaccines as adjuvant." (My interpolation.) [1A p. 110]. Further, there has been an increased uptake of the influenza vaccine by pregnant women in the last two decades where the multi-dose flu vials still contain mercury (25 mcg). It has been shown that toxins, for example phenol, can pass from the placenta into the foetal bloodstream. [1A p. 173, 118]. A 2016 study, *Aluminium in Childhood Vaccines is Unsafe*, in the *Journal of American Physicians and Surgeons*, states "Studies show that aluminium crosses the placenta and accumulates in the foetal tissue." [1A p. 261]. The authors of a 2015 study, entitled *Thimerosal: Clinical, Biological and Epidemiological Studies*, state with regard to some of the studies which they reviewed, "Overall these investigators observed that doses of Hg [mercury] exposure from administration from a single thimerosal-preserved influenza vaccine during pregnancy resulted in a developing foetus receiving a dose of Hg in excess of the US EPA [Environmental Protection Agency] Hg safety limit from between 1,000,000 to 10,000 times the safety limit at one week of development to 7.6 to 0.1 times that limit at 38 weeks." (My interpolations.) They concluded "that the accumulation of research that examines the effect of thimerosal in

humans indicates that it is a poison at minute levels with a plethora of deleterious consequences…" [1A p. 174] In this regard, we may note the following. The flu shot has *not* been tested on pregnant women or lactating mothers. [1b]. According to flu vaccine package inserts, "Safety and effectiveness has not been established in pregnant women or nursing mothers and should only be given if clearly needed." [47]. A 2017 study entitled *Association between Influenza Infection and Vaccination During Pregnancy and Risk of Autism Spectrum Disorder,* and published in the *Journal of American Medical Association Paediatrics*, found an elevated risk of autism in children in whose mothers had a first trimester flu shot. [49]. Dr. George Lucier, Associate Director of the National Toxicology Program from 1969-2000, said "The developing foetus should NEVER be exposed to any amount of mercury, period!" [48]. (The influenza vaccine is covered in more detail in section 6 of this paper.)

Vaccines can cause inflammation of the brain, leading to autism, in ways other than toxic metals. Measles and mumps are two of the three *live* viruses present in the MMR vaccine. These live viruses can cause encephalitis and in turn autism. Thus we find the following: "measles and mumps can cause significant disability, including encephalitis"—*The Paediatrician's Role in the Diagnosis and Management of Autistic Spectrum Disorder in Children*, *PEDIATRICS* Vol. 107 No. 5 May 2001. [6]. Accordingly, in 2007 the US Federal Court, in the case of Bailey Banks, judged that autistic conditions can result from acute disseminated encephalomyelitis *following* the MMR vaccination. Another known cause of autism is the rubella virus; it was in fact the first known cause of autism. This has been known since the 1960s and is supported by numerous authorities and studies. Indeed the CDC states on their website that "rubella virus is one of the few known causes of autism" And yet, the rubella virus is the other of the three live viruses in the MMR vaccine. [5]. Further, the human DNA contained in many (at least 23) vaccines may cause autism also. A 2010 article by Dr Helen Ratajczak—one of the world's foremost researchers in immunology and toxicology—entitled *Theoretical Aspects of Autism: Causes—A Review*, published in the *Journal of Immunotoxicology*, concluded that the DNA from vaccines can be randomly inserted into the host's DNA to thereby, when expressed, caused damage in the central nervous and mitochondria of cells. In this way the "residual human DNA in some vaccines may cause autism." [1A p. 184]. Further evidence that human foetal material and retroviruses included in vaccines are causing autism is the fact that increases in the introduction of these substances into vaccines correlated with increasing autism rates. This was found to be the case in the US, Western Australia, Denmark and the UK. [1A p. 184].

One small piece of completely damning information: two *independent* studies have shown that the 300,000 strong Amish community in the US have no vaccinations and *no* autism—something known as the Amish anomaly. [5; also, 29, chapter 7].

4. The Ineffectiveness of Vaccines

4.1. If vaccines offered protection from infections by viruses and bacteria then, despite the widespread death and damage they are inflicting, a case could be made for their continuance. However, there is little or no evidence to show that vaccines offer any significant protection from infectious diseases. In this section we will first take a look at the evidence which shows that vaccines were **not** responsible for the historical decline of infectious diseases and related deaths in developing countries and, related, the evidence which shows that vaccines, neither in the past nor at present, are effective at preventing infectious disease. Finally, I will look at the evidence and reasons for *why* vaccines are ineffective at preventing infectious diseases.

4.2. There is an abundance of *historical* data from countries around the world to show that the decline in infectious diseases and the mortality from these diseases was *not* due to the introduction of vaccines but, as one should expect, due to increases in the quality of food, water, sanitation and living conditions—something enabled by increasing wealth. The article *Vaccines Did Not Save Us—2 Centuries Of Official Statistics* collates a huge amount of this historical data, and reaches the emphatic conclusion that vaccines have had little to do with the decline of infectious diseases in developing countries. Regarding the Australian situation in particular, data is presented to show that deaths from typhoid had more or less disappeared by 1960 despite no widespread vaccination; deaths from scarlet fever declined to a very low

level by 1970 with no vaccination program; deaths from measles had declined to a very low level by the time the vaccine was introduced in 1969; and that diphtheria and whooping cough were already in serious decline before the introduction of the vaccines for them in Australia in the 1940 and 50s—and then the decline simply continued. [7]. Regarding the Australian situation Dr Judy Wilyman quotes H.O. Lancaster as saying in his 1956 article *Infant Mortality in Australia*: "as cases of infant mortality in Australia all infective diseases had been overcome.' Please note: as of 1956 most vaccines had *not* yet been introduced into Australia. Likewise Wilyman quotes Professor Fiona Stanley from her work *Child Health Since Federation* (2001 p. 178): "Infectious deaths fell before widespread vaccination was implemented [in Australia]." (My interpolation.) [27].

Turning to the US we find that the measles vaccine was introduced in 1962. By this time deaths from measles—based on US government figures—had declined to 1 in 10,000. [1A p. 593, 696]. Measles had reached this decline eight years *before* the vaccine was introduced. [1A pp. 471-2]. Stated another way, measles had declined by more than 95% before the vaccine was introduced—and was continuing to decline. Indeed some government statistics in the US put the decline at 99.4% before the vaccine was introduced. [1A p. 477, 566, 592]. In fact all infectious diseases such as mumps, diphtheria, tetanus, scarlet fever, typhoid and pertussis had a similar profile in the US. [1g; 29, chapter 2; 1A p. 473, 479]. Here are some examples. The death rate from rubella prior to vaccination was just one in nine million per population, and pregnant women who had it had birth defects at the rate of 1 in 20,000. The death rate from chicken pox prior to vaccination was one death in 60,000 cases, and in the US population as a whole one in 2.3 million people died. The death rate from mumps prior to vaccination was one death in every 5,000 r*eported* cases, and about one in two million of population died of this disease. Likewise for rotavirus there was about one death per ten million of population, and for polio the rate of death or permanent paralysis was one in 100,000 of population. [1A p. 696]. The article *Trends in Infectious Disease Mortality in the United States During the 20th Century*, published in the *Journal of the American Medical Association* in 1999, also reaches the same conclusion: deaths from infectious diseases reached a low point in the 1960s *before* mass vaccination—*and the figures have not improved since that time.* [1A p. 478]. Of the US situation, paediatrician Larry Palevsky states: "the literature shows that diphtheria, tetanus, polio, pertussis, measles, influenza, TB and scarlet fever were already waning before antibiotics and vaccines, because of clean water, better living conditions, sanitation and nutrition." [29, p. 49]. Further still, we find that in the US the rates of infectious diseases, *both* those which were vaccinated against and those which were not—such as tuberculosis, syphilis, gonorrhoea, malaria and typhoid fever—*had a similar decline*, thereby clearly showing that it was the improvement in environmental conditions, not vaccinations, that was the decisive factor in the decline. [1A p. 479-80]. Robert Kennedy Jr states that the CDC and John Hopkins University in the US conducted a joint study which found that vaccinations had little or nothing to do with the decline of smallpox, polio, diphtheria, pertussis, tetanus, influenza B and Hepatitis B infections. Furthermore, he adds that historically all infectious diseases, both vaccinated *and unvaccinated*, declined at similar rates, thereby, showing that it was conditions such as improved sanitation, nutrition, personal hygiene, refrigeration, and income levels, and less crowding in cities, which accounted for the historical reduction in infectious diseases, and not vaccination. [35; 1A p. 474, 486ff].

Poliomyelitis is basically due to inflammation of the grey matter of the spinal cord, occurring anywhere from the brainstem to the end of the spinal cord. This inflammation can be due to various causes including viruses, environmental toxins and infections. [1A p. 649]. Polio was *not* stamped out by vaccination. In the US polio peaked at 58,000 cases in 1952 and then reduced rapidly. By 1955 when the polio vaccine was introduced, the number of cases had already declined sharply to 28,000. Polio had declined by 47% and 55% in the US and UK respectively *before* the polio vaccine was introduced. This decline simply continued after the vaccine was introduced and irrespective of it. Why did the steep decline occur? The rise and fall of polio in the US correlated with the use of the insecticide DDT; where the rate and decline of polio lagged about six months behind the rate and decline of DDT use. DDT was *originally* developed as a nerve gas chemical weapon and later repackaged as an insecticide. DDT symptomatology exactly mimics the symptoms of poliomyelitis from start to finish. The use of DDT rapidly decreased from 1951 and soon thereafter (six months later) so did the number of polio cases—much of the so-called polio in the US was in fact DDT

induced nerve damage. Polio statistics *also* fell sharply after 1955 simply through the imposition of more stringent diagnosis standards by the CDC at this time—something which led to the *exclusion* of thousands of both actual and apparent polio cases and conditions which formerly would have been classified as polio. The more stringent criteria excluded less severe cases of polio, poisoning with neurotoxins such as DDT, arsenic and lead, asceptic meningitis, transverse myelitis, Guillain-Barre Syndrome, and Coxsackie. In particular, the CDC restricted polio to those cases of 60 days of paralysis or more. [29, chapters 2 and 11; 1A p. 650-1, 656-7; 1b].

The smallpox vaccine, developed by Edward Jenner, is seen as the start of vaccination. Once the smallpox vaccine (made from cow pox) became mandatory in the UK in 1857 there was an *epidemic* of smallpox. Between 1857-9 there were over 14,000 deaths from smallpox; between 1863 and 1865 there were over 20,000 deaths; between 1870-2 almost 45,000 deaths. The smallpox vaccination was made mandatory in the US with similar results. For example, in 1852 Massachusetts enacted mandatory smallpox vaccination and this was followed be a series of smallpox epidemics leading up to the massive 1872-3 epidemic. During the late 1800s similar events occurred in Germany, Japan, Scotland, Ireland, Sweden, Italy, Holland and Austria: as smallpox vaccination rates increased so did the incidence and deaths from smallpox. In particular there is the example of the town of Leicester in England which *stopped* smallpox vaccination in the 1880s due to the high death rates. The city's death rates from smallpox plummeted while surrounding towns had continuing and high death rates. It was in fact quarantine and isolation that largely led to the eradication of smallpox at this time. This is covered in detail in the book *Dissolving Illusions* by Dr Suzanne Humphries. [1a]. Edward Jenner developed the smallpox 'vaccine' after he noticed that milkmaids who contracted cowpox didn't get smallpox. He experimented by smearing pus from infected maids into cuts in the arms of his son and his young friend. Both were sick their entire lives and died in their late teens or early twenties of tuberculosis—a common consequence of the vaccine.

Finally, with regard to developing countries, we may finish with the following quote. "There has been a steady decline in infectious diseases in most developing countries regardless of the percentage of immunization administered in these countries."—*The World Health Statistics Annual* Vol. 2 1973-1976 [1a].

4.3. Vaccines are also proving to be *currently* unsuccessful. Here is a selection of their failures. Of all the reported cases of chicken pox in the US between 2004-15 half the children *had received* the chicken pox vaccine, which is to say that the vaccine offered no protection. [4] A relatively recent mumps outbreak in the US showed that of the 817 children whose vaccination status was definitely known, 63% had at least one Measles, Mumps, Rubella (MMR) vaccine shot and 50% had two shots—again, the vaccination offered no protection. [4]. In recent years in the US there have been mumps outbreaks in 100% vaccinated communities such as those at the University of Richmond and Harvard University in 2016, Loyola University in 2013, and Fordham University. [1c]

China has one of the most vaccination compliant populations in the world. In fact, the measles vaccination is mandatory. However, a recent Chinese study entitled *Monitoring Progress Toward Elimination of Measles in China*, and published in the *Bulletin of the World Health Organization*, 92:340, May 1, 2015, found over 700 small outbreaks between 2009 and 2012 in a *single* province boasting a vaccination rate of over 99%. There were over 26,000 cases in 2013 alone. [29, chapter 2; 8; 1A p. 573]. Similarly there was an outbreak of 235 cases of measles in Wisconsin, USA, in 1986. 94% of the people were vaccinated. Importantly, the measles were occurring in children with high levels of antibodies, thereby showing that antibody levels alone are a poor indicator of immunity. (This point is discussed shortly.) Likewise a study entitled *Failure to Reach the Goal of Measles Elimination. Apparent Paradox of Measles Infections in Immunized Persons* in the *Archives of Internal Medicine* stated "We found 18 reports of measles outbreaks in very highly immunized school populations where 71% to 98% of students were immunized against measles." In the conclusion they stated "The apparent paradox is that as the immunization rates rise to high levels in a population, measles becomes a disease of immunized persons." [1A p. 570]. Yet another study, entitled *Explosive School-Based Measles Outbreak: Intense Exposure May Have Resulted in High Risk, Even Among Revaccinees* (1998), found that both vaccinated and unvaccinated children were able to equally infect their

siblings. [1A p. 572]. It gets even worse: people vaccinated against measles have *lower* levels of measles antibodies and in the case of pregnant women this means that they can pass on *less* antibodies to their babies (called passive immunity) which are needed to provide protection until the infant has developed a stronger immune system; as a result infants born to mothers who did not develop immunity from the wild measles virus, but instead the vaccine, are more susceptible to measles. [1A pp. 580-87]. Immunity from the measles vaccine declines rapidly with efficacy lasting no more than ten years after the second dose, and subsequent doses provide almost no protection. [1A pp. 596-7].

According to the CDCs own data the vast majority (87%) of people in the US who contracted pertussis or whooping cough were already vaccinated. [1c; 4]. Likewise a 2014 report found that of the 621 people who contracted whooping cough in San Diego County, 527 or 85% were up to-date with their immunizations. [1A p. 602]. Other such instances have occurred. One reason for the ineffectiveness of the DTaP vaccine which is supposed to immunize against pertussis, as revealed in the 2016 article *Waning DTaP Effectiveness in Adolescents* in the journal *Paediatrics*, was that it waned rapidly in the first year and that little protection remained after 2-3 years. [1A p. 603-4]. Further, the pertussis rates in the US have been climbing since 1970 and especially since the late 1990s—a trend found also in a number of other developed countries. Consequently, in 2017 pertussis rates were at a 70 year high. [1A p. 604].

As far back as the 1980s extensive pilot studies showed the flu vaccine to be essentially ineffective for the elderly. [29, chapter 2]. The first major post war outbreak of flu in 1947 showed the incidence in the vaccinated had not changed versus the unvaccinated. Studies commissioned by the CDC in 1964 and 1968 found the flu vaccine to be ineffective. Likewise the mass vaccination against the swine flu in 1976 produced no results and the CDC again conceded that it was ineffective. There has been much the same pattern with flu vaccination studies ever since. [29, chapter 12]. Depending on the year in question, the CDC states that flu vaccine is relatively ineffective. For example, in 2014-5 it was rated as 19% effective. In 2019 the CDC said that the flu vaccination was only 29% effective, and later only 9% effective. Since then the CDC's Brenden Flannery stated it offers "no significant protection" due to new strains. [31]. Due to its widespread and repeated use, and the serious problems associated with it, a later section is devoted to discussion of the flu vaccine. Also in a later section we shall see that the new vaccines given for HPV, supposedly to prevent cervical cancer, are also useless, and indeed dangerous.

A 2011 peer-reviewed study entitled *Infant Mortality Rates Regressed Against the Number of Vaccine Doses Routinely Given: Is There a Biochemical or Synergistic Toxicity*, found that the US had the 34th worst mortality rate for infants under one in the *developed* world. Further, it found a statistically significant linear correlation: the higher the doses of vaccines the higher the mortality. At this time (2011), a child in the US was receiving 26 vaccine doses by one year; whereas Sweden which had the lowest mortality also had the lowest number of vaccines doses at 12. By 2016 the US ranked only 57th in the world in terms of infant mortality with a rate of 5.8 deaths per 1,000. Today, those countries which require the least number of vaccines, between 11 and 13 doses, including Sweden, Iceland, Finland, Japan and Norway have the lowest infant mortality of between 2 to 2.6 deaths per 1,000. [1A pp. 412-15; 1b; 1d; 15; 24]. Further, a 2012 study, entitled *Relative Trends in Hosptalizations and Mortality Among Infants By the Number of Vaccine Doses and Age Based on the Vaccine Adverse Events Reporting System (VAERS), 1990-2000*, reported "Our findings show a positive correlation between the number of vaccine doses administered and the percentage of hospitalisations and deaths reported to VAERS." The study also found the younger children to be "significantly more" at risk of death and hospitalisation. [1A p. 417]. Other epidemiological studies have also found that those *developed* countries with the highest vaccinations rates also have the highest infant mortality rates and vice versa. One such example is the study *Infant Mortality Rates Regressed Against the Number of Vaccine Doses Routinely Given* and found in the journal *Human Experimental Toxicology*, 30:1420, 2011. In 2019 Japan had the healthiest children in the world including the lowest child mortality. Japan has no mandatory vaccinations; does not give the Hep B vaccine at birth; does not vaccinate pregnant mothers with the DTaP vaccine; does not give the flu shot to pregnant mothers or 6 month year old children; does not give the MMR vaccine and instead recommends the MR vaccine; and does not require the HPV vaccine. [1A pp. 563-4].

4.4. So why have vaccines failed to prevent infectious diseases? There are various reasons. First, dozens of scientific studies demonstrate that individuals vaccinated with the *live* virus vaccines such as the pertussis (whooping cough), measles, MMR, rotavirus, chicken pox, the shingles vaccine (Zostavax), and the influenza vaccines—whether showing symptoms or not—can and do shed the virus for many weeks or months after the vaccination has been administered. [13; 1c; 1A p. 421]. Second, some vaccines do not prevent the vaccinated person spreading the virus. The polio, pertussis, diphtheria and tetanus vaccines fall into this category. Third, some infectious diseases have so many strains that the vaccination does little to reduce the spread of the disease, for example, flu, pneumococcus, HPV. [1A p. 695-6]. Fourth, and related, the viruses and bacteria against which the vaccine is supposed to protect are constantly mutating and evolving into new forms. This means that the vaccines become ineffective at preventing infections from these new forms. Indeed, just as with the introduction of antibiotics, vaccines *accelerate* the emergence of new and stronger forms of viruses and bacteria. Also, as the vaccine targets one form of the virus or bacteria and the body clears it away, a 'space' and opportunity is provided for new forms of the virus or bacteria to occupy. These new forms cause the same or a similar infection. So far, this phenomenon has occurred, at least, with pertussis, Haemophilus Influenzae type B, streptococcus pneumonia, chicken pox, polio, rotavirus, and HPV. [29, chapter 2; 1f]. Thus we find that pertussis or whooping cough cases are increasing significantly in the US from 1,730 in 1980 to 48,277 in 2012 due in part to new emergent strains or forms, and with extensive outbreaks in *vaccinated* populations. In this case, even public health officials admitting that asymptomatic *vaccinated* carriers are *mainly* responsible for the transmission. [29, chapter 11]. Again, while the chicken pox vaccine appears to be providing some immunity, in later life it is causing shingles or herpes zoster which is a *reactivated* form or type of chicken pox. This has now reached epidemic proportions among adults in the US and is causing debilitation and even death. The US is now losing more people to death from herpes zoster than chicken pox. [1f; 29, chapter 12].

The fifth reason why vaccines are ineffective is that they work by using an attenuated and modified virus, but this can itself cause the infectious disease, or a variant of the infectious disease, that it is meant to prevent. The most appalling example of this is the supposed polio eradication program conducted by the Bill and Melinda Gates Foundation in India. At the turn of the century the *oral* polio vaccine was *discontinued* in developed countries because it is a *live* polio virus and was found to be responsible for most of the cases of polio after 1960! However, it is still used in third world countries like India and is, of course, causing polio outbreaks. For example, in one district of India alone the Gates Foundation sponsored polio campaign in 2010-11 raised the polio numbers from eight or nine cases per year in the population to 47,000 cases in two years! To evade detection of this tragedy, these cases have been deceptively called non-polio flaccid paralysis (NPFP). However, NPFP *is clinically indistinguishable from polio paralysis* albeit twice as deadly. Further, the incidence of NPFP in India is *directly proportional* to the number of oral polio vaccinations given. Obviously we have 47,000 cases of *polio* here but given a different name to obscure the cause—the vaccine. [1a, 1b; 1A pp. 678-9]. In India the number of such cases has increased dramatically between 2000 and 2013 in *proportion* to the oral polio vaccine doses given. The increase has been from one to two cases per 100,000 to 11.82 cases per 100,000 or approximately 118,200 cases. [29, chapter 11]. It gets worse. A 2018 Indian study entitled *Correlation Between Non-Polio Acute Flaccid Paralysis Rates with Pulse Polio Frequency in India* by Rachana Dilman et al, and published in the *International Journal of Environmental Research and Public Health,* concluded that between 2000 and 2017 over 496,000 people in India developed paralysis *because of the oral polio vaccine*. Not only was it the Gates Foundation which was funding the oral polio vaccine programs in India, further, until 2017 the Foundation paid the salaries of the 32 member secretariat called the National Technical Advisory Group on Immunization which advised the Indian government on vaccination. In 2017 the Indian government cut all ties between these two groups. [36; 38; 50]. The Indian government dialled back Gates' vaccination regimen and the cases of NPFP dropped sharply. In 2017 the World Health Organisation admitted that the global explosion in polio is predominantly vaccine strain. In fact, by 2018, 70% of cases were vaccine strain. [40].

A short note concerning the 'philanthropist' Bill Gates. The Gates Foundation is the biggest private funder of vaccination programs in the developing world. And yet, Bill Gates *refused* to have his own three children vaccinated. In the 1990s the private doctor who attended to Gates' children when they were young stated to other doctors after a medical conference in Seattle, "I don't know if he had them vaccinated as adults, but I can tell you he point blank he refused to vaccinate them as children… They were beautiful kids, truly wise and lively, and he stated they would be fine as they were; they didn't need any shots." The statement caused a small uproar among the doctors at the conference. [21]. We shall re-visit the so-called benevolent Gates Foundation with regard to the testing of the HPV vaccine, Gardasil, in section 5 of this paper.

Vaccines are designed to stimulate an ongoing antibody response in the body. They do this by introducing modified and attenuated forms of a virus or bacterium into the body, which is the essential part of the vaccine. This is to say that the virus or bacterium in the vaccine is recognised by the body as harmful—technically it is called an antigen—and consequently the body mounts an antibody response. Further, adjuvants in the vaccine, such as aluminium, attach to the attenuated or modified virus and or bacterium and help to elicit an inflammation response it and, in turn, an increased antibody response to it. The main adjuvants used in vaccines are aluminium compounds. However, artificially eliciting an antibody response to a virus or bacterium does *not* mean that the person is effectively protected from infection. [4]. The centre within the FDA that tests for the effectiveness and safety of products, has repeatedly stated that an antibody response has nothing to do with protecting the person from the infection. In particular, there are some people who do *not* produce antibodies yet they recover from and are protected from diseases. [1b]. Dr Merrill Chace, nicknamed the Godfather of immunology, did clear-cut research in the 1950s which showed that antibody levels do *not* determine immunity. Consequently we find cases where populations who have not only been vaccinated but have high levels of antibodies are no more protected from infection than the unvaccinated. This then is the sixth reason why vaccines are ineffective. Let us consider it in more detail.

For the body to effectively rid itself of an infection, whether viral or bacterial, a coordinated and combined, or concerted, effort of the immune system is required. In particular, two parts of the immune system known as cellular immunity and humoral immunity must work together. Cellular immunity involves a range of cellular processes which detect, engulf and digest the invading virus or bacterium; while humoral immunity involves the production of specific antibodies which help facilitate the cellular immunity. When a person has *natural* infections, particularly in infancy, the body's immune system *develops* (or grows) to expel the virus or bacterium in question through this coordinated and combined effort of cellular and humoral immunity. Further, in so developing, the immune system learns to deal effectively or more effectively not only with the virus or bacterium in question, but also, viruses, bacteria and foreign bodies *in general*. This latter is called non-specific immunity. This is to say, recovery from natural infections confers *lasting* immunity and also a more generalised immunity. However, *artificial* infections caused by the attenuated and modified viruses or bacteria in vaccines do *not* develop the *whole* immune system; rather, they develop the humoral part of the immune system only which produces antibodies. Hence, the vaccine is not effective in developing the whole immune system needed to expel a virus or bacterium, that is, *the vaccine does not confer immunity*, let alone lasting immunity; the vaccine is only evoking and developing *part* of the immune system, the humoral which is concerned with making antibodies but, as stated, to effectively rid the body of a virus or bacterium both the humoral *and* cellular components of the immune system must develop and work together. For the same reason, a partly developed immune system, the attenuated and modified virus or bacterium introduced by the vaccine *also stays in the body*. Here, along with other toxic vaccine components it evokes an *ongoing* antibody response. This is the equivalent to a *chronic infection*, and is central to causing auto-immune responses and diseases where the body attacks its own tissues. [29, chapters 1 and 10]. (Autoimmune diseases and vaccines were discussed in section 2.14.) Further still, because the vaccine does not develop the immune system as a whole to effectively get rid of viruses and bacteria there is no generalised or non-specific immunity conferred by the vaccine, unlike what occurs through *natural* infection. Regarding the non-specific immunity there are now many studies which show that people who were naturally exposed to and recovered from childhood infections later in life have significantly less chance of contracting other infections and diseases such as various types of cancer, asthma, allergies, and autoimmune disorders including type one diabetes, Crohn's disease and ulcerative colitis. For example, one study of 379 patients

found that adults with a history of measles, mumps, rubella, chicken pox, pertussis or scarlet fever were 20% less likely to develop genital, prostate, GI, skin, lung or ears-nose-throat cancer if they had experienced one of these infections, 60% less likely if they had experienced three or four of these infections, and 76% less likely if they had experienced four or more. [29 chapter 1; 1c; 1A pp. 655-8]. When you naturally fight off flu then you are protected against a variety of strains (cross protection) thereby giving greater protection—this does not occur with the flu vaccination. [1d].

Finally, we must understand that the basic theory on which vaccines are based precludes them from being effective in those whose immune system is compromised. Vaccination is supposed to elicit an antibody response from the person's immune system. However, if the immune system is not functioning properly due to ill-health or injury, then it cannot mount such a response. Those who need protection from infection most because they have a weak or injured immune system cannot get it from vaccines. In particular, we must note that a young baby does not have a fully functioning immune system until about two years of age, and therefore, *cannot possibly* have an adequate immune response to a vaccine—the vaccine is useless, and of course extremely harmful. In fact, most countries do *not* vaccinate children before two years of age because the immune system is developing and the chance of vaccine injury is so much higher. [1d]. Mothers which have been *naturally* exposed to and recovered from measles have these antibodies in their milk and transmit this immunity to their children to some degree while their immune systems are still developing. [29, chapter 1]. We have seen that mothers vaccinated against the measles have less measles antibodies to transfer to their infants via the breast milk *vis-à-vis* mothers who were naturally infected with measles. [1A pp. 580-87]. I assume that the same holds for other types of infectious diseases.

5. The Human Papilloma Virus (HPV) Vaccine

5.1. The two vaccines developed to rid the body of the human papilloma virus or HPV are Gardasil and Cervarix developed by Merck and GlaxoKlineSmith respectively. The Gardasil vaccine is given to immunise against the HPV infection which in turn is supposed to cause cervical cancer. However, according to its own documents the Food and Drug Authority (FDA) in the US has known since 2003, and states on its website, that the HPV infection does *not* pose a danger to *healthy* women, that HPV is mostly short lived, and that in most cases the virus is self-clearing. Almost all women have the HPV at some time and it clears. Almost all HPV infections resolve naturally. Some women go onto to develop cervical cancer but where this occurrence is associated with a *variety* of other risk factors including prolonged use of the contraceptive pill, and poor diet and nutrition. [29, chapter 13]. In Western developed countries cervical cancer is a rare disease where 88% of the approximately 275,000 women who die each year are in developing countries. [1A p. 614]. In the US one in 43,500 women get cervical cancer, where only a third of cases are due to HPV. [1A p. 1A p. 618]. Rima Laibow MD stated on the Richie Allen Show in 2019 that the HPV has *never* been shown to cause cancer—not cervical, oral, anal, rectal or penile. Industry funded studies have shown that the antibodies arising from *natural* HPV infection are actually preventative of cervical cancer. [29, chapter 2].

5.2. Various studies such as *Who Profits from Uncritical Acceptance of Biased Estimates of Vaccine Safety and Efficacy* in the *American Journal of Public Health* in 2012 state that "clinical trials data have not demonstrated to date that the [HPV] vaccine has actually prevented a single case of cervical cancer…" [1A p. 606, 613, 640]. The *American Medical Association Journal* (2007) stated with regard to Gardasil, produced by Merck, that "No significant evidence of vaccine therapeutic affect was observed…" and "it is unlikely that vaccination can have a significant beneficial impact." [11]. Why is this? First, Gardasil is generally given to girls (and also to boys) prior to puberty, at 9-12 years of age, where its protective effect has only been shown to be for five years; and yet the average time when cervical cancer occurs is between 38-42 years—long after any protective effect from Gardasil has ceased. Diane Harper, a leading researcher who helped to design the phase II and III Gardasil vaccine trials, stated, "if you vaccinate a child she will not keep immunity in puberty and you do nothing to prevent cervical cancer." [1e; 1A p. 611]. Why not give Gardasil later in life? If it is given to sexually active women it actually increases the risk of cervical cancer! The American Medical Association (AMA) has stated that to give the vaccine to sexually active women who are already sero-positive (carrying the virus) could increase cervical cancer dramatically. (Most people are

infected with HPV shortly after the onset of sexual activity.) The AMA has found it to increase risk of precancerous lesions in this group by 44.6%—this is repeated in the literature and found in Merck's own trials! [1A p. 627]. The second reason for the ineffectiveness of Gardasil is that there are many different types of HPV, according to the CDC some 150 of which 15 have been associated with or are said to be causative of cervical cancer. Garadsil (at least the early versions) only vaccinates against four viruses (including two for cervical cancer); for the other strains it does nothing. [1A p. 614]. Further, only 3.4% of girls in the US have the two strains that they are being vaccinated against! One would think that the situation is the same for Australian girls.

5.3. The pap smear is adequate to prevent cervical cancer. [1e]. It has reduced cervical cancer in developed countries by 70-80%. [1A p. 614, 620].

5.4. Let us consider the lack of safety of the HPV vaccine. "Gardasil has been responsible for the largest number of adverse drug reactions of all vaccines currently in use."—Dr Ian Palmer. [1A p. 605]. As per usual there was no testing with an unvaccinated/placebo control group during the safety trials. In the Gardasil trials by Merck the 'control' groups generally received 250 mcg of the adjuvant and known neurotoxin aluminium. Gardasil itself contains 225mcg of aluminium. The newer Gardasil 9 contains 500mcg. In one trial well over 100 girls, aged between 9 and 26, developed various autoimmune diseases. Further, in the drug trials the lead investigator, as per usual, had authority over what adverse reactions were to be regarded as caused by the vaccine and those which were not, where this is usually *limited* to known or acknowledged adverse reactions (and the rest dismissed)—a practice which leads to wildly and deliberately false claims about the safety of vaccines. For example in one Gardasil trial only 0.04% of the serious adverse reactions were regarded as vaccine related by the lead investigator. We are asked to be believe that 99.96% of the adverse reactions reported had nothing to do with the vaccine! There are no long-term studies regarding the adverse effects of Gardasil. The Gardasil testing only followed people for six months, not the usual four years, and *observation* for adverse reactions was for 15 days only. All of this information about Gardasil is in the package insert. [29, chapter 3].

As stated, Dr Diane Harper helped design the Phase II and III safety and efficacy trials for both Gardasil and Cervarix. She has stated that the trials were invalid, that cervical cancer had been controlled via screening, and that the risk of adverse reactions from vaccines far exceeded the risk of the disease. [29 chapter 13]. Invalid? If you want to see just how fraudulent, corrupt, criminal and depraved the Merck Gardasil trials were, please see Robert Kennedy's expose of the trials in the work *Truth Will Prevail: 1,200 Studies That Refute Vaccine Claims* at p. 617ff. If you had any doubt about the absence of morality of vaccine companies this will surely remove all doubt. At the beginning of the expose Kennedy challenges Merck to sue him if he is wrong—needless to say that has not occurred. Here are but a few examples of Merck's heinous behaviour during the trials. In one control group in one of the Gardasil vaccine trials the aluminium adjuvant was omitted. This group alone in the trials had *half* the adverse events of the test group, and no serious adverse events in the first 15 days—but Merck hid the results. [1A p. 623-4]. In the only trial (called Protocol 18) by Merck on children in the age group for which the vaccine is used, 9 to 15 years, Merck used a *different* Gardasil formula than the one which was actually marketed to and used on the public, where this different formula had only *half* the aluminium. In this way they could reduce the number of adverse events in the test group to give 'better' test results. In the trials Merck gave the discretion to its researchers to determine what was or what was not a vaccine injury! Also, Merck lied to the girls in the trials telling them, and presumably their parents, that the safety tests had already been done and the product was proven safe. [1A p. 623-4].

In section 4.4, in the discussion of polio, we encountered the morally bankrupt Bill and Melinda Gates Foundation. The Foundation figures again in the testing of the HPV vaccines. In 2014 the Gates Foundation funded a trial of experimental HPV vaccines, Gardasil and Cervarix, on 23,000 young girls aged 9-15 years in remote Indian provinces—seven died and 1,200 suffered severe side-effects including autoimmune and infertility disorders, seizures and premature menstruation. The Indian government investigations charged that the Foundation's researchers committed pervasive ethical violations including pressuring young girls into the trials, bullying parents, forging consent, and refusing medical care to injured girls. The case is now

in the Indian Supreme Court. [40; 29, chapter 7]. After numerous deaths and injuries the Indian government has suspended its Gardasil trials. [1A p. 628]. In various interviews, long time anti-vaccination lawyer and activist Robert Kennedy Jr, provides the following information about the Gates Foundation and the WHO. In 2014 the WHO undertook a tetanus vaccination program in Kenya. Unusually, the program delivered five shots instead of the normal one shot. Also unusually, the vaccine was only administered to females of the ages 9 to 39 years. Further still, there was no tetanus emergency in Kenya. Many of the women had spontaneous abortions, miscarriages, and difficulty getting pregnant. Suspicious of what was occurring, the Kenyan Catholic Doctors Association sent the tetanus vaccine for independent testing to six laboratories approved by the WHO. It was found to contain the sterilizing agent human gonadic trophic hormone. This was at first denied but latter admitted to by the WHO. Later it was revealed that along with the Rockefeller Foundation the WHO has been developing sterilizing vaccines for 15 years. For many years the Gates Foundation had been involved in the WHO's tetanus programs in 57 countries. [35; 42]. In 2010 the Gates Funded a phase 3 vaccination trial of GSK's experimental malaria vaccine, killing 151 African infants and causing serious adverse events such a paralysis, seizures and convulsions in 1,048 of the 5,949 children. Most mercury containing vaccines have been banned in the US because of the neurological damage they cause, and yet, the Gates Foundation continues to give mercury-containing vaccines to African children. [1A p. 88; 35; 40]. Despite the well-known truth that vaccines injure and kill, an area where Gates has firsthand knowledge, he wants to vaccinate the entire world against Covid 19. Further still, Bill wants *immunity from prosecution* for the pharmaceutical industry and the researchers and suppliers of vaccines for any injuries produced by the vaccines. Indeed, this legislation already exists in the US. Gates is not being philanthropic in his promotion of vaccines, he is *investing* in vaccines and generating massive profits. In the last 10 years, in what he calls "the decade of vaccines", Gates' fortune has *doubled* to over 100 billion. [36; 37]. It should be evident to anyone who has researched Gates that he is not a philanthropist but, literally, a psychopath.

Between 2006 and 2012 the VAERS surveillance program run by the CDC and FDA had received 21,265 reports of adverse reactions to Gardasil, of which 9,565 involved ER visits, 1,669 were serious, 609 permanently disabling, 363 life-threatening, 212 needed long-term hospitalisation, and 78 were fatal. [29 chapter 13]. By January 2018 the VAERS showed that in relation to the Gardasil vaccine there were 412 deaths, approximately 5,500 hospitalisations, and 15,000 plus emergency department admissions reported. [12]. One study, *Adverse Events Following HPV Vaccination, Alberta 2006-14* showed that 19,351 girls or 9.9% of those vaccinated had to be admitted to the emergency department within 42 days of being vaccinated and 958 were hospitalised. [1e; 1A p. 607]. The US attorney Robert Kennedy Jr, as part of a presentation exposing Merck and challenging them to sue him if they dared, stated that the death risk from the Gardasil vaccine, according to Merck's own research, is 37 times the risk of dying from cervical cancer! The death rate in the trials by Merck was 8.5 per 10,000. Not surprisingly then death is listed on the package insert as one of the possible outcomes of having the Gardasil vaccine. [1A p. 627-8]. Dr Jasper Mehlsen, specialist at the Fredriksberg Hospital in Denmark stated of Gardasil: "We thought the rate of serious adverse reactions was about 1 in 10,000; now a realistic estimate is that 1 in 500 girls…will experience serious side effects." [29, p. 225].

The adverse effects of Gardasil are many and include: warts outbreaks (genital and other places—the vaccine is supposed to stop genital warts!), seizures, convulsions, paralysis, Guillain Barre Syndrome, chronic fatigue syndrome, facial palsy, autoimmune disorders, deep vein thrombosis, anaphylaxis, blood clots, hallucination, epilepsy, sensory disturbances, migraine, lethargy, insomnia, ovarian failure, premature menopause, amenorrhea, reduced pregnancy rates, miscarriage, pancreatitis, motor neuron diseases, and…cervical cancer. Many of these diseases and disabilities are listed on the package insert. [1e; 29, chapter 13; 1A pp. 614-17, 620, 628]. A syndrome has now been associated with Gardasil called Postural Orthostatic Tachycardia Syndrome which involves orthostatic intolerance (dizziness or fainting when standing), headache, fatigue, cognitive dysfunction, neuropathic pain and autonomic dysfunction. The vast majority suffer on-going symptoms. [1A pp. 609-11]. Dr Richard Moskowitz states that one of the most disturbing findings regarding the adverse reactions to Gardasil "was recent and prolonged amenorrhea and premature menopause due to ovarian failure in young girls, putting an end to their hopes of giving birth, which has alarmed gynaecologists and paediatricians alike, and prompted an official warning from the

American College of Paediatricians of a possible link to ovarian cancer." [29, p. 222]. In countries which have a robust Gardasil vaccine program, UK, Sweden and Australia, there has been a dramatic *upsurge* in cervical cancer. [1A p. 629]. Hitherto it was rare in *young* women; and the rate in mature women had been decreasing rapidly. In 2013 the Japanese government withdrew its recommendation of Gardasil based on 2,000 adverse reactions in just three years. As stated, after numerous deaths and injuries the Indian government has suspended its Gardasil trials. [1A p. 628]. At least eight countries have banned Gardasil.

6. The Flu Vaccine

6.1. As far back as the 1980s extensive pilot studies showed the flu vaccine to be essentially ineffective for the elderly. [29, chapter 2]. The first major post-war outbreak of flu in 1947 showed the incidence in the vaccinated had not changed versus the unvaccinated. Studies commissioned by the CDC in 1964 and 1968 found the flu vaccine to be ineffective. Likewise the mass vaccination against the swine flu in 1976 produced no results and the CDC again conceded that it was ineffective. There has been much the same pattern with flu vaccination studies ever since. [29, chapter 12]. According to the CDC, over the past 14 seasons up to 2018-19, the effectiveness of the influenza vaccine has varied from 10% to 60%. [46]. In 2019 the CDC declared that flu vaccination was only 29% effective, and later 9%. Since then the CDC's Brenden Flannery stated it offers "no significant protection". In 2014-5 the protection offered was just 19%. The reason given for this lack of protection is the emergence of new strains of forms of the flu. [30]. There are many strains of flu in circulation each year, around 200-300, but the flu vaccine only attempts to immunise against three or four—usually from the previous year—or against the A and B strains which account for about 10% of circulating viruses. [18; 1A p. 531]. Another reason for the ineffectiveness of the flu vaccine is that most people who have flu-like symptoms do not in fact have the flu. An analysis of CDC data over 19 years, involving hundreds of thousands of people, showed that the vast majority of them, 85%, with suspected flu did *not* actually have the flu or did not have the strain that was being vaccinated against. Thus, in most cases the flu vaccine is of *no* value to people. According to the CDC's own data, in 2001, 257 cases of death were attributed to the flu but, flu was only *positively* identified in 18 cases. [15; 1A p. 498]. In various interviews and articles Robert Kennedy Jr provides the following information about flu vaccination. The Cochrane Collaboration is an independent and international group of researchers and scientists who undertake meta-analysis studies of pharmaceutical products—they are the most trusted group of their kind in the world. The Collaboration produced two meta-analyses of the flu vaccine in 2010 and 2014. It was found that there was zero evidence that the flu shot prevents any hospitalisations or deaths, that you have to give 73-100 flu shots to prevent one case of flu (symptoms), and that the influenza vaccine is "barely effective", indeed, at most one percent effective. Likewise, the *British Medical Journal* conducted a meta-study on the flu shot and also concluded that it did not work. Further still, the Collaboration found that the people who take the flu shot actually spread it at six times the rate of the unvaccinated. And further still, that someone is 4.4 times more likely to get sick from a flu-like illness if he or she has had the flu vaccine. [35; 42; 43; 47]. More recently, in 2018 the Cochrane Collaboration did three meta-analyses of studies on the effectiveness of the flu vaccination for healthy children, adults and the elderly respectively. These were updates of their previous meta-analyses (referred to by Kennedy). Regarding children they looked at 41 studies from 1984 to 2013 encompassing some 200,000 children between 3-16 years. They found that vaccination with live attenuated vaccines reduced the risk of influenza from 18% down to 4 % and in influenza-like-illness from 17% to 12%. Regarding adults, the Collaboration looked at 52 studies from 1969 to 2009 and covering some 80,000 people. They found a 1.4% effectiveness rate of vaccination in preventing flu and a 3.4 effectiveness rate for preventing influenza-like-illness. Regarding the elderly (65 years plus), the Collaboration looked at 8 studies from 1965 to 2000 and encompassing some 5,000 people. This time they found a 3% effectiveness for preventing flu and a 2% effectiveness rate for preventing influenza-like-illness. Similarly the 2009 study *Influenza Vaccine Effectiveness Among Children 6 to 59 months of Age During 2 Influenza Seasons: A Case Cohort Study* "could not demonstrate vaccine effectiveness in preventing influenza-related inpatient/emergency department or outpatients visits in children younger than 5 years." It gets worse: a report released by the American Thoracic Society in 2009 found that children vaccinated against the flu were three times more likely to be hospitalised than unvaccinated. [1A pp. 510-4]. The drug companies themselves admit that the effectiveness of flu vaccines has not been proven. Here is what it states on the

package insert (information leaflet) provided with the flu vaccine called Flulaval:"There has been no controlled trials adequately demonstrating a decrease in influenza disease after vaccination with Flulaval." [17] Regarding the Afluria influenza vaccine, an analysis of the information on the package insert shows that it is only 1% effective. [1A p. 528]. There has been *one* controlled study of flu vaccine efficacy where a placebo (saline) was used. There was no difference between the two groups except that the vaccinated group had four or five times greater chance of getting other non-influenza viruses than the control group. [1d]. A further point regarding the ineffectiveness of the flu vaccines is implicit in this quote from Dr Alan Palmer. "The paradox: The number of doses of flu vaccine has increased from 12.4 million in 1980-1, to 155.3 million in 2017-8 (a 1,250 percent increase), and yet we are told that flu deaths are rampant." [1A p. 517].

In December of 2005 the *British Medical Journal* (online) published a shocking report by Peter Doshi, which created tremors through the halls of the CDC. Here is a quote from Doshi's report entitled *Are US flu death figures more PR than science?* found in the *British Medical Journal* (2005; 331:1412): "[According to CDC statistics], 'influenza and pneumonia' took 62,034 lives in 2001—61,777 of which were attributable to pneumonia and 257 to flu, and in only 18 cases was the flu virus positively identified." [51]. That's right, the flu only killed 257 people in the U.S. in 2001. You see, the CDC created and creates one overall category that combines both flu and pneumonia deaths. Why do they do this? Because they disingenuously assume the pneumonia deaths are complications stemming from the flu. This is an absurd assumption. Pneumonia has a number of causes. But, it allows the CDC to ramp up the flu death rates each year. Doshi continued his assessment of published CDC flu-death statistics: "Between 1979 and 2001, [CDC] data show an average of 1,348 [flu] deaths per year (range 257 to 3006)." [51]. These figures refer to flu *separated out* from pneumonia. Again, we see that death from flu are consistently low. Peter Doshi reveals another major piece of CDC fraud. Every year hundreds of thousands of respiratory samples are taken from flu patients in the US and tested in labs. Here is the kicker: only a small percentage of these samples show the presence of a flu virus. This means that most of the people in America who are diagnosed by doctors with the flu have no flu virus in their bodies—so they don't have the flu. Here's the exact quote from Doshi's review in the *British Medical Journal* entitled *Influenza: Marketing Vaccines By Marketing Disease* (2013; 346:f3037): "even the ideal influenza vaccine, matched perfectly to circulating strains of wild influenza and capable of stopping all influenza viruses, can only deal with a small part of the 'flu' problem because most 'flu' appears to have nothing to do with influenza. Every year, hundreds of thousands of respiratory specimens are tested across the U.S. Of those tested, on average 16% are found to be influenza positive." [51]. That's right, just 16% of flu cases are actually flu. In short, the CDC's figures on influenza are grossly inflated. Incidentally, each year the CDC gives out percentage figures for the effectiveness of the flu vaccine, for example, 45% effective overall in the U.S. in the 2019-20 flu season. But the above analysis shows that this is all a farce, for only about 16% of people who are diagnosed with the flu in the U.S. each year actually have the flu.

A 2009 survey of 1,017American registered nurses found that 41% of the respondents declined their flu shot citing adverse reactions and lack of effectiveness. In 2014, a group of 22,000 nurses spread over the US, calling itself Nurses Against Mandatory Vaccines, protested against hospitals requiring flu shots for employees. [29, chapters 4 and 14]. But shouldn't these 'irresponsible' health care workers get vaccinated to protect their patients? Here is the conclusion of the Cochrane Collaboration regarding the evidence for the flu vaccination of health care workers: "Our review findings have not identified conclusive evidence of benefit of HCW [Health Care Worker] vaccination programmes on specific outcomes of laboratory proven influenza, its complications…or all cause mortality in people over the age of 60 who live in care institutions." Again, a 2016 study found that when compliance of health care workers with the flu vaccine increased from 47 to 90 percent there was no significant reduction in hospital acquired flu by patients. [1A p. 524].

6.2. What is in the flu vaccines? *Multi-dose* flu vaccines such as Flulaval, Flucelvax and Afluria contain the preservative thimerosal which has 25 mcg of mercury [1b; 1d; 46]. This is 250 times above the level which the Environmental Protection Agency in the US regards as safe. [47]. Indeed, as discussed earlier, to some extent thimerosal is *still* present in a number of vaccines in "trace amounts" even those stated to be thimerosal free. [lb, 1d]. However, even trace amounts of thimerosal are up to 600 parts per billion (ppb).

However, 2 ppb is the safe limit in drinking water, and if something has 200 ppb it is considered a toxic hazard. [1b]. The flu shot at 25mcg contains the equivalent of 50,000 parts per billion of mercury. [1d]. Flu vaccines may also contain formaldehyde; the detergents polysorbate-80, octoxinol-9 or 10, sodium deoxycholate, Triton X-100 surfactant, squalene, MSG, antibiotics, embryonated chicken eggs, egg albium, dog kidney cells (MDCK), and nonylphenol ethoxylate. [29, chapter 12; 1A p. 533]. (Some of these toxic products were discussed in some detail in section 2 above.)

6.3. Considering its contents, not surprisingly many adverse reactions and deaths can and do result from flu vaccination. According to the information provided to doctors regarding Fluarix Tetra, one of the flu shots for 2018/2019, you have a 1 in 10,000 to 1 in 1,000 chance to get the following adverse effects: influenza-like illness; malaise; angioedema; neuritis, acute disseminated encephalomyelitis, Guillain-Barré syndrome (well documented in the literature [1A pp. 519-20]); allergic reactions (including anaphylactic reactions); seizures and transient lymphadenopathy; and a host of other adverse reactions with varying degrees of probability. Other conditions found to be caused by the flu vaccine and which have been compensated for include: vertigo, peripheral neuropathy, cerebellar ataxia, blindness, optic neuritis, multiple sclerosis, and transverse myelitis. [29, chapter 12]. A high incidence of narcolepsy, a sleep disorder, is also caused by flu vaccination. [1A p. 525-7].

6.4. The flu vaccine is the leading cause of damage awards by the Vaccine Court. 70% of all cases settled for injuries from vaccines have been in relation to flu shots. [17; 29, chapter 12]; although another estimate is roughly 50% of cases. [47]. Dr Hugh Fudenberg, a world-leading immunogeneticist, who has authored some 600 papers in peer-reviewed journals, found that if a person had five consecutive flu shots over a ten year period his or chance of developing Alzheimer's was ten times higher than people received two, one or no flu shots. He said that this was due to the aluminium and mercury in the shots. [18; 1A p. 518]. A 2017 CDC study links miscarriage to flu vaccines, particularly in the first trimester. A 2017 study by Donahue et al entitled *Association of Spontaneous Abortion with Receipt of Inactivated Influenza Vaccine H1N1 pdm09 in 2010-11 and 2011-12* found that pregnant women vaccinated in the 2010/2011 and 2011/2012 flu seasons in the US had two times greater odds of having a miscarriage within 28 days of receiving the vaccine. In women who had received the H1N1 vaccine in the previous flu season, the odds of having a miscarriage within 28 days were 7.7 times greater than in women who did not receive a flu shot during their pregnancy. An Australian study (Armstrong et al., 2011) found one in every 110 children under the age of five had convulsions following vaccination with the Fluvax H1N1 vaccine in 2009. [46; 47; 1A p. 272]. A 2017 study in the *JAMA Paediatrics* entitled *Association Between Influenza Infection and Vaccination During Pregnancy and Risk of Autism Spectrum Disorder* found a 20% increase in the autism rate of women vaccinated against flu in the first trimester of pregnancy—although the authors attempted to massage the result away using dubious statistical analysis. [1A p. 257]. The flu shot has *not* been tested on pregnant women or lactating mothers. [1b]. For example on the package insert of the Sanofi Pasteur H1N1 flu vaccine it states "Safety and effectiveness of Influenza A (H1N1) 2009 monovalent vaccine has not been established in pregnant women, nursing mothers or children less than six months of age." [1A p. 255]. The package inserts of all the other flu vaccines make similar statements. Further most of them say that the flu shot should be given to pregnant women "only if clearly needed". [1A pp. 272-3]. The FDA admits that there are no studies which show the safety of the flu shots for pregnant women. [1A pp. 273-4]. A 2017 study *Metal Neurotoxins; An Important Role In Current Neural Epidemics?* found that there was a significant increase in miscarriages in the US in the 2009-10 influenza season which was far greater in either prior or later years. During that season for the *first and last time* pregnant women were given *two* different mercury containing flu shots instead of one. The study called for the immediate removal of metals from all vaccines and, in particular, the removal of neurotoxic adjuvants. [1A p. 239-41]. Another study which looked at this dual administration of flu shots to pregnant women in the US during the 2009-10 influenza season was *Comparison of VAERS Foetal Loss Reports During Three Consecutive Flu Seasons: Was There A Synergistic Foetal Toxicity Associated with the Two-Vaccine 2009/2010 Season?* This 2013 study found that the incidence of miscarriage rose from 1.9 per million in 1990 to 2009 where pregnant women had one flu shot to 590 per million in 2009/10 when pregnant women had two flu shots! Completely in accord with the CDC's corrupt nature, the organisation knew about this increase and did nothing about it. [1A pp. 266-7].

Dr. George Lucier, Associate Director National Toxicology Program from 1969-2000, said "The developing foetus should NEVER be exposed to any amount of mercury, period!" [48]. A 2017 study entitled *Association between Influenza Infection and Vaccination During Pregnancy and Risk of Autism Spectrum Disorder,* and published in the *Journal of American Medical Association Paediatrics* found an elevated risk of autism in children whose mothers had a first trimester flu shot. [49]. All of this and yet the CDC and the American College of Obstetricians and Gynaecologists declare that flu vaccines are safe for and should be given to pregnant women! [1A p. 274-5]. A number of flu package inserts also state that the flu vaccine is not to be given to young children below 3, 4, or 5 years of age; and yet, again, the CDC recommends that children as young as six months get the flu vaccine including those with 25 mcg of mercury! [1A p. 277].

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References

Most of the above information comes from the following references. **The videos are on YouTube. (*Good i.e. relatively informative and accessible, places to begin.)**

1. **The Truth About Vaccines*. (7 part—labelled a-g in the notes—documentary series on vaccination produced by Ty Bollinger. This is a very clear, comprehensive and accurate presentation on vaccines—probably the best starting point.

1A. **Truth Will Prevail: 1,200 Studies That Refute Vaccine Claims* (Free e-book by Dr Alan Palmer at www.wellnessdoc.com. Easily the most comprehensive and referenced single study on vaccines.)

2. **Vaxxed: From Cover up to Catastrophe.* (This is a documentary of 1.5 hours showing the dangers of vaccines, and in particular, gives a history of the cover-up by the CDC of the studies which showed the statistically significant correlations between mercury in vaccines and autism.)
3. **Trace Amounts: Ethyl Mercury.* (A documentary of 1.5 hours of a similar nature to the previous one, but with more emphasis on the dangers of mercury in vaccines.)
4. *Former ER Physician Sounds Alarms on Vaccines*. (This video features Sherri Tenpenny, a doctor and former ER specialist at the forefront of the anti-vaccination movement in the US, giving a one hour introduction to the dangers of vaccines. Her website is vaxxter.com)
5. **Silent Epidemic: The Untold Story of Vaccines.* (One and half hour video containing interviews with a wide variety of health professionals, researchers and parents on the dangers of vaccines, and their lack of safety and efficacy.)
6. *Vaccination Causes Autism Say US Government and Merck's Director of Vacci*nes (An article outlining four ways in which vaccines contribute to autism. Found at www.childhealthsafety.wordpress.com)
7. *Vaccines Did Not Save Us – 2 Centuries Of Official Statistics* (Article providing abundant historical data to show that vaccines are *not* responsible for the great decline in infectious diseases and mortality. Found at www.childhealthsafety.wordpress.com)
8. *Why Is China Having Measles Outbreaks When 99% Are Vaccinated?* **(**Article found at www.childhealthsafety.wordpress.com)
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20. *Vaccinated vs. Unvaccinated: Mawson Homeschooled Study Reveals Who is Sicker*. (Article found at info.cmsri.org)
21. *Bill Gates and the World's Elite DO NOT VACCINATE Their Own Children… and for Good Reason.* (Article found at www.naturalnews.com)
22. *Full Measure: January 6, 2019 – The Vaccination Debate.* (Short 11 minute documentary by Sharyl Attkinsson exposing the cover-up of the causative link between vaccination and autism.)
23. *King of Vaccines Comes Clean.* (Short video of Dr Stanley Plotkin, a key figure in the production of new vaccines, testifying in court that vaccines some are produced in and contain aborted foetal tissue.)
24. *Japan's Medical Freedom: No Vaccine Mandate—Healthier Children*. (Article by Mac Slavo at www.Shtfplan.com)
25. *The Vaccine-Autism Controversy*. (Article by Tony Ryan in the *Gumshoe News* at www.gumshoenews.com)
26. *Ultimate Guide to the Dangers of Vaccines in Australia* (Article at *Tott News*, July 2018)
27. *Vaccine Choice Vaccine Injury.* (Half hour video of a presentation by Dr Judy Wilyman given at the University of Wollongong, her website is *Vaccination Decisions*.)
28. *20 Things You Didn't Know About Polio*. (Article)
29. **Vaccines: A Reappraisal*. (Book by Dr Richard Moskowitz, a family physician with some fifty years of experience. Published in 2107. Gives a very detailed, meticulously researched and updated coverage of the dangers of vaccines. Essential reading.)
30. **Fully Vaccinated vs. Unvaccinated—Part 1, 2 and 3*. (Articles by Robert F. Kennedy Jr. at *Children's Health Defense*, www.childrenshealthdefense.org)
31. *Flu Vaccine Fails Yet Again As New Wild Strain Appears Halfway Through Flu Season.* (Article by Ethan Huff at *Natural News*, wwwnaturalnews.com).
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37. *Meet Bill Gates.* (Video presentation at the Corbett Report.)
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50. *Who Is Bill Gates*? (Video documentary at the Corbett Report.)
51. *Corona: If They Lied Then, Why Wouldn't They Lie Now?* (Article by Jon Rappoport at nomorefakenews.com, 26/3/2020).
52. *Australian Vaccination Risks Network* at www.avn.org.au (An organisation providing information and guidance about problems with vaccinations in the Australian context.)