



DEADLY INJECTION: THE HIDDEN INGREDIENTS IN VACCINES

By Gary Null, PhD and Nancy Ashley, VMD, MS

November 30, 2011

For more than 100 years, Americans have lined up to take their vaccines. We have never questioned the safety and efficacy of these vaccines, and why should we? Vaccines are backed by the full faith and confidence of the entire scientific community, including the FDA, the CDC, the National Institute of Allergy and Infectious Diseases, and the American Academy of Pediatrics, and virtually all of the esteemed medical journals, including the British Medical Journal, the Lancet, and the Journal of the American Medical Association, have given their unconditional support to vaccines. Therefore, in fact, if any physician, scientist, journalist, or health activist ever challenges either the safety or efficacy of vaccines, they are immediately assaulted. The normal arguments are:

1. There are dozens of gold standard studies proving beyond a shadow of a doubt the safety and efficacy of every vaccine and every combination of vaccines.
2. There is an independent group of scientists at the FDA and the CDC that examines the childhood vaccine schedule to make sure it is appropriate.
3. There is no scientific proof that vaccines are dangerous.
4. On rare occasions, when someone does have an adverse reaction, it in no way affects the safety and efficacy for anyone else.
5. Virtually all major scourges -- polio, smallpox, and measles -- were eliminated by our vaccine program.

Well, I'm persuaded. But there is one little point – what if there is evidence that can prove that vaccines are neither safe nor effective for a given individual? For example, let's examine the ingredients. Analyzing the data from the finest peer-reviewed studies, are the ingredients non-toxic, non-allergic, non-stressing to the body's immune system? Oops! It seems we have a problem, Scotty.

A recent story in the Salem News should have made headlines across the country.¹ The reporter describes in detail how vaccines are contaminated with dangerous ingredients -- including cancer, viruses, and bacteria -- which translate into the creation of lifelong patients for the pharmaceutical industry. He cites statistics showing that the lifespan of Americans is decreasing in direct relationship to the increase of vaccines. Can it be true that all the vaccines are contaminated and always have been? How did this get covered up? Who was involved? Scientists, regulatory agencies, members of Congress in oversight positions, all were complicit in the conspiracy of silence and denial of accountability. But you won't find this story in the New York Times or any of the major media. It won't make a difference what this reporter said. It won't lead to health journalists advocating a change in vaccine policies. We won't have physicians and nurses changing their minds about the safety and efficacy of vaccines. Why? Because they are all part of the official story. They are part of the cult, with the cult-like mind set of true believers. And they must keep protecting the official story at all costs. This is not the way public health policies should be administered.

So at a time of year when vaccines are being pushed upon us from all sides, let's take a look at what is really in vaccines and how it got there.

THE HISTORY OF VACCINE CONTAMINATION

The common perception that vaccines are a safe, clean product is far removed from reality.

The early vaccinologists used technology which was in its infancy, created as they went along with very little thought for the consequences. How did they go about making vaccines in the first place? They started with virus samples, which they obtained primitively from actual cases of disease: polio virus came from a suspension of ground up backbone from a deceased polio victim, measles virus was obtained from a throat culture from a sick 11 year-old boy, mumps virus (the Jeryl Lynn strain) was taken from a throat culture from the daughter of famed vaccine developer, Maurice Hilleman², the hepatitis B vaccine was derived from infected human blood³, and so on. Of course, since all virus samples for vaccine manufacture were obtained from real life situations, they came with their own bacteria, viruses, and contaminants which were not sterilized away. It might be surprising for most people to learn that vaccines today are still based in these same primitive virus cultures.

Next, in order to produce vaccines for distribution it is necessary to have a large quantity of virus. Since viruses can only grow in a living medium, how could they propagate the viruses? Vaccines were developed by injecting live animals with viruses and then killing them to obtain enough infected tissue to grow large quantities of the virus. In the case of polio, it was the rhesus and African green monkeys that were used. As techniques improved, organs or cells of animals, as well as human tissue, were used, and we currently have vaccines propagated in chick fibroblast cells, chick embryos, chick retinal cells, monkey kidney cells, aborted human fetal lung fibroblast cells, chick kidney cells, mouse brain culture, rhesus fetal lung tissue culture, and sheep red blood cells, to name a few.⁴

Possibly the most bizarre substrate choice is the recently- approved Cervarix human papillomavirus vaccine by GlaxoSmithKline, which grows the virus in insect cells (*Trichoplusia ni*, the Cabbage Looper – a member of the moth family).⁵

Live-attenuated vaccines add yet more animal products to the mix by a process known as passaging.⁶ In order to reduce the virulence of a virus so that it won't immediately sicken the vaccine recipient, it is "passaged" by injecting the virus into a series of animals or animal cells – sometimes more than one type -- collecting fluid after the cell or animal appears infected, and repeating the process again and again into more subjects until the virulence is reduced. The consequence, of course, is that with each passage, more foreign cells, proteins, viruses, bacteria, and fragments of DNA are taken from their animal sources and end up in the vaccine.

Once scientists have obtained the virus they deem acceptable, this becomes the seed virus.

It is then nurtured with a variety of nutrients, including fetal calf serum, bovine extract, yeast, bovine serum albumin, and human serum albumin. Another animal-based product, porcine trypsin, is used earlier in the process to break down the virus to facilitate viral infection in tissue⁷.

But surely after they have obtained enough virus to make a vaccine, they purify the end product and filter all of this animal tissue out? Actually, no. There are many obstacles to any successful purification process: they can't risk destroying the virus they need for the vaccine, and they also can't filter out anything smaller than the virus itself.⁸ The result is that our vaccines are crude, unpurified products which cannot be separated from the debris of the cells on which they are grown. The limited tests for contaminants can identify some of the known pathogens, but mostly ignore the vast host of unknown, unstudied small particles and chemicals. How can they even evaluate unwanted viruses in vaccines or even know for sure what is there? The gold standard test to date is the polymerase chain reaction (PCR) which can detect small DNA fragments. The inherent problem, however, is that there has to be a known DNA segment that is unique to a certain pathogen in order for PCR to successfully identify it. PCR therefore could never be used to prove a vaccine to be pure because it cannot identify an unknown virus or contaminant. In many cases, safety or purity of a vaccine is tested by injecting it into animals and evaluating them for infection or tumor formation – a cumbersome, time-consuming, and ultimately unreliable method.

As we have seen repeatedly, manufacturers tend to look for a problem only after people are sickened by vaccines. Behind closed doors, many scientists in the field have expressed deep concern about the state of our vaccines. But even the Center for Biologics Evaluation & Research (CBER), which is the arm of the FDA responsible for monitoring vaccine safety, has stated that under current regulations they can only give recommendations to vaccine manufacturers. They have no control over how vaccines are made or what substrates or cells are used.⁹

We know that these potentially hazardous animal products are used intentionally by the manufacturers and are a part of vaccines. So let's talk about what has been found in vaccines that wasn't intended to be there.

ADVENTITIOUS AGENTS

Adventitious agents are microorganisms that have been unintentionally introduced into the manufacturing process of a vaccine and cause contamination. They can be infectious, inflammatory, or tumorigenic, and there are numerous examples throughout vaccine history of contamination with unexpected pathogens.¹⁰

Viruses:

Early on it was discovered that using animals or embryos in primary cell cultures resulted in many unwanted viruses ending up in the vaccines. Simian Virus 40 (SV40), discovered in the manufacture of the polio vaccine, is perhaps the best known of these viruses. Because both the Salk and the Sabin vaccines exclusively used monkey kidneys to produce poliovirus, both vaccines were completely contaminated with SV40, which was given to millions of children in the 1950s and 1960s. According to Dr. Ben Sweet, a Merck researcher at the time, "when we started growing the vaccines, we just couldn't get rid of the SV-40 contaminated virus. We tried to neutralize it, but couldn't."¹¹

Even the use of formaldehyde in the injectable (Salk) polio vaccine wasn't able to kill it.

SV40 is considered an oncogenic virus and it is actually used to induce cancer in the lab setting. The question is then: did widespread vaccination with SV40-contaminated vaccine in the 1950's and 1960's play a role in the exponential increase of cancer in the US? In fact, SV 40 has been isolated in many types of cancer, especially brain tumors, bone cancer, non-Hodgkin's lymphoma, and malignant mesothelioma – a cancer usually associated with asbestos.¹² Many researchers believe there is a connection. Although SV40 was ultimately eliminated from the polio vaccines, the other endogenous simian viruses present in monkey kidneys – along with their pathogenic potential -- have been completely ignored.

More recently, in 2010, both rotavirus vaccines were found to be contaminated with porcine circoviruses. Briefly withdrawing Rotarix by GlaxoSmithKline from the market for containing porcine circovirus 1 (PCV1), the FDA allowed it back in use after discovering that RotaTeg, the competing vaccine by Merck, contained both PCV1 and PCV2. Although PCV1 causes only mild disease in pigs, PCV2 causes a serious wasting disease in piglets which is usually fatal. Confronted with the only two rotavirus vaccines on the market both contaminated with circovirus, the FDA chose neither to investigate the potential hazard of this nor to stop giving the vaccine.^{13, 14} They instead threw up their hands and declared business as usual.

Reverse Transcriptase (RT):

Reverse transcriptase is an enzyme which allows DNA to be synthesized from an RNA template and be incorporated into a cell where it has not been previously, and is an integral factor in the function of retroviruses, such as HIV or the feline leukemia virus.¹⁵ In 1996, RT activity was discovered in the MMR vaccine, raising concerns that the vaccine had been contaminated with retroviruses which can cause both disease and initiation of cancer. The World Health Organization (WHO) was responsible for investigating this potential safety hazard. Did they withdraw the vaccine? Did they warn the public about possible risks? No.

Without telling the public, the WHO organized studies at certain laboratories which determined that the RT activity was associated with two endogenous avian retroviruses: EAV and ALV. The Avian Leukosis Virus (ALV) can cause cancer in birds, and theoretically

could infect the cells of vaccine recipients via RT and cause cancer in them as well. The test methods were not very reassuring: investigators attempted to infect human cells with ALV for only 48 hours before proclaiming that no merger of virus and human DNA had been observed. There was also the possibility that avian virus RT could combine with the live measles virus to create new mutant viruses, which likewise "had not been observed."

Researchers from the WHO were unable to study longer term consequences of the RT fragments in the MMR because the measles virus itself killed the growing culture within 3 or 4 days. So ultimately, the WHO decided that because there was no clear evidence that any harm had occurred thus far, they would leave the MMR vaccine as it was and not require the manufacturers to use a substrate that was RT-free. Since then, endogenous avian vaccines have likewise been found in all the egg-based vaccines -- influenza, yellow fever, and smallpox.¹⁶ -- and there has been little investigation into the significance or possible harm.

Bacteria:

It is known that many types of bacteria contaminate vaccines during manufacture, but in most cases this does not come to the attention of the public. In 2007, Merck had to recall 1.2 million doses of PedvaxHIB and COMVAX vaccines (Haemophilus Influenza type B and combined Haemophilus Influenza type B and Hepatitis B) because of bacterial contamination with Bacillus cereus, a gram positive bacteria that frequently causes food poisoning.¹⁷

The mycoplasmas are a large class of bacteria and are frequent contaminants of primary and continuous cell lines that are used to make vaccines. While many are harmless, others can cause serious disease in humans, including respiratory ailments and chronic fatigue-like symptoms. Mycoplasma contamination is a serious enough problem that the industry group, Parenteral Drug Association, created a separate Mycoplasma Task Force.¹⁸ The main source of mycoplasma infection for vaccine makers is cross contamination by infected cell culture used in the same laboratory.¹⁹

Mycoplasma also commonly infects chickens and eggs. While pathogen-free eggs are used to create vaccine virus seeds, the vaccines themselves are produced from commercial eggs.²⁰ Even though the flocks are regularly tested for a variety of avian pathogens, they only test for the two most common types of mycoplasma, which cannot protect against the host of other mycoplasmas that are common in chickens and eggs. Testing is discretionary, and instead, regulation tends to emphasize rigorous "downstream" inactivation protocols, using formaldehyde and other toxic chemicals to kill the bacteria they know are present.²¹

Cancer:

When the famous vaccinologist, Dr. Maurice Hillemann, created an adenovirus vaccine (for the military) from an intestinal cell line he believed to be from normal human tissue, he later found to his chagrin, after a few people had already received his vaccine, that the culture was completely contaminated with cervical cancer (HeLa cells).²² The cancerous cells had invaded his previously normal cells simply from being in the same laboratory.

Does this still happen today? You bet it does. Unfortunately, it seems impossible to completely prevent laboratory contamination from taking place.

Transmissible Spongiform Encephalopathy

Other pathogens potentially present in human vaccines and of great concern include transmissible agents of spongiform encephalopathy (TSE) from the use of bovine serum and albumin products, which could be contaminated with bovine spongiform encephalopathy (BSE).²³ Now referred to as "transmissible" agents, the name change is an acknowledgment that these prions could be transferred to people through vaccines. In fact, such instances have occurred, as in England in 2001 when two children in England who had received the same polio vaccine went on to develop Creutzfeldt-Jakob Disease.²⁴ Vaccine transmission through BSE had been suspected in Great Britain since the late 1980s, when many bovine herds became infected with the disease, but vaccines which could have been contaminated were not removed from the market until almost 10 years later. As frequently happens, those in charge made the decision not to withdraw vaccines initially -- not because there wasn't a risk of catastrophic illness, but because "the risk to public health through loss

of confidence in the vaccine program was greater than the remote theoretical risk associated with the use of bovine materials in vaccine.”²⁵

Examples of transmission involving TSE have likewise been documented in veterinary medicine, such as in 1997 when a number of sheep and goats in Italy developed scrapie (a type of spongiform encephalopathy) after having been vaccinated against *Mycoplasma agalactiae*.²⁶

So it is obvious that there are there many risks to injecting such a wide variety of animal cells into our bodies. Yet, not only has very little research has been done on this highly charged topic, but in fact, some scientists are pushing the envelope of the cautionary principle by intentionally combining human and animal cells with little regard for the consequences. An example of this is the RotaTaq rotavirus vaccine by Merck which came out in 2006. RotaTaq is a live, oral pentavalent vaccine that contains 5 live “reassortant” rotaviruses from human and bovine hosts, meaning that the viruses from humans and cows were taken apart and then combined to form a bovine-human hybrid.²⁷ We know that this vaccine has caused many serious adverse events, including the increased risk of intussusception,²⁸ but we don’t know about the longer term potential for harm from combining cells from cows and people.

Autoimmune Disorders

Another significant potential for harm from the injection of animal, bacterial, and viral cells is that extended immunostimulation by the foreign antigen could provoke chronic inflammation or autoantibody production. DNA fragments can be incorporated into the host cell and can cause the production of protein molecules that can cause autoimmune reactions. Considering the exponential increase in autoimmune diseases over the past 25 years, it is certainly reasonable to suspect that the large amount of foreign proteins injected into our bodies through vaccination is playing havoc with the ability of our immune systems to function adequately. There are also instances of certain vaccines causing a specific autoimmune response, such as the suspected association is between the Haemophilus influenza B vaccine and type 1 diabetes, which has been on the increase following widespread use of this vaccine.^{29,30} Another example is the connection between the Hepatitis B vaccine and multiple sclerosis.³¹ Dr. Phillip Krause of the FDA chaired the committee that licensed the chickenpox vaccine, and was concerned at the time about the possible connection between the vaccine and subsequent autoimmune disease. But instead of calling for a serious scientific inquiry, the FDA asked Merck to look for evidence of an autoimmune response associated with the DNA that was included in that vaccine.³² Of course, Merck found no such association, and the matter was dropped.

Recombinant Vaccines

There are currently a few recombinant vaccines on the market: the human papillomavirus vaccine, Gardasil, and Hepatitis B vaccines, Recombivax and Engerix. Gardasil is prepared from virus-like particles of the four HPV types grown separately in yeast and then recombined.³³ As we discovered just in September 2011, viral DNA has been found in Gardasil, with the possibility that the vaccine not only could cause infection with HPV, but viral DNA could be integrated into the recipient’s chromosomes and turn on cancer genes!³⁴

CELL CULTURE TECHNOLOGY: WHERE ARE WE NOW?

In recent years vaccine manufacturers have been using newer technologies to make vaccines without the use of live animals or eggs (primary cells). Yeast is widely in use, as are two types of human diploid cells: MRC-5 and WI-38, which are lung fibroblasts cultured from two different aborted fetuses.³⁵ Cell line vaccines still carry the original risk of contamination in the animal cells they were taken from, plus the chance of acquired contamination in laboratory conditions over the years that the cells have existed.

Regarding human diploid cells, many people who have strong ethical objections to abortion no doubt would be shocked to learn that they are injecting cells grown on aborted fetuses into themselves and their children with every MMR, Hepatitis A, Chicken pox, and Herpes Zoster vaccine, or any vaccine combination that includes them.³⁶

Immortalized Cells

The current emphasis is on cells that can grow indefinitely. The “immortalized” or “transformed” cell line -- in use through Vero cells created from African green monkey kidneys for the polio vaccine -- are cells which were normal but became transformed in the laboratory to live forever. These are not normal diploid cells: they have an abnormal number of chromosomes, will grow indefinitely in culture, but are known to form tumors after a certain number of passages used in vaccine manufacture. In other words, if these cells are used for too long, they will cause cancer. In Vero cells, for example, testing has showed that after 127 – 140 passages in agar, tumors will start to form.³⁷ For vaccine manufacturers, the risk of causing cancer through vaccines is worth taking: the cells are easier to use than primary cells, less labor intensive, and the cost of production per vaccine is substantially reduced. But how does the vaccine recipient feel about taking this risk? So far, almost no one receiving the inactivated polio vaccine is aware of this information because there is no such thing as informed consent in the world of vaccines.

Residual DNA

Despite precautions in manufacturing vaccines, it is inevitable that animal DNA and culture-contaminating viruses will end up in the final vaccine. Primary cells and immortalized cells have been found to contain viral genomes and harbor latent viruses. Studies show that viral genomic DNA is at least as infectious and tumorigenic when incorporated into cell substrate as it when directly injected.³⁸ Is there a risk that these stray proteins could be incorporated into the vaccine recipient’s own DNA resulting in abnormal gene transcription? Absolutely! Are there any safeguards against this? Not really. The WHO has set guidelines for the use of animal cells in cell line technology based vaccines, which limit the amount of cellular DNA to 10 nanograms per dose (up from 100 picograms per dose), but they acknowledge that manufacturers will have difficulty meeting this standard, and that they don’t have the authority to enforce it.³⁹ And this guideline, by the way, is completely arbitrary. There is no scientific data to show that no harm will come to a vaccine recipient who only received 10 nanograms of foreign DNA. Furthermore, a child receiving 9 vaccines in one day would be getting at minimum of 90 nanograms of DNA injected directly into his body if they were all made using the cell line technology. Keep in mind, however, that the current vaccines made on primary cells have no recommended limit for residual DNA, so the situation is already dire.

Swiss pharmaceuticals giant, Novartis, recently completed a state of the art vaccine manufacturing plant on 400 acres in Holly Springs, North Carolina, largely funded by our tax dollars (\$767 million from HHS), and with free land and tax abatements courtesy of the state of North Carolina. What do they intend to manufacture there? The plant was designed to use cell line technology to respond faster than is currently possible to a pandemic. Novartis will be able to make up to 150 million seasonal influenza vaccines without being constrained by having to order sufficient chickens to produce enough eggs to make the vaccines – essentially a commitment that needs to be made a year in advance. Instead of using eggs, Novartis will be using MDCK cells, as soon as they get official approval from the FDA.⁴⁰ It is unclear why approval has not been forthcoming, but the Vaccine and Related Biological Products Advisory Committee (VRBPAC) of the FDA expressed concern that tests so far have been inconsistent in determining how tumorigenic the MDCK cells are, which poses a regulatory challenge.⁴¹ In the meantime, the plant will also have the ability to make the flu vaccine with eggs.

So what are MDCK cells? MDCK cells are another line of immortalized cells, in this case from the kidney of a cocker spaniel.⁴² Will this be more difficult for people to accept on an emotional level if they find out that their flu vaccine came from a dog -- man’s best friend?

Also, the flu vaccine will be live-attenuated, so any virus, bacteria, or oncogenic potential will be injected directly into the vaccine recipients. Now in addition to the endogenous simian and avian viruses we are exposed to, we’ll be subjected to canine viruses as well!

There are no safety assays for new, novel viruses, and pathogenicity often takes years to establish. If all of this isn’t frightening enough, vaccine manufacturers have already planned the next phase of vaccine manufacture after immortalized cells when they intend to

use actual cancer cells!43,44

So despite the supposedly advanced scientific methods used in vaccine manufacture, we can clearly see that vaccine development is based more on the commitment to vaccinate as many children and adults with as many different vaccines as possible than on proper scientific inquiry, analysis, and a commitment to health. The vast majority of any vaccine consists of unknown fragments, DNA, viruses, bacteria, animal and human cells. Many of them contain ingredients such as eggs, yeast, and now insects, which can cause an anaphylactic reaction in allergic individuals. Clearly, neither the vaccine manufacturers nor the regulatory agencies charged with protecting us want to entertain any challenge to the current system or consider the consequences of this contamination. Why is there such haste to rid the world of all infectious diseases, most of which in the face of proper nutrition and sanitation are minor, and might actually help our overall health by strengthening our immune systems naturally? Is there any evidence that the number of vaccines we are expected to give our children and ourselves will stop increasing year after year? Is this drive to vaccinate motivated by pure greed -- the billions of dollars to be made? It seems that we have allowed a vaccination industry to become much like the military-industrial-complex -- it cannot be touched, questioned, or changed.

Vaccines are supposedly given for the greater good, and our current program requires that the highest possible number of people be vaccinated with full knowledge that many will become chronically ill, disabled, and even die. But what of those among us who want the right to chose NOT to take the risk that our own immune system might not be up to the challenge of so much stimulation? Since vaccination became commonplace from the 1950s to our present day, the health of the average American has gotten worse, and as a nation we have become sicker and sicker. Chronic fatigue, depression, allergies, asthma, attention deficit disorders, autism, rheumatoid arthritis, multiple sclerosis, diabetes, Parkinson's, Lou Gehrig's disease, lupus, asthma, fibromyalgia, IBS -- we are plagued with a host of debilitating, chronic diseases that tend not to kill us quickly, but leave us disabled and dysfunctional: dependent on the pharmaceuticals industry to keep us going. We know that we are destroying our own natural immune systems by relying on vaccines to briefly and incompletely protect us against certain bacteria and viruses, but what else is happening to us by allowing ourselves to be injected with this witches' brew of degradation products? Are we too sick to notice that there is a problem? Time will tell, but how much time do we have?

Endnotes:

1. Edmonson S, "All the Vaccines are Contaminated -- Every Last One of Them," November 29, 2011, Salem-News.com.
2. Peltola, H. et al, "Mumps Outbreaks in Canada and the United States: Time for New Thinking on Mumps Vaccines," *Clinical Infectious Diseases* 2007:45 (15 August)
3. Roberts, Janine, *Fear of the Invisible*, Impact Investigative Media Productions, 2008
4. *ibid*
5. Cervarix Package Insert, GlaxoSmithKline
6. Roberts, Janine, *Fear of the Invisible*, Impact Investigative Media Productions, 2008
7. Seitz, C, et al, "Trypsin Promote Efficient Influenza Vaccine Production in MDCK cells by interfering with the Antiviral Host Response," *Applied Microbiology and Biotechnology*, 2011 September 14.
8. Transcript for Public Hearing November 19, 1998: Vaccines and Related Biological Products Advisory Committee Meeting
9. *ibid*
10. *ibid*
11. Miller NZ, "The polio vaccine: a critical assessment of its arcane history, efficacy, and

- long-term health-related consequences." *Medical Veritas I* (2004) 239-251.
12. Vilchez RA, "Simian Virus 40 in Human Cancers," *American Journal of Medicine*; 2003 June 1;14(8); 675-84.
13. Victoria JG, "Viral Nucleic Acids in Live-Attenuated Vaccines: Detection of Minority Variants and an Adventitious Virus," *Journal of Virology* 2010 June; 84(12); 6033-6040.
14. *Medscape Medical News, Medscape Today*, May 7, 2010.
15. BALTIMORE, DAVID, "Viral RNA-dependent DNA Polymerase: RNA-dependent DNA Polymerase in Virions of RNA Tumour Viruses," *Nature* 226, 1209 - 1211 (27 June 1970); doi:10.1038/2261209a016. Transcript for Public Hearing November 19, 1998: Vaccines and Related Biological Products Advisory Committee Meeting
17. Merck December 11, 2007, Dear Dr. letter announcing details of recall
18. Hough, E. " Task Force Corner: Size, Workload Distinguishes PDA's Mycoplasma Task Force," stagingpda.
19. How Do Mycoplasmas Enter My Cell Culture?" Bionique Testing Laboratories, biunique.com
20. Wilson-David SA, et al "Evaluation of Mycoplasma Inactivation during Production of Biologics: Egg-Based Viral Vaccines as a Model," *Applied and Environmental Microbiology*, May 2010, p. 2718-2728 "
21. Potts, Barbara, "Buyer Beware: Are You Reducing the Risk of Adventitious Agents in Your Raw Material," *Pharma IQ* September 28, 2011, pharma-iq.com.
22. Transcript from, "Evolving Scientific and Regulatory Perspectives on Cell Substrates for Vaccine Development," September 7, 1999.
23. Vorbert I, et al, "Susceptibility of Common Fibroblast Cell Lines to Transmissible Spongiform Encephalopathy Agents," *Journal of Infectious Diseases*, 2004; 189; 431-9.
24. Poulter, Sean, "Two CJD victims linked to the same polio vaccine," *dailymail.co.uk*, December 18, 2001.
25. Barnett A, "Children exposed to CJD infection risk from vaccines," [The Guardian](#), Saturday 29 May 1999.
26. Caramelli, M, et al, "Evidence for the Transmission of Scrapie to Sheep and Goats from a Vaccine Against Mycoplasma Agalactiae," *Veterinary Record*, 2001 April 28; 148 (17); 531-6.
27. Merck, RotaTeq Package Insert
28. Australian Government Department of Health and Ageing, "Rotavirus vaccination and risk of intussusception;" February 25, 2011.
29. Wahlbert J, et al, "Vaccinations May Induce Diabetes-related Autoantibodies in One-Year-old Children," *Annals of NY Academy of Sciences*, 2003 Nov; 1005; 404-8.
30. Classen JB, Classen DC, "Clustering of Cases of Insulin Dependent Diabetes Occurring Three Years After Haemophilus Influenza B Immunization Supports Causal Relationship Between Immunization and IDDM," *Autoimmunity* 2002 Jul; 35 (4); 247-53.
31. *Jane Doe v. Secretary of the Department of Health and Human Services*, January 16, 2009
32. Transcript for Public Hearing November 19, 1998: Vaccines and Related Biological Products Advisory Committee Meeting
33. Merck, Gardasil Package Insert
34. SANE Vax Inc. Reports Human Papillomavirus DNA Contamination in Gardasil To FDA, Requests Public Safety Investigation, *Business Wire*. Sept. 6, 2011.
35. Vaccine Excipient and Media Summary, [cdc.gov](#).
36. *ibid*.
37. Sheets R, "History and Characterization of the Vero Cell Line," *CBER*, May 12, 2000.
38. Transcript for Public Hearing November 19, 1998: Vaccines and Related Biological Products Advisory Committee Meeting.

39. *ibid*

40. Tenpenny S, "Novartis is Celebrating – Should We?" December 10, 2009, [rense.com](http://www.rense.com)

41. Background Summary for the September 25, 2008, VRBPAC Meeting: Use of MDCK Cells for Manufacture of Live Attenuated Influenza Vaccine.

42. *ibid*.

43. Transcript from, "Evolving Scientific and Regulatory Perspectives on Cell Substrates for Vaccine Development," September 7, 1999.

44. [Merten OW](#). "Development of serum-free media for cell growth and production of viruses/viral vaccines--safety issues of animal products used in serum-free media." [Dev Biol \(Basel\)](#). 2002;111:233