One million U.S. children, and about 30 million worldwide, have already received GlaxoSmithKline's Rotarix vaccine. Now a research team has discovered it is contaminated with "a substantial amount" of DNA from a pig virus.

What is pig virus DNA doing in a vaccine intended to prevent rotavirus disease, which causes severe diarrhea and dehydration?

It's anybody's guess, although CNN reported that GlaxoSmitthKline detected the substance in the cell bank and the seed used to make the vaccine, "suggesting its presence from the early stages of vaccine development."

It is actually common for vaccines to contain various animal matter, including foreign animal tissues containing genetic material (DNA/RNA), but even FDA Commissioner Dr. Margaret Hamburg told CNN:

"It [Pig virus DNA] should not be in this vaccine product and we want to understand how it got there.

It's not an easy call and we spent many long hours debating the pros and cons but, because we have an alternative product and because the background rates of this disease are not so severe in this country, we felt that the judicious thing to do was to take a pause, to really ask the critical questions about what this material was doing in the vaccine, how it got there."

Disturbing Findings in Rotarix and Two Other Common Childhood Vaccines

Dr. Eric Delwart is the researcher who, along with colleagues, made the discovery of contamination in Rotarix. Their intent was reportedly to "show that live attenuated vaccine only contained the expected viral genomes and no other," but what they found told a different story.

Using new technology to test eight infectious attenuated viral vaccines, the results showed three of the vaccines contained "unexpected viral sequences":

1. A measles vaccine was found to contain low levels of

the retrovirus avian leukosis virus

2. Rotateq, Merck's rotavirus vaccine, was found to contain a virus similar to simian (monkey) retrovirus
3. Rotarix (GlaxoSmithKine's rotavirus vaccine) was found to contain "significant levels" of porcine cirovirus 1

So in their tests, nearly 40 percent of the vaccines they tested contained viral contaminants. The implications of these findings on the alleged safety of the vaccine supply remains to be seen, but clearly there is contamination occurring that was a complete surprise to researchers, health officials and vaccine manufacturers alike.

As Barbara Loe Fisher, founder of the National Vaccine Information Center (NVIC), said in her commentary on the Rotarix contamination issue:

"There are lots of questions about how the manufacturer of Rotarix vaccine and the FDA both missed the pig virus DNA contaminating the original seed stock and all doses of Rotarix vaccine given to more than one million American children in the past few years.

Is there state-of-the-art technology that is being used by private laboratories but not by drug companies and the FDA?

Why did the independent team of scientists, who found the contamination, notify the vaccine manufacturer first rather than also immediately reporting their finding directly to the FDA?

What about the significance of finding bird viral DNA in measles vaccine and the monkey viral DNA in RotaTeq vaccine?"

There are clearly a lot of unanswered questions right now. At the very least, it certainly makes you wonder what other "unknown" contaminants are lurking in vaccines. At worst, we could be injecting children with substances that could potentially cause serious health problems down the road.

Animal Ingredients Common in Vaccines

You should know that it is very common for vaccine manufacturers to use cells from animals and birds in their manufacturing process.
To put this in perspective, Barbara Loe Fisher has explained what animal material is par for the course in manufacturing the Rotarix vaccine for your children:
"Rotarix is a genetically engineered vaccine that GSK created by isolating human rotavirus strain infecting a child in Cincinnati and using African Green monkey kidney cells to produce the original viral seed stock from which all Rotarix vaccine has been made.
In the FDA licensing process, Rotarix had to meet certain FDA standards, that included demonstrating the vaccine was not contaminated with, for example TSE (Transmissable Spongiform Encephalopathy or "mad cow" disease, a brain wasting disease) or with cow viruses because bovine (cow) serum was used to prepare the original viral seed stock. Porcine trypsin, an enzyme in the pancreatic juice of a pig, was also used to make the viral seed stock."
So the fact that Rotarix contains animal material is not a surprise … it's the *type* of animal material, an unexpected variety, that has even the FDA raising their eyebrows.

Why it's Dangerous to Have Various Animal DNA in Vaccines …

Both the FDA and GlaxoSmithKline spokespeople continue to state that no safety risk has been uncovered from the contamination, at least not yet.
Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases at the National Institutes of Health, said "a substantial amount" of the DNA was found in the vaccine. But, he stressed, "there is no evidence that it causes any disease. … There is no evidence that it ever does anything."
Dr. Paul Offit added, "The PCV1 virus they found is an orphan virus, i.e., it is not associated with disease".

Of course there are no studies provided or have ever been done to show this, it doesn't stop them from making these statements without any facts to back up their safety assurance, despite the fact that SV40 from monkeys has been associated with cancer in multiple studies.

History has shown that it can indeed be very dangerous when an animal virus unintentionally enters the vaccine supply.

During the 1950s and 1960s, the polio vaccine, which is still given in the United States, typically four times during a child's first 16 months of life, was widely contaminated with the monkey virus, SV40, which had gotten into the vaccine during the manufacturing process (monkey kidney cells, where SV40 thrived, were used to develop polio vaccines). In lab tests, the virus was found to cause several different types of cancer, including brain cancer, and now SV40 is showing up in a variety of human cancers such as lung, brain, bone and lymphatic.

According to the authors of The Virus and the Vaccine: The True Story of a Cancer-Causing Monkey Virus, Contaminated Polio Vaccine, and the Millions of Americans Exposed, leading scientists and government officials turned their heads to repeated studies showing that SV40 was in the vaccine, and even today some well-known agencies are still dismissing study results.

The virus is even showing up in children too young to have received the contaminated vaccine, and some experts are now suggesting the contaminated virus may have been in the polio vaccine up until as late as 1999.

It is because of risks like this that Barbara Loe Fisher said: *"With mounting evidence that cross-species transfer of viruses can occur, the United States should no longer be using animal tissues to produce vaccines."*

This is also the same reason why Donald Miller, a cardiac surgeon and professor of surgery at the University of

Washington, suggests in his more User-Friendly Vaccination Schedule that if you choose to get your child vaccinated against polio, you request only an inactivated (dead) virus vaccine that is cultured in human cells, not monkey kidney cells.

The United States no longer uses the live oral polio vaccine, so parents don't really have to ask for the injected version. However, if you live internationally, this is still an issue.

Are the Benefits of Rotarix Worth the Risks?

Even without a potential contamination scare, there are serious risks to every vaccine. So before vaccinating you really need to be certain that the benefits will outweigh those risks.

In the case of Rotarix, along with RotaTeq (a similar vaccine made by Merck), the benefits are very questionable, especially if you live in the United States or another developed country.

Rotavirus is very contagious and does cause more than 500,000 deaths in young children each year, but this is mostly in developing countries. In the United States, rotavirus is responsible for only “several dozen” deaths a year, according to Hamburg.

Typically, when a child in the United States contracts rotavirus, and most do, only rest and fluids are required to recover. This infection also provides natural immunity that will protect your child for life.

As NVIC writes

“The CDC estimates that, by age 3, almost every US child has had a case of rotavirus. Once a child has been infected with a strain of rotavirus, he or she develops antibodies and is either immune for life or has a milder case if infected with that same strain in the future.

Most healthy children, who are infected with several strains of rotavirus in the first few years of life, develop lifelong natural immunity to rotavirus infection.”

The rotavirus vaccine, meanwhile, has shown little benefit for rotavirus rates in the United States. According to NVIC:
"Today, even though almost all US infants receive vaccines for rotavirus, and despite efforts to improve the management of childhood rotavirus-associated diarrhea, hospitalizations of children in the U.S. with the disease have not significantly declined in the past two decades."
Along with showing little benefit for a disease that is typically entirely treatable with fluids and rest, a recent drug review by the FDA found that Rotarix is associated with a significant increase in pneumonia-related deaths in children, compared to a placebo.
So with this particular vaccine, children are taking on serious risks with what appears to be very little benefit -- and that was before the contamination was uncovered.
The moral of the story?
Whatever you do, please do your homework before subjecting your children to any vaccine. A great way to get started is to simply use the Search Feature at the top of each of my Web pages and search my site as it contains a litany of research on vaccine safety, and the lack thereof.