# Diphtheria, tetanus & pertussis – Sudden death "Experiments to produce anaphylactic shock are facilitated by addition of pertussis vaccine to the solution: the mice (or rabbits, or hamsters, or whatever) die more rapidly, and in larger numbers. By the same token,

addition of the vaccine to the sterile brain and spinal cord solution greatly enhances it's ability to generate an allergic encephalitis."

# Harris Coulter (Vaccination, Social Violence, and Criminality: The Medical Assault on the American Brain)

**D** iphtheria, pertussis and tetanus (DTP) vaccine is a cocktail of toxoids in one single shot.

When the vaccine is being manufactured, it's actually manufactured as three separate vaccines: a diphtheria vaccine, a pertussis vaccine and a tetanus vaccine. After they have all been made, they are then combined into one single vial.

In the production process of the diphtheria vaccine, only the toxins are extracted from bacteria and used. The toxins inside *Corynebacterium diphtheriae* are proteins called exotoxins. These proteins help the bacterium grow. After the exotoxins finish their job they are released.

Unfortunately for we humans, when the exotoxins are released inside our body, they can be harmful. They destroy our cellular production of proteins and this eventually kills the cells.

When manufacturing the tetanus vaccine, the toxins from *Clostridium tetani*, *diphtheriae's* cousin, are extracted and used. These toxins enter our body when we puncture our skin, such as when we step on a rusty nail. Just like *diphtheriae*, *C. tetani* is harmless without its toxins. *C. tetani* produces two toxins, but we're only interested in the harmful one, tetanospasmin, which takes away our muscles' ability to relax by blocking nerve signals.

The third vaccine added to this triple combination vaccine is called *Bordetella pertussis*. This one behaves quite differently to the other two. Instead of utilizing exotoxins, it contains endotoxins. Endotoxins are an actual part of the cell wall. When the bacterium dies, the cell wall breaks and the toxins leak into the surrounding environment.

*Pertussis* has three components that can make us sick. One of them is the cyclase toxin (CyaA), which causes the infamous whopping cough. Another

one is the pertussis toxin (PT toxin), which attacks the macrophages in our throat, and the last one is filamentous hemagglutinin (FHA). This one's a sticky son of a gun.

The sticky mucous substance, hemagglutinin, allows the bacteria stick to our mucosal lining. This makes it difficult to breathe, especially for a tiny baby with narrow airways.

Now let's think about this for a second and summarize what we know so far. When a natural infection occurs, the germ becomes trapped in our mucosal tissue where immunoglobulin A (IgA) antibodies attack and produce memory immunity. In a vaccine injection, these toxins are not entering the body via mucosal lining in its natural state within the bacteria. Rather, they are injected straight into the bloodstream as toxoids.

### The death DTaP

We were surprised to see Sudden Infant Death Syndrome (SIDS) mentioned on a few of the package inserts. After some digging, we realized some argue SIDS is connected to the pertussis toxoids while others claim there are not enough cases to substantiate any such correlation.

One common adverse reaction, not only as a reaction to the DTaP vaccine, but many others as well, is apnea. Another one is cyanosis. So, we wondered whether this could be one of the many times where the wording confuses the consistency of diagnosis.

How would apnea and cyanosis be confused with SIDS? Apnea is the absence of breathing. Cyanosis occurs when the skin or tissues don't receive enough oxygen and turn blue. When a baby dies with its skin turning blue and/or not breathing could it be diagnosed with SIDS?

There are cases where apnea or cyanosis occur and is caught in time to resuscitate the baby (and baby survives). These cases will then, of course, not be counted as SIDS. Does that mean they shouldn't be a part of the statistics in the warning section of SIDS in adverse events? Aren't the symptoms of SIDS the same as a child with apnea or cyanosis up to the point of resuscitation?

The only reason someone needs to be resuscitated is because he or she ceased to breathe. Are we missing something? Is it safe to say that if a baby's death is attributed to apnea, it died from SIDS? If the baby's death is attributed to apnea and not SIDS, does that lower the SIDS deaths stats?

In the 1970s, Japan experienced multiple infant deaths claimed to be caused by the DPT vaccine. This was quite concerning for the Japanese Government. So, by making some adjustments to Eli Lily's own vaccinerecipe, they made a purer and safer acellular pertussis vaccine. Japan started using this new vaccine in 1981.

Although this incident was widely reported and well known, the US kept using the more reactive version of the vaccine. Not surprisingly, perhaps, by the mid-1980s in the US, the side-effects from the DTP vaccine had triggered about 300 lawsuits against the vaccine manufacturers.

Authors of another study, this one done in India, conclude that there is no association between SIDS and DTP vaccine. Something we found a little odd was that they exclude all the children who had "any history of risk of SIDS in family or to child" [407]. What makes us curious about this exclusion, is, would these children have been excluded from receiving vaccination if they were not a part of the study?

It seems to be a consistent flaw in study trial designs that they don't include those at higher risk in the test (vaccine) group. This, of course, makes sense, but it's also very misleading. It biases the study towards falsely high safety results.

A research paper on Infant Mortality Rates (IMR), states that 'Crib death', which is another term for SIDS, used to be so unheard of. It wasn't even recorded in the 'infant mortality statistics' [408].

### The authors continue:

"For the first time in history, most US infants were required to receive several doses of DPT, polio, measles, mumps, and rubella vaccines. Shortly thereafter, in 1969, medical certifiers presented a new medical term—sudden infant death syndrome. In 1973, the National Center for

Health Statistics added a new cause-of-death category—for SIDS—to the ICD. [...] By 1980, SIDS had become the leading cause of postneonatal mortality (deaths of infants from 28 days to one year old) in the United States." [409].

The authors also mention conclusions drawn in other research papers as well. For instance, they state that in Australia it was found "when the SIDS rate decreased, deaths attributed to asphyxia increased." [410]

Could this be another case of wide selection of diagnosis?

In the early 2000s, SIDS was replaced by diagnoses like 'suffocation in bed' and 'unknown causes'. Not surprisingly, less children suffered from SIDS after that [411].

Although their study or conclusion isn't about whether the vaccines cause SIDS, they found that: "nations that require more vaccine doses tend to have higher infant mortality rates." [412]

How safe do the FDA and the CDC feel this vaccine is? This question relates to a study that was funded by these two organizations. The conclusion of this study isn't necessarily their official standing on the matter. The authors used the Vaccine Adverse Event Reporting System (VAERS) to collect data on adverse events in relation to the DTaP vaccine from January 1, 1991 through December 31, 2016 [413].

The authors of the study were not surprised to find SIDS to be the most prevalent since SIDS is "the fourth leading cause of death in the United States among infants" and according to the Vaccine Safety Datalink (VSD), it's "the second leading cause of death among children aged 0 to 18 months." [414] They continue by explaining how the incidence of SIDS has actually gone down with time and don't believe the DTaP vaccine is the causal factor for SIDS.

Keep in mind that all cases of adverse events from vaccinations reported to the FDA are believed to be less than one percent of all actual cases [415]. Despite this, in a 15-year period, with less than one percent of adverse events reported, 844 deaths of children who received the DTaP vaccine were

officially acknowledged. They also found official records for 725 of these deaths, which they categorized under *Cause of Death*. In their list of reasons, SIDS was highest with 350 deaths (48.3%). *Undetermined and Other* (causes) equaled 119 deaths (16.4%).

Their argument is that rather than it being the vaccine causing SIDS, it's merely a coincidental factor as it happens to be administered together with multiple other vaccines and at an age when children are most likely to die from SIDS.

# Viral awakening

Apart from SIDS, there have been other incidences of death from this vaccine. As you may remember, formaldehyde (FA) is used to inactivate the toxins. It does this by randomly destroying some of the surface proteins. Unfortunately, because formaldehyde isn't coded for specific proteins, we have no idea which proteins it will break.

An incident involving the use of formaldehyde is the 1948 Kyoto Disaster in Japan. Some 606 children received a vaccine containing the diphtheria toxoid. Something happened during the manufacturing that caused the toxoid to 'wake up' and revert back to its original toxin. This caused 68 of the 606 children to die. That's more than 10%. Imagine if there had been hundreds of thousands of children vaccinated.

Authors of a paper that summarized a workshop on neurological effects of vaccines state:

"[...] there is sufficient experimental data to implicate both endotoxin and PT [pertussis toxin] in adverse neurologic reactions to pertussis vaccine." [416].

In 2018, a paper on 'the Pertussis Enigma' the authors explain that:

"According to 2008 estimates, pertussis caused 16 million cases and 195 000 deaths in children younger than 5 years old worldwide, despite a global 82% vaccine coverage." [417].

## They continue:

"whole-cell and acellular pertussis (aP) vaccines do not protect against transmission and that waning of infection- or vaccine-derived immunity generates an endemic pool of adults, who act as a reservoir of transmission to young children." [418]

The authors set out to look into the validity of these statements. They collected data from 32 countries, and only four (Australia, Israel, Netherlands, U.S.A) had increased incidences in pertussis from 1980 to 2012. The authors include graphs showing the 20 countries that switched from whole cell pertussis vaccine to the acellular pertussis vaccine, to see if there was a shift in incidence of disease. Interestingly, they were unable to find a solid answer.

The data is not consistent between all the countries. What seems to apply in one country doesn't necessarily apply in another.

Besides the four countries mentioned above (four countries which actually showed a steady incline in pertussis incidence), Italy had a drastic decrease in pertussis cases. South Korea continued to see a drop in cases after they switched over to acellular pertussis, but then suddenly, a decade later, the number of cases rose steadily.

The authors' overall conclusion, after reviewing all their data, is that there isn't enough consistency to draw even a hypothetical conclusion on the vaccine's behavior [419].

We don't know if DTaP plays a role in SIDS, but we do find the circumstantial correlations undeniable. It would be interesting to pull the same data from other countries and compare their vaccine schedules with SIDS or similar infant deaths. Another aspect that would be interesting to look into is adding the vaccine brand used in each of these countries or cases.