

Claims about mRNA vaccines evaluate based on scientific evidence: HB 371

1. **"The mRNA vaccines have caused enormous numbers of deaths, disabilities, and serious adverse events."**
 - **Scientific Evidence:** This claim is **not supported** by rigorous scientific studies. Large-scale clinical trials and post-market surveillance have shown that mRNA vaccines (such as Pfizer-BioNTech and Moderna) have a strong safety profile. While rare adverse events (e.g., myocarditis in young males) have been reported, regulatory agencies worldwide, including the CDC, FDA, WHO, and EMA, have found no evidence of "enormous numbers of deaths."
2. **"No long-term studies have been completed regarding fertility, teratogenicity, mutagenicity, or oncogenicity."**
 - **Scientific Evidence:** While long-term studies are still ongoing, **current evidence does not suggest any risk to fertility, DNA integrity, or cancer development.** Studies and real-world data, including those tracking pregnant individuals, have **not** found increased risks of birth defects, infertility, or mutagenic effects.
3. **"Recipients are not given informed consent."**
 - **Scientific Evidence:** In most countries, including the U.S., informed consent is a standard practice before vaccine administration. Healthcare providers discuss benefits, risks, and potential side effects. While some critics argue about transparency in early vaccine rollouts, legal and ethical requirements for informed consent are in place.
4. **"The mRNA vaccines may integrate into the human genome and be passed onto the next generation."**
 - **Scientific Evidence:** This claim is **false**. mRNA vaccines do not alter DNA. The mRNA in vaccines does **not** enter the nucleus, where human DNA is stored. It degrades quickly after instructing cells to produce a harmless spike protein to trigger an immune response.
5. **"The mRNA vaccines are contaminated with DNA, metallic particles, and other unknown nanoparticles."**
 - **Scientific Evidence:** This claim is **misleading**. Quality control measures by manufacturers and regulatory agencies ensure that vaccines meet strict purity standards. While trace amounts of residual DNA fragments may be present from the manufacturing process, they are well below harmful thresholds. Claims about "metallic particles" or "unknown nanoparticles" are based on misinformation and have not been substantiated by peer-reviewed research.
6. **"The mRNA vaccines may shed to others and cause side effects or harm."**
 - **Scientific Evidence:** This claim is **false**. Unlike live virus vaccines, **mRNA vaccines do not contain live viruses** and therefore **cannot shed** to others. The spike protein produced by cells after vaccination remains localized and does not spread to others.

Conclusion: The claims in the provided text **are not scientifically proven** and contain misinformation about mRNA vaccines. Multiple regulatory agencies, peer-reviewed studies, and real-world data confirm the **safety and efficacy** of mRNA vaccines.