COVID-19 Vaccines & Fetal Cell Lines

In various stages of vaccine development and manufacturing, some of the COVID-19 vaccines used cells originally isolated from fetal tissue (often referred to as fetal cells), some of which were originally derived from an aborted fetus. The use of fetal cell lines is a very sensitive and important topic within some faith communities and among individuals with concerns about the ethics of using materials derived in this way.

It is important to make an informed decision regarding COVID-19 vaccination. For those with questions or concerns about the use of fetal cell lines in vaccine development, please view the information presented in this handout and keep the following considerations in mind when making your vaccine decision:

- COVID-19 vaccines are a safe and effective way to protect yourself from getting seriously ill, being hospitalized, and even dying from the virus.
- Getting vaccinated not only protects you, but may also protect your family, friends, and those in our community most vulnerable to severe disease from COVID-19.
- The risks and benefits of COVID-19 vaccination will vary from person to person, and individuals may want to consider discussing this with their own healthcare provider.
- Several religious and bioethics groups have reviewed and commented on the ethical considerations of receiving the current COVID-19 vaccines. Many of those considerations are cited below.
- If you decide to receive a vaccine, you may need to search your area if you have a preference on which COVID-19 vaccine you receive.
- Individuals may want to consider having a personal conversation with their faith leader or someone experienced in bioethics.

**Why are fetal cells used to make vaccines?**

Historical fetal cell lines were derived in the 1960’s and 1970’s from two elective abortions and have been used to create vaccines for diseases such as hepatitis A, rubella, and rabies. Abortions from which fetal cells were obtained were elective and were not done for the purpose of vaccine development.

The fetal cell lines being used to test or manufacture the COVID-19 vaccines are from two sources:

- HEK-293: A kidney cell line that was isolated from a fetus in 1973 ([undisclosed origin](#), from either a spontaneous miscarriage or an elective abortion)
- PER.C6: A retinal cell line that was isolated from an aborted fetus in 1985.

Any vaccine that relies on these historic cell lines will not require nor solicit new abortions.

To develop and manufacture some vaccines, pharmaceutical companies prefer human cell lines over other cells because 1) viruses need cells to grow and some human viruses tend to grow better in cells from humans than animals (because they infect humans), 2) fetal cells can be used longer than other cell types, and 3) fetal cells can be maintained at low temperatures, allowing scientists to continuing
using cell lines from decades ago. While fetal cell lines may be used to develop or manufacture COVID-19 vaccines, the vaccines themselves do not contain any aborted fetal cells. A comprehensive list of COVID-19 vaccines in development and any connection to abortion-derived cell lines is available here.

**Were the Pfizer and Moderna COVID-19 vaccines developed using fetal cell lines?**

The mRNA COVID-19 vaccines produced by Pfizer and Moderna do not require the use of any fetal cell cultures in order to produce or manufacture the vaccine.

Early in the development of mRNA vaccine technology, fetal cells were used for “proof of concept” (to demonstrate how a cell could take up mRNA and produce the SARS-CoV-2 spike protein) or to characterize the SARS-CoV-2 spike protein.

The Pfizer and Moderna vaccines were found to be ethically uncontroversial by the pro-life policy organization the Charlotte Lozier Institute. Further, the Secretariat of Pro-Life Activities, a committee within the United States Conference of Catholic Bishops, has stated: “neither Pfizer nor Moderna used an abortion-derived cell line in the development or production of the vaccine. However, such a cell line was used to test the efficacy of both vaccines. Thus, while neither vaccine is completely free from any use of abortion-derived cell lines, in these two cases the use is very remote from the initial evil of the abortion...one may receive any of the clinically recommended vaccines in good conscience with the assurance that reception of such vaccines does not involve immoral cooperation in abortion.”

**Was the Johnson & Johnson (Janssen Pharmaceuticals) COVID-19 vaccine developed using fetal cell lines?**

The non-replicating viral vector vaccine produced by Johnson & Johnson did require the use of fetal cell cultures, specifically PER.C6, in order to produce and manufacture the vaccine. The Catholic Church and the Southern Baptist Ethics & Religious Liberty Commission have both stated that receiving a COVID-19 vaccine that required fetal cell lines for production or manufacture is morally acceptable. The U.S. Conference of Catholic Bishops goes further and has stated: “receiving a COVID-19 vaccine ought to be understood as an act of charity toward the other members of our community. In this way, being vaccinated safely against COVID-19 should be considered an act of love of our neighbor and part of our moral responsibility for the common good...Given the urgency of this crisis, the lack of available alternative vaccines, and the fact that the connection between an abortion that occurred decades ago and receiving a vaccine produced today is remote, inoculation with the new COVID-19 vaccines in these circumstances can be morally justified.”

On March 2nd, 2021, the U.S. Conference of Catholic Bishops issued a statement which addressed the use of Johnson & Johnson’s COVID-19 vaccine. The Bishops stated: “if one can choose among
equally safe and effective COVID-19 vaccines, the vaccine with the least connection to abortion-derived cell lines should be chosen. Therefore, if one has the ability to choose a vaccine, Pfizer or Moderna's vaccines should be chosen over Johnson & Johnson’s...While we should continue to insist that pharmaceutical companies stop using abortion-derived cell lines, given the world-wide suffering that this pandemic is causing, we affirm again that being vaccinated can be an act of charity that serves the common good.”

The Catholic Church has stated, “Those who, however, for reasons of conscience, refuse vaccine produced with cell lines from aborted fetuses, must do their utmost to avoid, by other prophylactic means and appropriate behavior, becoming vehicles for the transmission of the infectious agent. In particular, they must avoid any risk to the health of those who cannot be vaccinated for medical or other reasons, and who are the most vulnerable.”

**Was the Novavax COVID-19 vaccine developed using fetal cell lines?**

The Novavax COVID-19 vaccine did not require the use of any fetal cell cultures in order to produce and manufacture the vaccine.

The Novavax COVID-19 vaccine was found to be ethically uncontroversial by the Charlotte Lozier Institute. Further, a spokesperson of Novavax has stated: "No human fetal-derived cell lines or tissue, including HEK293 cells, are used in the development, manufacturing or production of Novavax’s COVID-19 vaccine candidate, NVX-CoV2373.”

The Charlotte Lozier Institute determined that early in the development of Novavax COVID-19 vaccine, fetal cell lines were used for confirmatory lab tests. Specifically, the Institute cites an article published in Science, which discusses a structural analysis conducted for the Novavax COVID-19 vaccine. Novavax’s response to the article stated: “The reference in the Science paper to HEK-293 cells was based on well-established scientific knowledge, did not include our vaccine protein, and is completely independent of Novavax COVID-19 vaccine development.” The vaccine manufacturer has made repeated claims that HEK-293 was not used in testing NVX-CoV2373.

**Some Perspective on the Topic.**

In the discussion of COVID-19 vaccines, some have gone so far as to reject the vaccine because it has been developed, tested or manufactured using fetal cell lines. The truth is, many of our life-saving drugs and everyday products have been tested on, produced in, or developed using fetal cell lines. To start, many over-the-counter pain relievers, like Tylenol (acetaminophen), Advil/Motrin (ibuprofen), and Aleve (naproxen) have used fetal cell lines in one way or another. Additionally, many prescription drugs have been tested using fetal cell lines, like Lipitor, Albuterol, Prilosec OTC, and Azithromycin, to name a few. Many drugs that have been widely circulated online and on social media as suggested treatments for COVID-19, such as hydroxychloroquine and ivermectin, have been tested using fetal cell lines (WARNING: ivermectin and hydroxychloroquine are NOT FDA-authorized or -approved for the treatment of COVID-19. Talk to your healthcare about COVID-19 treatment options based your health status). For consistency, those who reject COVID-19 vaccines
because they have been developed, tested or manufactured using fetal cells lines should consider rejecting the use the aforementioned everyday products, as well.

While it is understandable that persons who object to abortion for moral reasons may advocate for not using fetal cells derived from an abortion in the production or development of COVID-19 vaccines, we must remember that these vaccines save lives. Again, the Catholic Church in their deliberations on this issue note that the good achieved by preserving or lengthening life, outweigh the very remote connection to the once past abortion from which these cell lines are derived to save lives during the pandemic.

**Where can I find more information?**

Some religious groups and bioethics institutes that oppose the use of aborted fetal cells in the development or manufacturing of vaccines have noted that individuals may ethically receive these vaccines when there are no ethically derived alternatives. For more information from these groups on this issue, check out the following links:

- [Children's Hospital of Philadelphia Vaccine Education Center Handout](#)
- [National Catholic Bioethics Center](#)
- [Pontifical Academy of Life Statement](#)
- [United States Conference of Catholic Bishops](#)
- [The Vatican – Congregation for the Doctrine of the Faith](#)
- [The North Dakota Catholic Conference](#)
- [Charlotte Lozier Institute](#)
- [The Pillar – The ultimate Catholic coronavirus vaccine morality explainer](#)
- [American Muslim Health Professionals – COVID-19 Vaccines](#)