

# COVID-19 Vaccine – Should Catholics Vaccinate Using an Ethically Compromised Vaccine?

Kevin McGovern & Kerri Anne Brussen

ISSUE SIXTY-ONE AUGUST 2020 THE NATHANIEL REPORT

## The History of Vaccines

Edward Jenner is considered the father of vaccinology. He pioneered the world's first vaccine, which was for smallpox. Caused by a virus, smallpox was a serious disease which killed about three in ten of the people who contracted it and left many others with severe scars. Smallpox was mainly spread by direct, lengthy face-to-face contact between people. Virus from an infected person spread to another when they coughed or sneezed. Over the centuries, smallpox killed literally millions of people. Jenner observed that milkmaids who became infected with cowpox did not subsequently contract smallpox. In 1796, Jenner inoculated a young child with cowpox, and demonstrated that the child had developed immunity against smallpox. It is said that through this discovery, Jenner saved more lives than anyone else has ever done. Through ongoing vaccination programmes, smallpox was eradicated in 1979.<sup>1</sup> Vaccination has also greatly reduced the risk of infection for many other diseases for much of the world's population, including rubella, polio, whooping cough, diphtheria, mumps, chicken pox, measles, and tuberculosis. Although these diseases are still present in some parts of the world, many parents today have the great gift of not worrying when the next outbreak might ravage their local neighbourhood and their children.

## The COVID-19 Pandemic

This year, 2020, on March 11, a pandemic was declared by the World Health Organisation. There has not been such a world pandemic since the Spanish Flu just over one hundred years ago. Coronavirus 19 or COVID-19 has caused havoc across the world. Infections and deaths are occurring at a disturbing rate.

COVID-19 belongs to a family of viruses which includes the severe acute respiratory syndrome (SARS) virus (as well as several bat coronaviruses). The Middle East respiratory syndrome (MERS) virus, another coronavirus, appears more distantly related.<sup>1</sup> In the seventeen years since the SARS outbreak of 2003, no vaccine has become available.<sup>2</sup>

COVID-19 is a highly infectious virus spreading between people when an infected person is in close contact with others. Transmission can occur through saliva, respiratory secretions or secretion droplets, which can be released from the mouth or nose when an infected person coughs, sneezes, speaks, or sings. Uninfected people who are in close contact (within 1 metre) with an infected person can be infected with COVID-19 when those infectious droplets get into their mouth, nose or eyes. Transmission can also occur through touching objects or surfaces contaminated with COVID-19.<sup>3</sup>

The COVID-19 pandemic now poses a significant threat to global public health, economic stability and growth, food security and environmental issues. As seen so far, the pandemic has claimed hundreds of thousands of lives with the potential to claim many more. It is placing, and will continue to place, an enormous strain on global health care systems. Social distancing and different levels of lockdown can help to reduce the spread of COVID-19. However, these measures come at enormous social and economic costs to all aspects of society.

*Human cell lines are one type of cell line that supports the growth of COVID-19. One of the sources used for these cell cultures is tissue from deliberately aborted fetuses. This can pose a significant moral quandary for Catholics and others. Catholic teaching upholds the principle of the inviolability of human life and forbids direct abortion.*

Some of the major challenges of this pandemic are the lack of a safe and effective vaccine and a lack of treatments in lieu of a vaccine. Scientific knowledge is growing daily to understand more fully the transmission of infection, including the potential for transmission by asymptomatic infected people, the disease trajectory, who is more susceptible to infection, and the longer-term health implications of a COVID-19 infection. The long-term protection provided by the immune response either from a COVID-19 infection or potential vaccine is still unknown. The requirement for boosters if a vaccine is developed is yet to be determined.

Vaccination is considered one of the best exit strategies for fighting the COVID-19 pandemic, and a race has begun to develop an effective vaccine. As of 10<sup>th</sup> August 2020, there are 28 candidate vaccines in clinical evaluation, and 139 in pre-clinical development.<sup>4</sup>

### **The Origin and Development of Vaccines**

Vaccines can be produced by growing the virus in a cell line or another substrate. They can also be developed through replicating viral vectors, subunit vaccines, mRNA and DNA techniques, as well as through production of a non-replicating viral vector. Companies in the race to develop a vaccine are utilising one or more of these techniques. (It should be noted that no commercial vaccine has yet been licensed utilising mRNA, DNA or non-replicating viral vector techniques.<sup>5</sup> COVID-19 may be the first.)

*...someone who refused an ethically compromised COVID-19 vaccine could catch the virus, have the potential to be asymptomatic, and infect others, who could become seriously ill with the possibility that they may die. By refusing a vaccine when available, one could therefore perhaps be directly responsible for the death of another.*

Human cell lines are one type of cell line that supports the growth of COVID-19. One of the sources used for these cell cultures is tissue from deliberately aborted fetuses. This can pose a significant moral quandary for Catholics and others. Catholic teaching upholds the principle of the inviolability of human life, and forbids direct abortion. What is more, Catholic teaching opposes the use of tissue from deliberately aborted fetuses.<sup>6</sup> On this matter, it is also worth noting that the use in medical research of human foetal tissue from elective abortions was restricted in the United States last year.<sup>7</sup> Vaccines which have been produced using cell lines from deliberately aborted fetuses are often known as ethically compromised vaccines.

Two cell lines derived from elective abortions are PER.C6 and HEK-293. Both these cell lines are being utilised by a small number of research facilities who are in the process of developing a COVID-19 vaccine. HEK-293 is a kidney cell line widely used in research and industry. The foetus was aborted in about 1972. PER.C6 was developed from retinal cells from an 18-week-old foetus aborted in 1985.<sup>8</sup> The cells used today in the potential vaccine manufacture are cells that are descended from the cells that were originally sourced from the foetal material. Thus, while their lineage can be traced back to the foetuses, the cells in use today are not the cells from the aborted foetus.<sup>9</sup> Further, if a COVID-19 vaccine is produced through the use of these cell lines, the vaccine will not contain cells or DNA pieces that are recognisably human. The cells are killed as the virus grows in them, usually bursting the cell membrane. The process of vaccine purification removes cell debris as well as any growth reagents.<sup>10</sup>

### **Catholic Teaching and Ethically Compromised Vaccines**

The Vatican has issued a number of documents to guide Catholics in their response to ethically compromised vaccines. In 2005, the Pontifical Academy for Life (PAL) issued *Moral reflections on vaccines prepared from cells derived from aborted human foetuses*. The issue of ethically compromised cells is also considered in the Congregation for the Doctrine of the Faith's 2008 *Instruction Dignitas Personae on certain bioethical questions*. The Pontifical Academy for Life dealt with this issue again in its 2017 *Note on Italian Vaccine Issue*. All these documents apply a Catholic principle called the principle of cooperation to the issue of the production and utilisation of ethically compromised vaccines.

The Catholic Church is not dismissive of the problem of ethically compromised vaccines. To the contrary, the Church has a clear and consistent position which includes three important points.

1. First, when a choice exists between an ethically compromised vaccine and another vaccine which is not ethically compromised, we have a grave responsibility (all other things being equal) to use the latter vaccine.
2. Second, when only ethically compromised vaccines are available, we should make known our moral objection to these vaccines, lobbying governments and healthcare systems to prepare and make available vaccines which are not ethically compromised.
3. Third, until ethically uncompromised vaccines are developed, we can and should use ethically compromised vaccines to prevent serious health risks both for ourselves and for everyone. The Pontifical Academy for Life stated this third point very clearly in 2017. It said that "we believe all clinically recommended vaccinations can be used with a clear conscience... the moral responsibility to vaccinate is reiterated in order to avoid serious health risks for children and the general population."<sup>11</sup>

The 2005 document from the Pontifical Academy for Life contained a noteworthy footnote. It noted that rubella can cause "grave congenital malformations in the foetus when a pregnant woman enters into contact, even if it is brief, with children who have not been immunised and are carriers of the virus. In this case, the parents who did not accept the vaccination of their children become responsible for the malformations in question, and for the subsequent abortion of foetuses, when they are discovered to be malformed."<sup>12</sup> Parents in this situation are of course only indirectly responsible for these abortions.

## Ethically Compromised COVID-19 Vaccines and Moral Responsibility

However, someone who refused an ethically compromised COVID-19 vaccine could catch the virus, have the potential to be asymptomatic, and infect others, who could become seriously ill with the possibility that they may die. By refusing a vaccine when available, one could therefore perhaps be directly responsible for the death of another. If only an ethically compromised vaccine is available, the truly pro-life decision is to vaccinate with that vaccine, not infect others, and save lives.

If someone chooses not to be vaccinated, they are instead reliant on others to be immunised so that a society can reach a sustainable level of herd immunity through which transmission is interrupted. In this situation, an unimmunised person may be protected against COVID-19 through the acceptance of vaccination by others. However, there are both practical and ethical problems with this. John Grabenstein reported that sociologists refer to those who do not vaccinate as “free-riders” or “free-loaders.” He added that such behaviour is “inequitable and uncharitable.” Further, “if enough people ‘free-load,’ then the community’s collective immunity dissipates and disease outbreaks resume.”<sup>13</sup> To refuse a COVID-19 vaccine would therefore be “a morally wrong act contrary to the common good.”<sup>14</sup> The World Health Organisation in 2019 listed ‘Vaccine Hesitancy’ as one of the ten major global threats.<sup>15</sup>

*The World Health Organisation in 2019 listed “Vaccine Hesitancy” as one of the ten major global threats.*

Dr Helen Watt, a senior research fellow with the Anscombe Bioethics Centre in Oxford wrote a briefing paper in April 2020.<sup>16</sup> The paper admits that there is “no absolute duty” to boycott a COVID-19 vaccine developed using a cell line derived from an aborted foetus. However, it argues that “some will feel, whether rightly or wrongly, called to a boycott [of such a vaccine] even if no alternative vaccine is available to them.” We believe that this comment is not pro-life and potentially dangerous as it may encourage people not to vaccinate. While Dr Watt may be pressuring vaccine companies to utilise ethical methods for vaccine production, encouraging the boycotting of an ethically compromised COVID-19 vaccine is quite dangerous.

In this pandemic, could Catholic researchers or a Catholic research institution use ethically compromised cell lines for development of a COVID-19 vaccine? There may indeed be proportional reasons for doing so. Some compromised vaccines have been used effectively for many years. Researchers may be very familiar with these cell lines, know the techniques of using them, and knowing the outcomes which are most likely. In this crisis, they may reasonably decide that they do not have neither the time nor the financial resources to develop and adequately characterise ethically uncompromised cell lines or to utilise other techniques to develop a vaccine. They may also belong to an international consortium in which they have little influence on the cell line used for vaccine development. They should not forget about the need to develop uncompromised cell lines, but they may reasonably not seek to do so during this time of crisis.

If they do use ethically compromised cell lines, they should recognise the ethical problems with them, and also state their proportional reason for using them during the pandemic. As the *Code of ethical standards for Catholic health and aged care services in Australia* states, we minimise the risk of scandal by “explaining clearly... the reasons for one’s cooperation [i.e. in this case, the use of a cell line derived from an historical abortion] and why the... cooperation is permissible according to Catholic principles.”<sup>17</sup>

## Conclusion

Developing ethically uncompromised cell lines and vaccines is important. In the crisis of this pandemic, developing and using an effective vaccine so as to save lives is even more important. If a COVID-19 vaccine is developed using a cell line derived from an aborted foetus, the Catholic Church would surely permit the use of this vaccine, and Catholics should not hesitate to use it. Saving lives was just what Edward Jenner set out to do, and saving lives is still very important.

*Kevin McGovern is a Catholic priest. He is a former Director of the Caroline Chisholm Centre for Health Ethics in Melbourne, Australia. He is an adjunct lecturer at both Australian Catholic University, and Catholic Theological College within the University of Divinity.*

*Kerri Anne Brussen has worked as a medical scientist, and is a former Researcher at the Caroline Chisholm Centre for Health Ethics.*

---

<sup>1</sup> <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19-epidemiology-virology-and-prevention>.

<sup>2</sup> <https://theconversation.com/fast-covid-19-vaccine-timelines-are-unrealistic-and-put-the-integrity-of-scientists-at-risk-139824>.

<sup>3</sup> <https://www.who.int/news-room/q-a-detail/q-a-how-is-covid-19-transmitted>.

<sup>4</sup> <https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines>.

<sup>5</sup> <https://www.chop.edu/centers-programs/vaccine-education-center/making-vaccines/prevent-covid>.

<sup>6</sup> <https://www.cha.org.au/images/resources/Code%20of%20ethics-full%20copy.pdf>, II.3.27.

<sup>7</sup> <https://www.sciencemag.org/news/2020/06/abortion-opponents-protest-covid-19-vaccines-use-fetal-cells>.

<sup>8</sup> <https://www.sciencemag.org/news/2020/06/abortion-opponents-protest-covid-19-vaccines-use-fetal-cells>.

<sup>9</sup> <https://catholicethics.com/forum/dealing-with-the-coronavirus/>.

<sup>10</sup> <https://www.chop.edu/centers-programs/vaccine-education-center/vaccine-ingredients/fetal-tissues>.

<sup>11</sup> <http://www.academyforlife.va/content/pav/en/the-academy/activity-academy/note-vaccini.html>.

<sup>12</sup> <https://www.immunize.org/talking-about-vaccines/vaticandocument.htm>.

<sup>13</sup> John D. Grabenstein, "The Value of Immunization for God's People," *National Catholic Bioethics Quarterly* 6, no. 3 (2006): 433-442 at 436-437.

<sup>14</sup> <https://catholicethics.com/forum/dealing-with-the-coronavirus/>.

<sup>15</sup> <https://www.who.int/news-room/feature-stories/ten-threats-to-global-health-in-2019>.

<sup>16</sup> <http://www.bioethics.org.uk/images/user/covidbriefing2.pdf>.

<sup>17</sup> <https://www.cha.org.au/images/resources/Code%20of%20ethics-full%20copy.pdf>, II.8.6.

All online resources were accessed on 11 August 2020.