

Is it true that there are vaccines produced using aborted fetuses?

Some of the vaccines currently used to prevent diseases such as rubella, measles, rabies, poliomyelitis, hepatitis A, chickenpox or smallpox are produced using tissues from human abortions.

The vaccines consist of dead or attenuated live viruses that are introduced into the patient's body to activate the body's defences against that virus without becoming ill. Thus, if the patient subsequently enters into contact with the live virus, it will be unable to infect him, since he has the necessary defences to cope with it, i.e. he is immunised.

To prepare the vaccines, the viruses must be cultured in cells in the laboratory. The ethical difficulty appears when *these cells come from surgically-aborted human foetuses*. Similarly, the viruses themselves can be obtained from aborted foetuses that have been infected with a particular virus. An article published in 2008 in [Cuadernos de Bioetica](#) includes detailed information on the different cells and viral strains originating from these sources.

Cells used and vaccines produced using aborted fetuses

The most widely used foetal cells are WI-38 and MRC-5. The WI-38 cells were derived by Leonard Hayflick in 1962 from the lung of a 3-month female foetus [2]. The initials WI refer to the Wistar Institute, a body of the University of Pennsylvania, Philadelphia, and number 38 to the foetus from which the cells were obtained. The MRC-5 cells were obtained in 1966 from the lungs of a 14-week male foetus [3]. The initials MRC indicate Medical Research Council, a body from London. Other cells derived from surgically-aborted foetuses are: WI-1, WI-3, WI-11, WI-16, WI-18, WI-19, WI-23, WI-24, WI-25, WI-26, WI-27, WI-44, MRC-9, IMR-90, and R-17 (obtained from lung); WI-2, WI-12 and WI-20, (skin and muscle); WI-5 (muscle); WI-8 and WI-14, and WS1 (skin); WI-4, WI-9, WI-10, WI-13 and WI-15 (kidney); WI-6, WI-21 and WI-22 (heart); WI-7 (thymus and thyroids), WI-17 (liver); FHs74Int (small intestine); and PER.C6 (retina)¹.

Among the currently used vaccines derived from these cell types are:



- Measles, mumps and rubella. Vaccines against rubella initially used virus strains not cultured in human cells, notably the HPV77DE5 and Cendehill vaccines, cultured in animal cells. However, the virus is currently cultured in WI-38 or MRC-5 cells. Furthermore, the RA 27/3 strain of the virus is used, which was obtained from the kidney of an aborted foetus whose mother had contracted the disease. Thus, both the virus and the cells in which they are cultured come from surgically-aborted human foetuses. Vaccines for measles and mumps have also been created using human foetal cells. Combined vaccines against measles-mumps-rubella (MMR, triple vaccine) can have all three components cultured in human foetal cells.



- Rabies. An example of an anti-rabies vaccine cultured in MRC-5 cells is Imovax Rabies. Another anti-rabies vaccine, Merieux, is cultured in WI-38 cells. Rabipur is an alternative vaccine produced in chicken embryonic cells.



- Chickenpox and herpes zoster. The vaccines Varilix and Varivax against chickenpox, ProQuad, a combined vaccine against chickenpox, rubella, measles and mumps, and Zostavax against herpes zoster, are also produced in various cells obtained from aborted human fetuses.



-Hepatitis A. The vaccines Vaqta, Havrix, Avaxim and Epaxal are cultured in MRC-5 cells. In the vaccine Twinrix, against hepatitis A and B, the hepatitis A component is also cultured in these cells, as with Vivaxim, a combined vaccine against hepatitis A and typhoid fever.

Ethical questions

The fact that certain **vaccines are cultured in cells derived from aborted fetuses raises several ethical questions** about material complicity with an immoral act, namely [abortion](#). This must be assessed, not just to give scientists answers on how to conduct research in this field, but also patients themselves, who may find themselves faced with the dilemma of having to choose between their health (or that of their children) and their moral integrity.

Is it immoral or hypocritical to benefit from something that is condemned as an evil? Or, on the other hand, since the abortions have already been performed and there is no going back, is it not right to take advantage of the good that can be derived from these abortions? In that case, though, would it be promoting the use of aborted fetuses for research? And what happens if the abortion has not been induced but has occurred spontaneously, i.e. a miscarriage? Is it licit for the parents to donate its body to science? In this case, would the moral implications of the use of the derivatives be lessened?

Those who defend these controversial vaccines argue that, since the abortions were events separated in time, agency, and purpose from vaccine production, their use would be ethically acceptable [4].

Nevertheless, although the WI-38 and MRC-5 cells were previously obtained, the truth is that obtaining cells from aborted fetuses for use in stem cell research is not a fact from the past, but something that also occurs today^{1,4}.[\[5\]\[6\]\[7\]](#). It is for this reason that accepting products of this type could be said to promote this industry, since there is no practical but only theoretical opposition.

As regards the agency and the purpose, section 35 of the Instruction [Dignitas Personae \[8\]](#) on the use of human "biological material" (see Biological Status of the Embryo [HERE](#)) of illicit origin states that the criterion of independence "is not sufficient to avoid a contradiction in the attitude of the person who says that he does not approve of the injustice perpetrated by others, but at the same time accepts for his own work the 'biological material' which the others have obtained by means of that injustice. When the illicit action is endorsed by the laws which regulate healthcare and scientific research, it is necessary to distance oneself from the evil aspects of that system in order not to give the impression of a certain toleration or tacit acceptance of actions which are gravely unjust. Any appearance of acceptance would in fact contribute to the growing indifference to, if not the approval of, such actions in certain medical

and political circles". Therefore, it is not licit for scientists to participate in this type of research (see more about experimentation with human embryos [HERE](#)).

The instruction adds: "within this general picture there exist differing degrees of responsibility. Grave reasons may be morally proportionate to justify the use of such 'biological material'. Thus, for example, danger to the health of children could permit parents to use a vaccine which was developed using cell lines of illicit origin, while keeping in mind that everyone has the duty to make known their disagreement and to ask that their healthcare system make other types of vaccines available".

The [Pontifical Academy for Life](#) agrees with these opinions, and points out that there is a grave responsibility to use alternative vaccines, not linked to procured abortions in their production, and when these do not exist, their use is licit but everything possible must be done to obtain an alternative vaccine [\[9\]](#).

In the hypothetical case that the fetuses used had been aborted spontaneously, not induced, the problem of moral complicity with abortion would disappear. However, the Instruction [Donum vitæ](#) states that "The corpses of human embryos and fetuses, whether they have been deliberately aborted or not, must be respected just as the remains of other human beings. In particular, they cannot be subjected to mutilation or to autopsies if their death has not yet been verified and without the consent of the parents or of the mother. [...] Also, in the case of dead fetuses, as for the corpses of adult persons, all commercial trafficking must be considered illicit and should be prohibited" [\[10\]](#).

Thus, in the case of spontaneous abortions, their donation to science may be licit, in the same way as in the case of a corpse or organs of a person already born. Nevertheless, there must be consent from the parents and the foetus should be treated with utmost respect. Furthermore, whenever there is an alternative, it is better to use it and not resort to using these fetuses.

[1] Redondo Calderón JL. Vacunas, biotecnología y su relación con el aborto provocado. *Cuad Bioet.* 2008 May-Aug;19(66):321-53.

[2] <https://www.lgcstandards-atcc.org/Products/All/CCL-75.aspx#characteristics>

[3] <https://www.lgcstandards-atcc.org/Products/All/CCL-171.aspx#characteristics>

[4] Zimmerman, RK. Ethical analyses of vaccines grown in human cell strains derived from abortion: arguments and Internet search. *Vaccine.* 2004 Oct 22;22(31-32):4238-44.

[5] Kent J. The fetal tissue economy: from the abortion clinic to the stem cell laboratory. *Soc Sci Med.* 2008 Dec;67(11):1747-56. doi: 10.1016/j.socscimed.2008.09.027. Epub 2008 Oct 22.

[6] Pfeffer N. How work reconfigures an 'unwanted' pregnancy into 'the right tool for the job' in stem cell research. *Sociol Health Illn.* 2009 Jan;31(1):98-111. doi: 10.1111/j.1467-9566.2008.01117.x. Epub 2008 Dec 16.

[7] Ma B, He LF, Zhang YL, Chen M, Wang LL, Yang HW, Yan T, Sun MX, Zheng CY. Characteristics and viral propagation properties of a new human diploid cell line, Walvax-2, and its suitability as a candidate cell substrate for vaccine production. *Hum Vaccin Immunother.* 2015;11(4):998-1009. doi: 10.1080/21645515.2015.1009811.

[8]

http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20081208_dignitas-personae_sp.html

[9] http://www.academiavita.org/_pdf/documents/pav/moral_reflections_on_vaccines_en.pdf

[10] Congregación para la doctrina de la fe, Instrucción *Donum vitæ*, I, 4: AAS 80 (1988), 83.



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