



# IN VITRO FERTILIZATION



In this report, we discuss the ethics of assisted reproductive technologies and the impact of in vitro fertilization (IVF) on those involved in the process. IVF presents serious risks to both the birth mother and children. We conclude with policy recommendations that protect human dignity.

The birth of Louise Brown on July 25, 1978 changed the world of reproductive medicine. Louise was the world's first child born through IVF. Forty years later, more than 8 million babies throughout the world have been born through IVF.<sup>1</sup> While IVF has opened doors for couples struggling with the pain of infertility, it also raises difficult questions about how we should view and treat human beings at the beginning of life.

As the number of IVF-conceived children grows, so does the variety of perspectives on how IVF impacts children. As one child conceived through IVF describes her experience:

A miracle baby. That's what my parents always said I was. After 12 years of marriage and much agony, I had been conceived. They had never been so happy. I had never doubted that I was wanted. But there it was... right in the baby book my grandmother had put together for me was a photo of me as an embryo in a Petri dish...

Somehow, somewhere, my parents developed the idea that they deserved to have a baby, and it didn't matter how much it cost, how many times it took, or how many died in the process.<sup>2</sup>

As Chief Justice McLachlin wrote for a plurality of the Supreme Court, "Parliament has a strong interest in ensuring that basic moral standards govern the creation and destruction of life, as well as their impact on persons like donors and mothers."<sup>3</sup> This report examines the basic moral standards that should underly our discussion on IVF and their policy implications.

## What is In Vitro Fertilization?

In Vitro Fertilization is a process that creates a human embryo outside the womb of its mother.<sup>4</sup> The procedure generally consists of these five steps:<sup>5</sup>

1. The woman undergoes a series of hormonal injections to artificially stimulate egg production so that multiple

## An embryo has the same moral status as any other human being.

eggs can be harvested from her ovaries. The eggs are retrieved with a probe, using ultrasound images as a guide.

2. The eggs are then fertilized with sperm in a laboratory.
3. The resulting human embryos grow “in vitro” (Latin for “in the glass”) in a laboratory with staff checking on them regularly to ensure proper growth. Screening for genetic disorders is often done at this time.
4. One, some, or all of the surviving embryos are transferred into the birth mother’s uterus, usually between three to five days after fertilization.
5. Any excess surviving embryos that are not implanted in the mother are frozen (“cryopreserved”), discarded, or donated for medical experimentation.

### Ethics and Human Dignity

The desire for children is deeply felt and infertility can be painful. However, there are limits to what science should explore, what money should buy, and what government should endorse.

Many Canadians disagree over the parameters for the ethical use of IVF. We do not propose to delineate those parameters precisely or exhaustively in this report. However, there are several obvious and pressing concerns with the way IVF is currently practiced in Canada.

The Bible describes children as a blessing from God and the crown of their parents.<sup>6</sup> They are a gift but not a right.<sup>7</sup> New life is a good gift to be celebrated, but not all means of creating life are ethical.<sup>8</sup> The Bible teaches us about God’s will and design for families: children should be born and raised in the context of the faithful union of a husband and wife.<sup>9</sup>

IVF involves exercising control over the earliest stages of human life. Doctors are active agents in the extraction of ova, the fusion of sperm and ovum, and the maturation, selection, and transfer of human embryos.<sup>10</sup> To assess the ethics of this

practice, we need to understand what an embryo is and how they ought to be treated.

Medical ethicist Margaret Somerville explains three different views of an embryo. The first claims that the embryo has no moral status and is equivalent, for example, to a human skin cell, and so it does not matter how the embryo is treated. The second approach recognizes embryos as having moral status, but a lesser status than more mature humans. The third approach is to view the embryo as “the earliest stage of each human life [that] as such has the same moral status as the rest of us.”<sup>11</sup> Existing Canadian law around assisted human reproduction is built around the second approach.

ARPA Canada’s position is that an embryo has the same moral status as any other human being.

Scientifically, every embryo is a unique human life. The moment a sperm cell fertilizes an egg, whether naturally or through IVF, something radical occurs: a new, genetically unique human being comes into existence.<sup>12</sup> The embryo is a single biological system distinct from its mother and father, with a self-directed and active developmental program by which he or she will develop into a mature human being.<sup>13</sup> Thus, we ought to recognize the embryo as an early stage human being and an equal member of the human family and treat them accordingly – with dignity and respect.

Some argue that certain characteristics such as an active brain, a subjective will, rational thought, or independence from the mother are relevant to one’s moral status.<sup>14</sup> Yet, there is no clear basis for making a distinction between those possessing moral status or not after fertilization, when every individual’s life begins. Disregarding the humanity of an embryo discriminates based on age, stage of development, location, or degree of dependency.<sup>15</sup> Yet even if one wished to distinguish between a human being and persons by saying the latter have a conscious mind or subjective will, an embryo would still be a future person because it possesses this potential inherently. To intentionally destroy it, therefore, would be to wrong it – to rob it of its future.

## Physical Risks of IVF

There may be various risks to both the mother and the child throughout the IVF process. Children conceived through IVF are at a higher risk of developing birth defects or genetic disorders, and concerns have been raised that hypertension, cancers, and other medical issues may rise significantly when children born through IVF reach their fifties and beyond.<sup>16</sup> One study has linked IVF with an increased chance of genetic defects.<sup>17</sup> In another, IVF was tied to increased risk of intellectual disabilities in children by age 8 or older.<sup>18</sup>

A woman taking fertility medications may have adverse reactions and is particularly at risk of ovarian hyperstimulation syndrome due to increased egg production. Further, many fertility drugs have not been tested as to the short-term and long-term adverse effects. A 2015 study in the United Kingdom demonstrated that women who went through IVF had a one-third greater risk of developing ovarian cancer.<sup>19</sup> The process of ova retrieval may also cause damage to organs, infertility, haemorrhaging, or increased risk of various forms of cancer.<sup>20</sup>

## Multi-fetal Pregnancies

In the IVF process, multiple embryos are often transferred into a mother's womb, resulting in frequent multi-fetal pregnancies.<sup>21</sup> Multi-fetal pregnancies (triplets, quadruplets, etc.) come with significant risk of health complications for both mother and children. Risks of multi-fetal pregnancy for the children include premature birth, low birth weight, long-term neurological disorders, and death. Risks to the mother include increased chances of miscarriage, haemorrhage, high blood pressure, and other medical complications.<sup>22</sup> Because of the risks involved in a multi-fetal pregnancy, women are commonly encouraged to "reduce" the pregnancy – that is, they are encouraged to abort one or more of the children to increase the likelihood of a healthy pregnancy with a single child. This is typically done in the first trimester by injecting a needle to stop the heart of the "extra" children.<sup>23</sup> A policy mandating that only one embryo be created and implanted at a time would be safer for Canadian children and mothers and remove the motivation to have an abortion.<sup>24</sup>

Elective Single Embryo Transfer, commonly referred to as eSET, is a relatively recent


procedure by which only one embryo is transferred to the mother's uterus, and additional embryos are often set aside for possible future use.<sup>25</sup> (We further address the issue of storing embryos below). Transferring just one embryo prevents various harms to the woman and embryos that may result from transferring multiple embryos. Although eSET is recommended by various clinics, neither the *Assisted Human Reproduction Act* (AHRA) nor the existing regulations provide clarity on the benefits.

## Destruction of Human Life

Modern IVF practices violate the dignity of embryos in several ways. It is common practice to create more embryos than necessary for each IVF cycle to increase the chances of producing a healthy embryo. The strongest embryos are implanted and the weak are often discarded, frozen, or donated to research.<sup>26</sup>

As one donor-conceived woman comments: "Creating, freezing, and abandoning embryos to any options other than raising them yourself is not giving your life for their cause; it is sacrificing them to yours."<sup>27</sup>





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**- Donor-conceived woman**

## FREEZING EMBRYOS

“Extra” embryos, nascent human beings, are often frozen for indefinite lengths of time through the process of **cryopreservation**. Canadians would, and should, be appalled at the idea of freezing any fully developed human beings without their consent. The difference between an embryo and a mature human being is, in essence, only their size and level of development. Cryopreservation is a degrading and dangerous practice, and many embryos do not survive thawing.<sup>28</sup> If they are not implanted, frozen embryos eventually die or are simply discarded. Over the first 16 years of freezing embryos in the United States, an estimated 600,000 frozen embryos were stored indefinitely. Of these, just over 3,000 were adopted and thawed, and only 340 babies were born as a result.<sup>29</sup> Cryopreservation facilitates the creation of “excess” human beings who are viewed as a commodity or “back-up plan” and often are never implanted in the womb and die as a result.

The regulations under the *Assisted Human Reproduction Act* currently allow for the use of frozen embryos with the consent of the person or persons for whom the embryo was created. If consent is given, an embryo not used by the donor can be implanted in a third party or used for research on assisted reproduction procedures.<sup>30</sup> If clinics attempt to reach the donors of an embryo and fail, the embryos are deemed abandoned and can be destroyed if storage fees are not paid. Regulations around the disposal of unwanted embryos are unclear and create multiple ethical and legal conflicts.<sup>31</sup> When the B.C. Women’s Centre for Reproductive Health shut down in 2012, staff were unable to contact the parents of many of the embryos frozen in their facilities. The Centre was granted an order from the British Columbia Supreme Court permitting it to discard those embryos. Hundreds of human beings were promptly destroyed, with judicial authorization.<sup>32</sup>

Our courts have classified early embryos as property, with one judge describing them as “chattels that can be used as [the mother] sees

fit.”<sup>33</sup> Calling a human being “chattel” (i.e. property) justifies reprehensible treatment of that person. We condemn slavery for this very reason because slaves were human beings owned by other human beings and considered their property.<sup>34</sup> Human life should not be so callously treated in Canada.

## EXPERIMENTATION

In embryonic research, embryos are typically dismembered and destroyed for their cell lines or for the investigation of embryonic development.<sup>35</sup> It might be argued that such research is justified by the potential or realized scientific results, but such an argument treats the embryo as a means to an end, not as a human being with moral worth.

Ultimately, IVF would not be possible without knowledge derived from experimenting on and destroying countless embryos. The birth of Louise Brown was considered an amazing scientific feat, but it followed the death of more than 80 embryos who did not survive the experimental transfers to their mothers’ wombs.<sup>36</sup> Additionally, the IVF industry *continues* to incentivize and practice destructive research. This is a concern not only for those considering whether or how to use IVF, but also for governments, whose responsibility it is to advance justice and protect human dignity.

Unless the human dignity of the embryo is adopted as the primary regulatory principle, the IVF industry will continue its destructive practices in order to deliver what clients want. In the end, “no scientist or any other agent should ever willingly engage in activities that would deliberately threaten the life or health of human beings at any stage of development or in any condition.”<sup>37</sup> This is exactly what happens when scientists experiment on human embryos. There are other forms of scientific research which are ethically sound, and may achieve similar goals, that can be pursued instead of embryonic research, such as adult stem cell research, which does not require or facilitate the destruction of a human being.<sup>38</sup>

## GENETIC TESTING

It is now possible, through pre-implantation genetic diagnosis (PGD), to identify and reject embryos with genetic conditions that parents and doctors deem incompatible with the life they want for children. PGD is conducted between three to five days after fertilization, when the human embryo has eight cells. One of the cells is removed and tested to identify its genetic make-up and screened for everything from chromosomal abnormalities to a predisposition to cancer. If the embryo appears to have a defect that could lead to a disease, he or she is usually discarded.<sup>39</sup>

Parents can use IVF and PGD to try to ensure that the embryo they implant will not have certain genetic diseases. These technologies have rightly garnered criticism (especially those that screen for spina bifida, cerebral palsy, and blindness) because they dehumanize and devalue individuals living with such conditions.<sup>40</sup> To sort human beings in this way – to nurture the healthy and kill the disabled – is eugenics, and it is happening here in Canada. The practice of PGD and embryo selection amounts to lethal discrimination against the most vulnerable members of the human family.

Children are a gift from God, not products to be selected based on their ability.<sup>41</sup> The level of control over reproduction that PGD offers raises difficult questions: who should have this control? How will it be monitored? What are its limits? What kind of impact will it have on society?<sup>42</sup> Currently, the only limitation on the screening of embryos is a prohibition on genetic screening for the purpose of sex selection. But even sex selection is allowed if it is done for the purpose of avoiding sex-linked disorders or diseases – which are not specified in the regulations.<sup>43</sup>

Many countries have significant restrictions on the use of PGD. For example, the United Kingdom and France restrict PGD to testing for specific conditions or allow it only if there is a high probability of giving birth to a child with an incurable disease.<sup>44</sup> It is a complex and constantly changing area of science and Parliament ought to implement restrictions

that recognize the value of human life regardless of ability or disability.

### **Donor Gametes and Genetic Responsibility**

Although IVF can be done using the sperm and egg of the mother and father, it often involves the use of donor gametes. Donors introduce a third (and possibly fourth) party into a process that God intended to take place exclusively within the stability of a marriage covenant. A similar conflict exists for those trying to become a single parent using IVF. The donor who does not intend to be a parent is effectively abandoning his or her biological child. This is contrary to God's good design for the family.<sup>45</sup> Article 3 of the Convention on the Rights of the Child, of which Canada

is a signatory, states that "in all actions concerning children . . . the best interests of the child shall be a primary consideration."<sup>46</sup> Current practices in Canada do not align with this principle but allow embryos to be separated from their biological parents even before birth.

The IVF industry relies on sperm and egg (gamete) donations. While preferable to a for-profit market in human gametes, gamete donation is nevertheless unethical. The moral significance of a genetic parent-child relationship is undeniable. Gametes carry with them the latent potential of a familial (blood) relationship between the donor and any resulting offspring. Intentionally and unnecessarily severing ties between genetic parents and their children is a harm

that should not be perpetrated, but gamete donation does just that. Donor conception "transforms an adult's longing for a child into a child who is longing for his or her missing parent(s)."<sup>47</sup> The Bible directs parents to love and care for their children and warns strongly against neglecting this duty.<sup>48</sup> As such, the practice of gamete donation for the purposes of IVF is ethically unjustifiable.

A child thrives when he or she is connected to both biological parents. Overall, "the fact that both adults have a biological connection to the child would increase the likelihood that the parents would identify with the child and be willing to sacrifice for that child and it would reduce the likelihood that either parent would abuse the child."<sup>49</sup> The increased risks of non-biological parents living in



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the same home as children is exactly why adoptive parents must undergo such strict screening before children are placed in their care.<sup>50</sup> Yet, with donor conception, there are no efforts to ensure that the intended, non-biologically related parent will be able to care for the child.<sup>51</sup> Tragically, there are times where circumstances cause a child to lose a parent. Adoption seeks to remedy such a difficult situation. However, through donor-conception, the relationship between the biological parent (donor) and the child is *intentionally* severed before the child is born.

### Gamete Commodification

Many donor-conceived children are troubled by the circumstances of their conception and are pained to know that they were bought, particularly where purchase of gametes took place.<sup>52</sup> Internationally, parents can select donors based on attractiveness, education attainment, race, ethnicity, or various other factors in efforts to conceive children who will look or behave in a certain way.<sup>53</sup> One website in the United States allows parents to bid on high-quality sperm or eggs in the hopes that it will help them conceive genetically superior offspring.<sup>54</sup>

The Baird Commission, appointed in 1989 by the Canadian government to study reproductive technologies, concluded in its Report that it is fundamentally wrong for decisions about human reproduction to be determined by a profit motive. They argued that prohibiting the purchase and sale of gametes is essential “as a matter of respect for human dignity, but also to protect anyone who might be pressured or induced to sell

gametes or zygotes.”<sup>55</sup> This is an appropriate conclusion, which the Supreme Court of Canada also affirmed in the *Reference Re AHRA*.<sup>56</sup>


Yet unintended loopholes in our current laws allow gamete commodification to occur. Section 7(1) of the AHRA states that “No person shall purchase, offer to purchase or advertise for the purchase of sperm or ova from a donor or a person acting on behalf of a donor.”<sup>57</sup> Health Canada regulations clarify that buying sperm and eggs from a donor in Canada is a crime, but that fertility clinics and sperm banks may charge fees for their services including the transfer and use of donated sperm and eggs.<sup>58</sup> Despite Canadian law regarding commercialization, commercial practices still occur and enforcement of the law is lax.<sup>59</sup> Additionally, due to looser regulations around commercialization of gametes in the United States, donor banks and individuals within Canada can still purchase gametes in the United States or in other countries.<sup>60</sup> The 2022 federal budget has only exacerbated this issue, further incentivizing gamete distribution through tax credits for expenses related to sperm, ova, or embryo donation and for fees paid to fertility clinics and donor banks.<sup>61</sup>

The Baird Commission stated that “certain activities conflict so sharply with the values espoused by Canadians and by this Commission, and are so potentially harmful to the interests of individuals and society, that they must be prohibited by the federal government under threat of criminal sanction.”<sup>62</sup> These activities include the commercialization of reproductive material.<sup>63</sup> The government must ensure that the AHRA

and Health Canada regulations continue to respect and protect human dignity. Legislative and regulatory changes should be used to curb the purchase of gametes from abroad and reverse the commodification of assisted reproduction in Canada.

### Donor Anonymity

Another key issue in IVF is donor anonymity. The government must recognize the right of donor-conceived children to know the identity of their genetic parents. Prior to the establishment of the AHRA, the Standing Committee on Health studied this issue and concluded: “We feel that, where there is a conflict between the privacy rights of a donor and the rights of a resulting child to know its heritage, the rights of the child should prevail... We want to end the current system of anonymous donation.”<sup>64</sup> Current Health Canada guidelines require gamete banks to maintain the records of donors for only 10 years, to ensure that the information can be traced if necessary.<sup>65</sup> However, gamete donors may choose to remain anonymous.<sup>66</sup> The importance of a child’s connection with his or her genetic parents is reflected in a deep desire among many adoptees and donor-conceived children to know their genetic parents. Their advocacy led to the banning of donor anonymity in several countries, including the U.K., Germany, Sweden, Norway, Australia, and New Zealand.<sup>67</sup> Additionally, a committee of the Parliamentary Assembly of the Council of Europe (PACE) adopted a recommendation stating that anonymity should be waived for all future gamete donations.<sup>68</sup>



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Consider these testimonies of donor-conceived children who want their stories told:

Discovering, aged 32, that I was donor conceived was, to put it mildly, a bombshell. It made complete sense, explaining the lack of similarity to my social father, not to mention the tensions between us. It explained why I often had difficulties feeling that I fit in not only at home but at work, church, other social settings... Not knowing donor identity is like being lost in the middle of a great, featureless ocean. Now that I know who he was (and, of course, I have a relationship with my half-siblings) my life has form and landmarks. I feel normal!<sup>69</sup>

I'm a daughter of a single mother that chose to have a child through sperm donation... I don't want a father, I don't need a father, but I want a face, a name, anything, I know nothing... I don't even know why I want to know, I just feel the need to know but I don't want my mom to believe that she is not enough, because she is the best mother in the world and I'm so thankful to her for bringing me into the world. I don't even know where to start searching though.<sup>70</sup>

In 2011, Olivia Pratten went to court trying to find out who her donor father was. She was successful at the BC Supreme Court, which found: "Based on the whole of the evidence, that assisted reproduction using an anonymous gamete donor is harmful to the child, and is **not in the best interests of donor offspring**."<sup>71</sup> The case was appealed to the BC Court of Appeal, however, which reversed the decision and found that donor-conceived children have no right to know who their genetic parents are.<sup>72</sup> The Supreme Court of Canada declined to hear Olivia's appeal.<sup>73</sup>

This leaves Canada distinctly out of line with international norms. Since 1985, many countries have passed laws that require donor information to be made available after the donor-conceived person turns 18.<sup>74</sup> The United Nations Convention on the Rights of the Child states that "the child shall be registered immediately after birth and shall

have the right from birth to a name, the right to acquire a nationality and, as far as possible, the right to know and be cared for by his or her parents."<sup>75</sup> The right of the child to know his or her origins vastly supersedes any privacy interest held by a gamete donor who freely chooses to participate in creating new human life. Canada should affirm that right.

## RECOMMENDATIONS

The issue of IVF involves the question of how we care for human life at its beginning. As such, it merits a rigorous ethical analysis to ensure that Canada is not recklessly disregarding human life at its most vulnerable stages. The practice of creating excess embryos, freezing embryos indefinitely, destroying or discarding embryos, commodifying gametes, and intentionally severing children from their biological parents should be condemned in Canada. Parliament should enact a legislative scheme that bans these harmful activities and protects life from its very beginning.

All the recommendations made in this report should be implemented as valid criminal law under federal jurisdiction. Due to its deep moral dimensions, we believe that IVF is properly regulated under criminal law, not simply health care regulations.<sup>76</sup> The following policy recommendations are crafted in criminal law form (a prohibition with a penalty for a valid criminal law purpose) to protect the weak and respect human dignity.

### Recommendation #1:

Prohibit the intentional destruction of human embryos at any stage. Parliament should amend the prohibitions in section 5(1)(b) and (d) of the AHRA regarding the 'treatment and destruction of embryos,' under the 'prohibited activities' heading, and add subsections 5(1)(d.1), (k), and (l):

5(1) No person shall knowingly

(b) create an *in vitro* embryo for any purpose other than creating a human being;

...

(d) maintain an embryo outside the body of a female person after the fourteenth day of its development following fertilization or creation;

...

(d.1) for greater certainty, no person shall knowingly cryopreserve, discard, or maintain for research a living *in vitro* embryo;

...

(k) create or transfer more than one embryo in a single IVF cycle;

(l) prior to implantation, perform any procedure or process for the purpose of ensuring that any *in vitro* embryo does, or does not have, any genetic disorder or disadvantage.

### Recommendation #2

Disallow the use of donor gametes for assisted human reproduction. This can be done by simply repealing section 10(3) of the AHRA.

We believe this measure is justified as being in the best interests of children yet to be conceived, who should not be separated or abandoned by their biological parents by design. Short of taking this step, however, we would urge Parliament to implement recommendations 3, 4, and 5, which are based on the assumption that donor gametes may be used in assisted human reproduction.

### Recommendation #3

To respect the principle of non-commodification of gametes, Parliament should prohibit the purchase and sale of gametes, whether within Canada or from abroad for importation into Canada. This can be done by adding the following (underlined) amendments to section 7 of the AHRA:

7(1) No person shall purchase, offer to purchase or advertise for the purchase of sperm or ova from a donor or a person acting on behalf of a donor.

**The practice of creating excess embryos, freezing embryos indefinitely, destroying or discarding embryos, commodifying gametes, and intentionally severing children from their biological parents should be condemned in Canada.**

(7.1) No person shall sell, offer for sale, or advertise for sale of sperm or ova from a donor or a person acting on behalf of a donor.

7(1.2) For further clarity, 'purchase' includes purchasing gametes from a donor or from someone other than the donor within Canada, as well as purchasing gametes internationally for the purpose of importing them to Canada.

**Recommendation #4**

Federal and provincial governments should work together to ensure that access to donor information is available to all biological offspring of future gamete donors. The federal government can ensure that donor records are held in a registry. Likewise, Provincial governments can require egg and sperm clinics to create, maintain, and disclose donor records, similar to records that are held for adopted children. All children conceived through IVF must be able to access information about their biological parents upon request.

The following provisions should be added to the 'prohibited activities' section of the AHRA:

- a) No person shall donate human reproductive material for the purpose of creating an embryo unless the would-be donor first provides consent, in accordance with the Regulations, to
  - a. the disclosure of the donor's identity to any person conceived from the donor's reproductive material; and
  - b. the disclosure of the donor's medical information and history to any person conceived from the donor's reproductive material, where that information may be relevant to the health of the donor-conceived person.
- b) Where human reproductive material has been donated prior to these provisions coming into force, and where the identity of the donor is known to, or can be

reasonably ascertained by, the gamete bank or fertility clinic, the clinic shall provide the donor's medical information to the donor-conceived person upon request. Personal identifying information not relevant to the health of the donor-conceived person shall be redacted by the clinic subject to freedom of information and protection of privacy legislation.

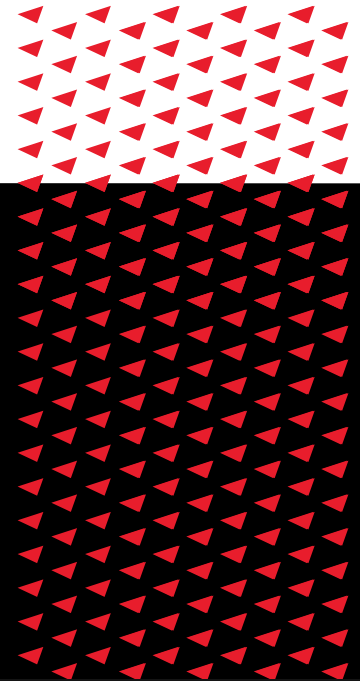
- c) During the period that the donor-conceived person is a minor, the disclosure of the donor's identity shall be subject to the consent of the donor-conceived person's legal parent and, if there is more than one legal parent, the donor's identity shall be disclosed only if every parent has consented.

**Recommendation #5**

Provincial governments should ensure that intended parents who are not biologically related to a child conceived through IVF undergo screening to ensure the safety and wellbeing of the child. Screening would follow the same process it does for adoptive parents.

## Endnotes

- 1 ["More than 8 million babies born from IVF since the world's first in 1978,"](#) *European Society of Human Reproduction and Embryology*, July 3, 2018.
- 2 "Claire – My parents developed the idea that they deserved to have a baby, and it didn't matter how much it cost, how many times it took, or how many died in the process," *Them Before Us*, Dec. 23, 2021.
- 3 *Reference re Assisted Human Reproduction Act*, 2010 SCC 61, at para. 61.
- 4 We ought never to intentionally divide motherhood into biological mother, birth mother, and legal or social mother. However, society has divided motherhood into these categories, also through IVF. As such, this report reflects the different terms used, while recognizing that ideally, motherhood is not divided into categories.
- 5 "In vitro fertilization (IVF)," *Medline Plus*, Jan. 1, 2020; "In Vitro Fertilization (IVF)," *Healthline*, Feb. 11, 2016. "Embryo Freezing," *Regional Fertility Program*.
- 6 [Proverbs 17:6](#).
- 7 It is important to distinguish between a positive and a negative right with regard to children. There is a limited "negative right" to children in the sense that the State ought not to interfere with natural human reproduction within a mutually consenting marital union. However, there is no "positive right" to children in the sense that no individual or couple is *owed* children and the government is not responsible for ensuring that a person can have children. If an individual or couple is unable to bear children, their rights are not being violated by the mere fact that they don't receive children by other means.
- 8 We reject the argument that simply because we can, we should. In other words, just because we are *able* technologically to do something does not mean that we are morally permitted to do that thing.
- 9 [Genesis 2:18-25](#), [Exodus 20:12](#), [Psalm 128:3](#), [Ephesians 6:1-4](#).
- 10 This report uses the term 'embryo' as it is used scientifically. 'Embryo' refers to the earliest stages of human life from two weeks until eight weeks after fertilization, after which the child is referred to as a 'fetus,' and before which the child is referred to as a 'zygote.' However, each term refers to a living, pre-born human being.
- 11 Margaret Somerville, *The Ethical Imagination: Journeys of the Human Spirit*, (Toronto, ON: House of Anansi Press, 2006), 135-136.
- 12 Dr. Dianne N. Irving, "When do human beings begin?" "Scientific myths and scientific facts," *International Journal of Sociology and Social Policy* 19:3/4 (1999): 22-36.
- 13 Robert P. George and Christopher Tollefsen, *Embryo: A Defense of Human Life*, 2nd ed. (Princeton, NJ: The Witherspoon Institute, 2011), 49. Though the embryo and the mother influence each other, they are separate entities – the embryo does not serve a functional role in the mother's biological economy. This embryonic individuality is clearly illustrated by the fact that, for example, it is possible to implant and gestate a zebra embryo in a horse's womb; though cared for and nurtured during the pregnancy, the zebra remains a distinct creature and a different species. In IVF, we know the embryo is an individual and we know that this individual is a human being. See also Robert P. George and Christopher Tollefsen, "Embryonic Debate," *National Review*, February 11, 2008.
- 14 George and Tollefsen, *Embryo*, 143-171.
- 15 George and Tollefsen, *Embryo*, 130.
- 16 John R. Ling, *Bioethical Issues: Understanding and Responding to the Culture of Death*, (Rylands Road, Leominster: Day One Publications, 2014), 91.
- 17 "In Vitro Fertilization Linked to Increased Risk of Birth Defects," *UCLA Health*, Spring 2013.
- 18 Lisa Rapaport, "Assisted reproduction tied to risk of intellectual disabilities in kids," *Reuters Health*, November 15, 2018.
- 19 Renate Klein, *Surrogacy: A Human Rights Violation*, (Australia: Spinifex Press, 2017), 13-15.
- 20 Trudo Lemmens, "The Commodification of Gametes: Why Prohibiting Untrammelled Commercialization Matters," in Trudo Lemmens et al., *Regulating Creation: the Law, Ethics, and Policy of Assisted Human Reproduction*, (Toronto, ON: University of Toronto Press, 2017), 426.
- 21 "Embryo Transfer," Pacific Fertility Center.
- 22 Ling, *Bioethical Issues*, 91.
- 23 Stephanie Booth, "What Is Multifetal Reduction?" *WebMD*, Mar. 19, 2021.
- 24 Amending the law to limit fertilization and transfer of embryos one at a time will require a transitional provision allowing the transfer of previously cryopreserved vials which contain more than one embryo.
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We hope you enjoyed reading this policy report.

We know that championing our policy recommendations will take courage, dedication, and hard work. We at ARPA Canada strongly believe that doing so would be consistent with God's calling for you in a position of civil authority (Romans 13), and for promoting the well-being of our neighbours, in line with Canada's constitution and legal history. We are grateful for your service and we remember you in our prayers.

**RESPECTFULLY SUBMITTED**

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