Thanks to IVF and donor conception, infertile couples, single women and lesbian couples now have a better chance of starting families. But while you might know someone who has gone through the process, it’s rarely openly discussed.

Last month, you submitted your questions about donor conception and IVF and we put them – and some of our own – to The Conversation’s experts in law, embryology, sociology, psychology and donor conception.

Here are your questions answered (scroll down or click on the links below):

1. How much are men compensated for donating sperm and women for donating eggs?
2. Where do donors come from?
3. What sort of identifying information is filed about open donors on the information register?
4. When and how should you tell children they’re donor-conceived?
5. What kind of contact can donors expect when their offspring are adults?
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16. Can donor-conceived people access information about their donor if they were conceived before anonymity was abolished?
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18. What motivates men to donate sperm, and women to donate eggs?
19. Why do I need ICSI (sperm injections) if I use donor sperm?

Q1. How much are men compensated for donating sperm and women for donating eggs?

A. Deborah Dempsey, sociologist:

In Australia, human eggs and sperm cannot be treated as goods that are bought or sold. It’s permissible to pay egg and sperm donors “reasonable expenses” (such as travel and parking) and medical costs incurred in the process of making their donation. Although the actual sum paid varies, for sperm donors it is generally around A$250 per donation.

For egg donors, it is substantially more as it’s a much more invasive medical procedure. Women are required to self-inject drugs for several days to hyper-stimulate their ovaries and need to be monitored to ensure there are no serious side effects. Eggs must be extracted by a medical practitioner, and this usually requires an anaesthetic and a half-day stay in hospital.

If there is too great a financial gain attached to providing eggs and sperm, one concern is that people will be motivated by money rather than a desire to help infertile men or women, and this could cause harm. Potential
donors, for instance, may be more likely to conceal a health condition that could be passed on to intended parents or children because they wanted to receive the fee.

The issue of compensation is currently a hot topic due to a national shortage of both egg and sperm donors in Australia. In April, one group of fertility clinics made headlines for offering A$5,000 payments to cover egg donors’ expenses. Debate centered around whether this flat fee could be considered an “inducement” to participate, just as it did several years ago when a different clinic offered A$7,000 to Canadian students willing to come to Australia for a working holiday and to donate sperm.

I agree with a number of other scholars who argue it’s time we looked seriously at whether the principle of “reasonable expenses” is useful in taking into account the actual risks, costs and inconveniences incurred by egg and sperm donors, and the interests of children born from such donation.

Q2. Where do donors come from?

A. Loretta Houlanahan, embryology lecturer:

Clinic-recruited donation is probably the most well-known method of donation.

Because of the critical shortage of donor eggs and sperm in Australia, some clinics are now recruiting from overseas. This is generally permitted if it complies with local laws.

Patients can also ask someone they know to donate to them. This is commonly a friend or family member, however, some people may find their donor through online forums as well. Advertising online is subject to many legal restrictions, so be careful if you go down this route.

Sperm donation can also occur outside the clinic environment. Private insemination with donor sperm is not necessarily illegal, but potential medical and legal issues can arise from these arrangements. Unlike clinic-recruited donors, private donors are not screened for infectious diseases and donors often advertise online without their true identities being confirmed.

The local shortage of donor sperm and eggs has promoted some clinics to recruit from overseas.

There are also no restrictions on the number of children that can be fathered from a single donor in a private donation scenario. One Sydney “freelance sperm donor” claims to have fathered 18 children. In contrast, clinic-recruited donors are only allowed to produce a limited number of families. They can also be removed from use if abnormalities are detected in the offspring.

There are pros and cons to both clinic and private donation, however, patients should seek medical and legal advice if they choose the latter.

Q3. What sort of identifying information is filed about open donors on the information register?

A. Fiona Kelly, legal scholar:

Under Australian guidelines, all donors in Australia are required to be “open donors”. Anonymous donors ceased to be available across the country in 2005, though some states abolished anonymity earlier.

The guidelines require fertility clinics in Australia to collect the following information from sperm and egg donors:
• name, any previous name, date of birth and most recent address
• details of medical history, family history, and any genetic test results that are relevant to the future health of the person conceived by egg or sperm donation (or any subsequent offspring of that person) or the recipient of the donation
• details of physical characteristics.

Clinics are also obliged to tell egg and sperm donors that it is their ethical responsibility to keep the clinic informed about any changes to their health that may be relevant to the persons born or the recipients of their donation, and about changes to their contact details.

Clinics are not required to proactively gather additional health information or change of address details. So it’s possible that the information a donor-conceived person receives when they turn 18 is not up to date.

In some states and territories, such as Victoria and New South Wales, donor information is held in a central register, while other states and territories require the clinics to maintain the data.

Q4. When and how should you tell children they’re donor-conceived?

A. Damian Adams, donor conception researcher:

Discovering you’re donor-conceived later in life can potentially lead to confusion, anger and distrust of the family members who kept the secret from you.

Some researchers argue that telling children earlier in life causes less harm. Associate Professor Ken Daniels, a sociological researcher into donor conception, writes that “a child should never be able to remember a time when he/she did not know”. Others suggest it should at least occur before the identity construct window of adolescence occurs.
Telling children early seems to work best. Laura Smith/Flickr, CC BY-NC-ND

As there is currently no evidence that more problems arise by telling early, doing so while young has the least potential to create problems.

There are numerous books on the market that can assist parents in how to tell, as well as numerous online resources. One of the better ones is run by the Victorian Assisted Reproductive Treatment Authority (VARTA) which has been running very successful “Time to Tell” campaigns for many years and has numerous informative pages on their website dealing with this.

Q5. What kind of contact can donors expect when their offspring are adults?

A. Roger Cook, psychology scholar:

When offspring reach adulthood it’s possible for them to initiate contact with their donor, the outcome of which is varied. Some offspring reach strong relationships with their donor parent and some do not. There are, of course, some offspring who do not want to make contact.

Typically, however, if both the donor and the offspring are enthusiastic and prepared for contact, an on-going relationship can emerge but it’s not usually a parenting relationship. Often, the young adult can develop and maintain positive relationships with his or her biological father or mother but retain affection for the parents who raised them.
Q6. What are the options for gay men to start a family?

A. Deborah Dempsey, sociologist:

Australian gay men's pathways to creating families with children are diverse, although relatively limited compared to men in the United States.

Australian gay men's history of involvement in known sperm donation for lesbian and single heterosexual friends and acquaintances dates from at least the 1980s. Some men are able to negotiate “donor dad” or parental relationships with children conceived in this way.

Gay dads in Australia have fewer pathways to fatherhood than in the US. Dubova/Shutterstock

Since the early 2000s, it has become popular for Australian gay men to form families through surrogacy, particularly commercial surrogacy arrangements abroad.

For gay men who are US residents, adoption is a well-documented path to parenthood. Though laws in some Australian states do not permit gay men or lesbians to adopt. And relatively few children are available for adoption in Australia.

La Trobe University researcher Jennifer Power and her colleagues investigated family make up in the 2012 Work, Love and Play study. Of the 88 gay and bisexual men who described themselves as “actively involved” in parenting a child:

- 39% had become parents in a previous heterosexual relationship
- 23% were parenting children conceived through surrogacy
- 19% had become parents through known sperm donation to lesbian couples or single women
- 11% were foster parents or permanent carers.

Q7. What logistical barriers do lesbian couples face when starting a family?

A. Deborah Dempsey, sociologist:

Lesbian couples using clinical donor insemination, known donor insemination or IVF to form families with children must navigate a complex range of logistical, social and emotional issues.

Finding a suitable known donor can be difficult because of the need for compatible expectations about parenthood. Men may want more or less involvement than the lesbian parents feel comfortable with; they may feel awkward or uncertain about the responsibilities attached to giving sperm; or their partners may not approve of the idea.

For some lesbian couples, deciding who will become pregnant and whose eggs will be used will be straightforward and for others, it will be emotionally difficult. It really depends on how the women view the issue of being genetically related to the child, and their feelings about how important it is to become pregnant and give birth.
Reciprocal IVF is not available in Australia unless the couple has fertility problems. Danny Hammontree/Flickr, CC BY-NC-ND

In some US states, a procedure called “reciprocal IVF” is offered so both women can have a biological relationship to the child. One woman provides the egg, while the other becomes pregnant and gives birth. However this procedure is currently only possible in Australia if the couple has fertility problems.

Q8. Who goes on the birth certificate when using a sperm or egg donor? And what about if the couple is same-sex?

A. Fiona Kelly, legal scholar:

Where a couple or single woman has used assisted reproduction (ART) to conceive, the donor is not named on the birth certificate. Rather, the recipient parent(s), who are the legal parents of the child, are named, provided they were married or in a de facto relationship at the time of conception.

In all states and territories, the woman who gives birth to a child born as a result of ART is the “mother” of that child. When a married woman or a woman in a de facto relationship with a man becomes pregnant as a result of assisted reproduction her partner is presumed to be the father, provided he consented to the procedure.

All Australian jurisdictions also presume the same-sex partner of a birth mother who has used ART to conceive is a legal parent of a child born. In other words, same sex couples and opposite sex couples are treated identically.

The language that is used on birth certificates may vary. For example, in Western Australia, the partners may register as “mother” and “parent”; “mother” and “mother”; or “parent” and “parent”. In the ACT, a person may be registered as “mother”, “father” or “parent”.

Several states make a notation on the child’s birth certificate, indicating that further information is available about...
the child’s birth. The notation ensures the child can determine that he or she is donor conceived, particularly in
the event of the child not having been informed by their parents of the nature of their conception.

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Q9. How much does IVF cost?

A. Loretta Houlahan, embryology lecturer:

Back in 1987, the cost of IVF treatment was about A$3,500 to A$4,500 and the pregnancy rate was around 40-
50% after three attempts. At the time, Professor Carl Wood, one of the pioneers of Australian fertility treatment, said:

*as the test-tube procedure has been developed only recently, it is reasonable to assume that with
further improvements the cost may be reduced and the success rate increased.*

Arguably, the reverse has occurred with live birth rates reported to be as low as 4% at one IVF clinic. Further,
despite a large proportion of IVF now being subsided by Medicare, the going rate for a fresh IVF cycle is around
A$10,000, with out-of-pocket expenses commonly over A$4,000 before private health insurance rebates.

Using donor sperm or eggs costs more again, with clinic-recruited donor sperm usually costing around A$1,000
per treatment. Although, actually paying a donor for their eggs or sperm remains illegal.

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Q10. What are the success rates for IVF?

A. Loretta Houlahan, embryology lecturer:

Fitness guru Michelle Bridges recently caused a stir when she suggested her ability to conceive naturally at 44
was because of her and her partner’s healthy lifestyle.

While lifestyle factors such as smoking and weight will play a role, the biggest contributing factor to infertility is the
woman’s age. So while Michelle Bridges’ 12-week body challenge may reduce your body mass index, drinking
protein shakes and running on the treadmill cannot turn back the clock.

Michelle Bridges was lucky; most women her age would need donor eggs. AAP/Tracey Nearmy

The highest success rates are reported in women under 30 who have around a 26% chance of having a baby
with IVF. Women over 40 have around a 6% chance, and as for women 44 or older such as Michelle, the chance
of going home with a baby is less than 1%. Michelle was lucky. Most women her age would need donor eggs.

There is also a wide discrepancy between the success rates of IVF providers. The last report showed overall
results ranged from 4% at one clinic to 30.9% at another.

There is also evidence to suggest having a younger male partner may improve IVF outcomes in women. This
doesn’t necessarily mean women should go out looking for a young male sperm donor, it just shows there are
many factors at play, many of which are out of patients’ control.

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Q11. Is sex selection legal in Australia? Should it be?
A. Deborah Dempsey, sociologist:

Sex selection using assisted reproductive technology is only legal in Australia to reduce the risk of transmission of a serious genetic conditions, such as **duchenne muscular dystrophy**.

Sex selection of embryos created through IVF is done using a technique called **pre-implantation genetic diagnosis** (PGD). This technique enables the removal of one or more cells from an embryo so it can be tested for genetic abnormalities prior to implantation.

Clinics providing PGD must be accredited by the **Fertility Society of Australia**, which requires them to comply with **National Health and Medical Research Council ethical guidelines**.

Some Australians would like to use PGD for “family balancing” reasons. Australians often consider it ideal to have at least “one of each” in their family, although in many parts of the world there is a cultural preference for sons. Australians are known to travel overseas to obtain sex selection services in countries where clinicians will perform PGD for non-medical reasons.

While I understand that some parents have a very strong desire to have children of both sexes, my personal view is the practice is undesirable and discriminatory. If we take the “family balancing” idea seriously enough to legally facilitate it, we are perpetuating the view that boys and girls are so different from each other that families with children of one sex are “unbalanced” and somehow deficient.

There would also be no impediment to using the procedure to support more extreme forms of gender discrimination, for example, in cases where families favour having sons.

Q12. How long can donor eggs and sperm stay in the freezer?

A. Loretta Houlahan, embryology lecturer:

Donor eggs and sperm are often frozen before they’re given to recipients. This allows donors to be tested for infectious diseases and genetic abnormalities, transported interstate or overseas, if needed, and to be readily available for patients who need them.

Some people express concerns about the survival rates of donor eggs or sperm that were frozen many years ago. But as long as they’re stored correctly, there is no biological limit on the amount of time eggs or sperm can remain in frozen. Just like Elsa in the movie Frozen, the cold never bothered them anyway, and staying frozen doesn’t reduce their thaw survival rates.

There’s no limit to how long donor eggs and sperm can be frozen.

The main problem with eggs and sperm that were frozen many years ago is that the older freezing methods were not as good as the new ones. Eggs frozen using the now-outdated “slow frozen” method have **poorer survival rates** than those that have been vitrified (“snap frozen”).

There is also limited information about the success of egg freezing in general. So while we know eggs can survive the thaw process, we don’t know the how many babies are being born from this process.

Sperm isn’t usually vitrified like eggs are, but advances in sperm freezing technology have also improved success rates over time.

So, to sum it up, donor eggs and sperm can theoretically remain frozen indefinitely – although there are legal restrictions on this.
Q13. How difficult is it to obtain information about overseas donors/surrogates?

A. Damian Adams, donor conception researcher:

Australian clinics are mandated to follow National Health and Medical Research Council’s guidelines which stipulate that all donor-conceived people (since the guidelines came into effect in 2005) are entitled to know identifying information on the donor once they reach 18 years of age. Subsequently, if clinics are sourcing eggs or sperm from overseas, the information available must meet our guidelines.

We are yet to see whether any donor-conceived people have trouble accessing this information as those conceived under these guidelines as they’re yet to turn 18. Those conceived prior to this will be at the mercy of whatever agreement the Australian clinic and the overseas clinic had in the supply of those gametes and associated information. The donor-conceived are then also reliant on a foreign business maintaining and looking after those records.

Anecdotal evidence from older donor-conceived people overseas does not paint a rosy picture of possible outcomes from seeking information, although it is hoped that their practices have also changed for the better as has been the case in Australia.

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Q14. How are donor eggs and sperm transported interstate and overseas?

A. Loretta Houlahan, embryology lecturer:

After eggs and sperm are frozen, they need to be kept in liquid nitrogen, which is about minus 196 degrees Celsius. This can make transportation tricky, as liquid nitrogen is really dangerous, and if it was to leak it could easily kill the courier or the any one else around at the time.

Luckily, scientists have come up with a special device called a “dry shipper” which allows frozen embryos, eggs and sperm to be transported safely while keeping everyone safe. Dry shippers absorb the liquid nitrogen in the walls so it doesn’t leak, but it still keeps everything cold.

Very occasionally, this process can fail, but most transportation occurs successfully without any damage to patient material.

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Q15. What barriers do donor-conceived people face in obtaining information about their biological mother or father?

A. Damian Adams, donor conception researcher:

This is highly dependent on when the person was born and which state they were born in. Those conceived from 2005 onwards around Australia, and 1998 onwards in Victoria, are entitled to access identifying information. Prior to those dates, donations were primarily anonymous.

In some instances, records had been destroyed or redacted. Adrian Clark/Shutterstock

For those conceived under anonymous conditions there are, however, voluntary registers in Victoria, Western Australia and New South Wales which offspring can put their details on in the hope that the donor will also place their details on the register. If the donor is not on the register – or if they were conceived in another state – the offspring will be reliant on assistance from the clinic.

Research my colleagues and I published in 2012 on accessing information in Australia showed some people
found dealing with the clinics quite difficult (others have found them helpful), and if information was available that there was no national consistency on what information was recorded.

In some instances, records had been destroyed or redacted. We have also seen instances of registers failing to match people who were later matched through DNA testing.

So, some younger offspring may find it easy, while older offspring may find it difficult or even impossible.

**Q16. Can donor-conceived people access information about their donor if they were conceived before anonymity was abolished?**

*A. Fiona Kelly, legal scholar:*

The only state in which donor records have been opened retrospectively is Victoria. As of June 2015, all donor-conceived people who were conceived in Victoria *may apply for access* to their donor’s identifying information, with the donor’s consent.

In other states, there is no right of retrospective access. However, in a number of states, such as NSW and WA, donor-conceived people may place their names on a voluntary registry. If both the donor-conceived person and the donor register, access is permitted by mutual consent.

**Q17. Will using donor eggs from a younger woman increase my chances?**

*A. Loretta Houlahan, embryology lecturer:*

Women over 40 are the main recipients of donor eggs. Using donor eggs from a younger woman *significantly increases* the chances of success.

However, using donor eggs doesn’t eliminate all complications. Women who use donated eggs have a *higher risk* of developing serious complications, specifically high blood pressure and pre-eclampsia. Although it was thought these dangers may have been linked to the age of the birth mother and not the egg donor, the real reason remains unknown.

There is also a difference between fresh and frozen eggs to consider. Fresh is best because the success rate with thawed eggs remains unclear. However, this option is not always available where donor eggs are involved. Until only recently, *egg freezing* was considered experimental so we are still learning a lot about this process.

**Q18. What motivates men to donate sperm, and women to donate eggs?**

*A. Roger Cook, psychology scholar:*

Both sexes are motivated, at least in part, by a sense of altruism.

In the past, some men were enticed to donate by payments, albeit very low amounts. This became less common through the 1980s and now some clinics provide some reimbursement but no inducement payments. The *Human Tissue Act of 1982* prohibits commercial profiting from semen donation. Financial reward is not a current motivation.
Some donors are unlikely to have children of their own and want to be fathers. [Dave Lawler/Flickr, CC BY-NC-ND]

The motivation for men to donate sperm changed somewhat after laws were introduced prohibiting anonymous donation. Donors must now be prepared to be identified and allow contact with their donor children. This has reduced the number of men donating, as the necessity of identification is incompatible with their sense of privacy.

Another motivation for some men is a desire to be biological fathers, particularly when they’re unlikely to form a parenting relationship with a woman.

Women are usually more reluctant than men to give away their DNA, except when they have had their own experience of IVF. This is likely related to the significance of pregnancy and child birth experience, which men experience in a different way.

Women who donate their eggs are have been through infertility treatments such as IVF, and therefore have some understanding of the distress that follows such circumstances. Their motivation is to help other women who are not able to produce their own viable eggs.

Q19. Why do I need ICSI (sperm injections) if I use donor sperm?

A. Loretta Houlanah, embryology lecturer:

A common source of confusion for patients is why they need to use intra-cytoplasmic sperm injection (ICSI) when using donor sperm. ICSI is usually preserved for treatment where the male partner has a low sperm count and costs a lot more than a standard IVF treatment.

The main reason ICSI is used is because of the critical shortage of donor sperm. To enable supply to meet demand, the donor sperm sample may be diluted. This way it can be used in more patient treatments. The downside to this is that because diluted samples contain such a low volume of sperm, ICSI is required for the insemination procedure.

ICSI is also required to inseminate frozen-thawed eggs. In order to freeze eggs, the “cumulus cells” that surround them need to be removed. In natural conception, as well as standard IVF, the cumulus cells act like a maze and the sperm are required find their way through these cells to get to the egg.

It also acts like a barrier to limit the number of sperm that reach the end point. Without the cumulus cells in-tact, the risk of more than one sperm fertilising the egg is too high, so ICSI is used to avoid an abnormal fertilisation. With ICSI, the embryologist can ensure only one sperm enters the egg.