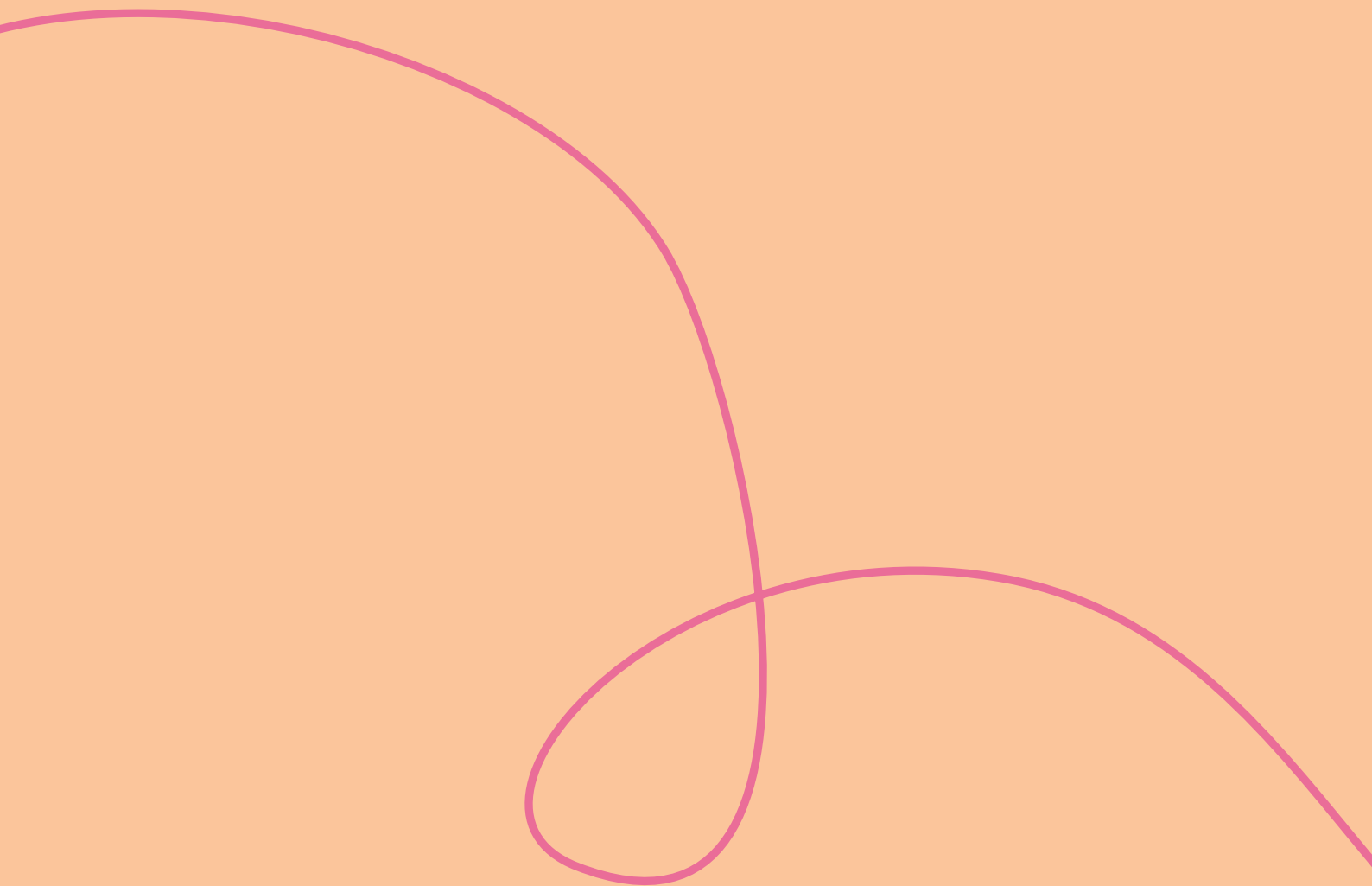


What you need to know about *infertility*



How common is it?

Tips to proactively support your fertility





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Understanding *infertility*

Infertility is defined as not being able to achieve a pregnancy after 12 months of actively trying (i.e., sex without contraception).¹ When you first learn about infertility, it may feel overwhelming and isolating, but it's important to know, **you're not alone.**

In fact, infertility is more common than you may think:

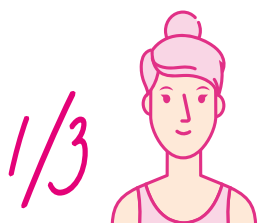
**Infertility affects about
1 in 6 Australian couples
of reproductive age²**



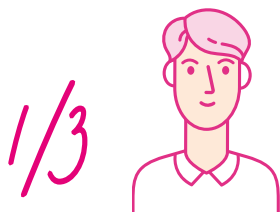
LGBTQIA+ couples, or an individual trying to get pregnant alone, may need to use Assisted Reproductive Technology (ART) via donation of gametes to achieve pregnancy.

Infertility can impact anyone, and is just as likely if you were assigned female or male at birth.²

Infertility is just as likely whichever sex you were assigned at birth



are related to fertility issues with people assigned **female** at birth



are related to fertility issues with people assigned **male** at birth



are related to fertility issues with **both** or ultimately the cause is **unknown**

There are many factors that impact fertility — some you don't have control over, such as age and pre-existing medical conditions, and some you do, such as lifestyle choices.

In this brochure, we will discuss various factors to give you a better understanding of infertility and some proactive tips on how you can help support your chances for a successful pregnancy.

We will also be highlighting some tests that your fertility specialist may choose to use to help get a better understanding of your fertility. **These tests are not an exhaustive list of all available assessments**, but some of the more common ones. Your fertility specialist will choose the most appropriate tests for you.

If you feel like you need more support
or you
have unanswered
questions, please do
not hesitate to get in
touch with your fertility
specialist, nurse or
other healthcare
professional.

How age affects infertility

For those assigned female at birth:

Whether the reasons are wanting to feel more settled, career advancement or finding the right partner, it's not uncommon to choose to wait and have children.

After the age of 35, there is a natural decline in both the quantity and quality of eggs.^{2,3}

Quantity of eggs

People assigned female at birth are born with a **fixed number of eggs**, and as they age, there is natural depletion in egg count. Quantity is often categorised by:^{2,3}



**LOW
OVARIAN
RESERVE**



**NORMAL
OVARIAN
RESERVE**



**HIGH
OVARIAN
RESERVE**

Quality of eggs

Quality of eggs decrease with age along with an **increased likelihood of chromosomal abnormalities** (irregularities in DNA).⁵ If you do become pregnant at an older age, you may undergo genetic testing to ensure the health of the embryo before proceeding with the pregnancy.

This does not mean that you cannot and should not get pregnant when you are older.

Age is just something that you will need to consider when beginning this journey. Such as, after the age of 35, you may want to see a fertility specialist after 6 months of not being able to conceive, instead of waiting the full year.⁶



FERTILITY TESTING

Ovarian reserve testing³

Provides a better understanding of your egg quantity. This testing often begins with hormone assessments at the start of your menstrual cycle.

Anti-Mullerian hormone (AMH) testing⁴

Assesses AMH levels, which helps identify low ovarian reserves and helps predict how you may respond to certain forms of ovarian stimulation.

Did you know?

It takes at least 39 million sperm per ejaculate to help conceive naturally!⁷

For those assigned male at birth:

There's not as much of a definitive age for people assigned male at birth; however, generally, their fertility will decrease with age.⁵ Age can also impact sperm quality.

Sperm quality is determined by 3 factors:⁷⁻⁹

Sperm count

The amount of sperm during ejaculation. A low sperm count can reduce the chances of fertilisation of an egg.

Sperm motility

Can be broken down into non-progressive motility and progressive motility. Non-progressive motility, as the name suggests, means that the sperm are not traveling in straight lines, which makes it very difficult for them to reach the egg.

Sperm morphology

The actual size and shape of sperm, more specifically the shape of the head. All of this impacts the sperm's ability to penetrate the egg.

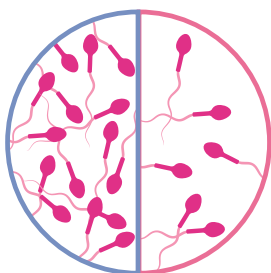


FERTILITY TESTING

Semen analysis⁷

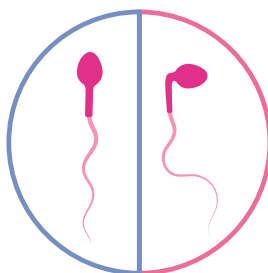
Provides a better understanding of your semen quality. After a specimen of semen is collected, it is sent to a lab, which analyses the count, motility and morphology of your sperm.

SPERM COUNT



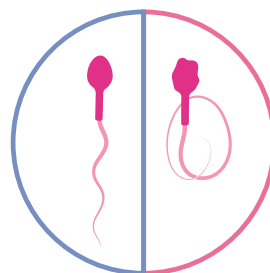
NORMAL SPERM COUNT
LOW SPERM COUNT

SPERM MOTILITY



NORMAL FORWARD PROGRESSION
ABNORMAL MOBILITY

SPERM MORPHOLOGY



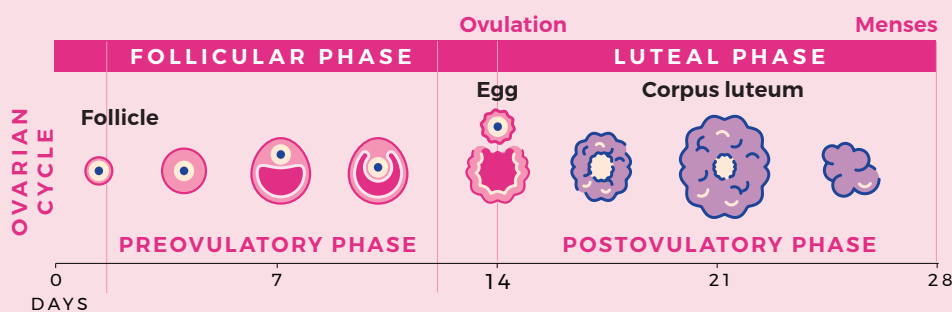
NORMAL SPERM
ABNORMAL SPERM

conditions affecting the reproductive system for those assigned female at birth:

Fertility can be impacted by many medical conditions, but here we'll focus on managing conditions that directly affect your reproductive system. If you do have any chronic conditions, it's important to make sure that they are well controlled prior to trying to conceive, so you are at your healthiest when starting the fertility journey.

Menstrual cycles and fertility

Menstrual cycles are an important part of your fertility.. A 'normal' monthly menstrual cycle prepares your body for conception and is regulated by your body's hormones.¹⁰



Infrequent (or irregular) menstrual cycles

An infrequent (or irregular) menstrual cycle could be a sign that there is an underlying medical condition that needs to be addressed.¹¹ Sometimes these can be easily addressed, while others may require more investigation.



FERTILITY TESTING

Hormone testing¹²

Provides a better understanding of how your hormones are functioning to regulate your menstrual cycle.

Ovulation testing

A common blood or urine test that measures hormone levels to determine if you are ovulating.

NOTE: While over-the-counter tests are available, they are not as comprehensive as an in-clinic blood test to assess multiple hormones.

If you have any questions

If you want to know more about how to manage these risks, talk to your fertility specialist, nurse or other healthcare professional.

Known abnormality of the uterus, fallopian tubes, or ovaries

Here are some medical conditions that directly impact reproductive organs that may need to be considered, when assessing fertility:^{6,11,13–15}

ENDOMETRIOSIS	POLYCYSTIC OVARY SYNDROME	PELVIC INFLAMMATORY DISEASE
<p>When tissue that is normally inside the uterus grows outside the uterus.</p> <p>NOTE: <i>This is a complex condition that can be hard to identify immediately. Further investigation may be necessary to confirm a diagnosis.</i></p>	<p>A hormonal disorder that causes the production of hormones usually associated with people assigned male at birth, which impacts the menstrual cycle.</p>	<p>An infection of the upper reproductive organs of the pelvis.</p>
FIBROIDS	SEXUALLY TRANSMITTED INFECTIONS	SINGLE OVARY
<p>Noncancerous growths that grow in the uterus.</p>	<p>Infections that are transmitted via sexual contact.</p>	<p>Individuals who are born with one ovary or have had one removed for medical reasons, have fewer eggs available.</p>



FERTILITY TESTING

Hysterosalpingography¹⁶

Assesses if there are any blockages in your uterus or fallopian tubes. The procedure begins by injecting dye into the uterus, followed by an X-ray to assess if there are any blocks or leaks.

Pelvic ultrasound¹³

Used to examine if there are any uterine or ovarian diseases, conditions, or abnormalities.

conditions affecting the reproductive system for those assigned male at birth:

Infertility in people assigned male at birth can be largely attributed to sperm quality (please refer to sperm quality on page 7) typically caused by problems with **sperm production** or **sperm transport**.¹⁷

Approximately 2 out of 3 people assigned male at birth who are infertile have an issue with sperm production; either due to low sperm count or the sperm that is being produced having a morphology that isn't conducive to conception. Approximately 1 in 5 people assigned male at birth who are infertile have issues with sperm transport; either a problem with sperm motility or blockages to ejaculation.¹⁷

Some potential causes¹⁷

Here are some medical conditions that directly impact reproductive organs that may need to be considered, when assessing fertility:^{5,10,16}

SPERM PRODUCTION PROBLEMS

- Genetic
- Undescended testes (didn't descend at birth)
- Infections (such as sexually transmitted infections)
- Torsion (twisting of the testes in the scrotum)
- Certain medications (i.e., exogenous testosterone)

BLOCKAGE OF SPERM TRANSPORT

- Infections (such as sexually transmitted infections)
- Prostate-related problems
- Absence of vas deferens
- Vasectomy



FERTILITY TESTING

Semen analysis¹⁶

As mentioned above, this provides a better understanding of your semen quality.

Imaging (such as an MRI or ultrasound)¹⁶

Used to examine if there are any underlying diseases, conditions, or abnormalities.

If you have any questions

If you want to know more about how to manage these risks, *talk to your fertility specialist, nurse or other healthcare professional.*

lifestyle considerations, the dos and don'ts

It's important to take a holistic approach to your lifestyle choices and try to be as proactive as possible in 'staying healthy'.

There isn't just one thing that will 'fix' infertility. However, all the little choices you make do add up and can play instrumental roles in supporting fertility.

Which lifestyle adaptations can you commit to adding or subtracting from your daily routine?

Do



Eat the rainbow when it comes to fruits and veggies¹⁸

The more colours you add,
the more variety
in nutritional value.



Switch to organic foods or those that have less toxins¹⁸

Unfortunately, toxins do find a way of making it into our foods. Switch to organic or even just washing fruits and vegetables can help minimise exposure to unwanted toxins.^{17,18}



Wash fruits and vegetables before eating to remove toxins¹⁹



Keep a healthy weight^{6,8}

Extra weight can impact hormone levels, which in turn can affect the menstrual cycle and quality of eggs or sperm.



Commit to regular exercise (75 mins intense or 150 mins moderate per week)¹⁸

Regular exercise not only helps you maintain a healthy weight but can also keep you strong in preparation for your fertility journey.



Manage stress through mindful movement¹⁸

Stress can have a negative impact on nearly all parts of your life. By adding mindful movement (like meditation and yoga) you can help reduce stress.

If you have any questions

about these lifestyle recommendations, talk to your fertility specialist, nurse or other healthcare professional.

Don't (or limit)



Don't smoke or vape²⁰

Eggs and sperm can be harmed by toxins in smoke. On average, people assigned female at birth who smoke take longer to fall pregnant. Exposure to second-hand smoke isn't good either!



Cut out alcohol⁸

Even light drinking has been found to increase the time it takes to get pregnant, and reduce the chances of delivering a healthy baby.^{8,21}

There is some evidence that daily drinking may impact the count and quality of sperm.²²

For those assigned female at birth:



Limit caffeine²¹

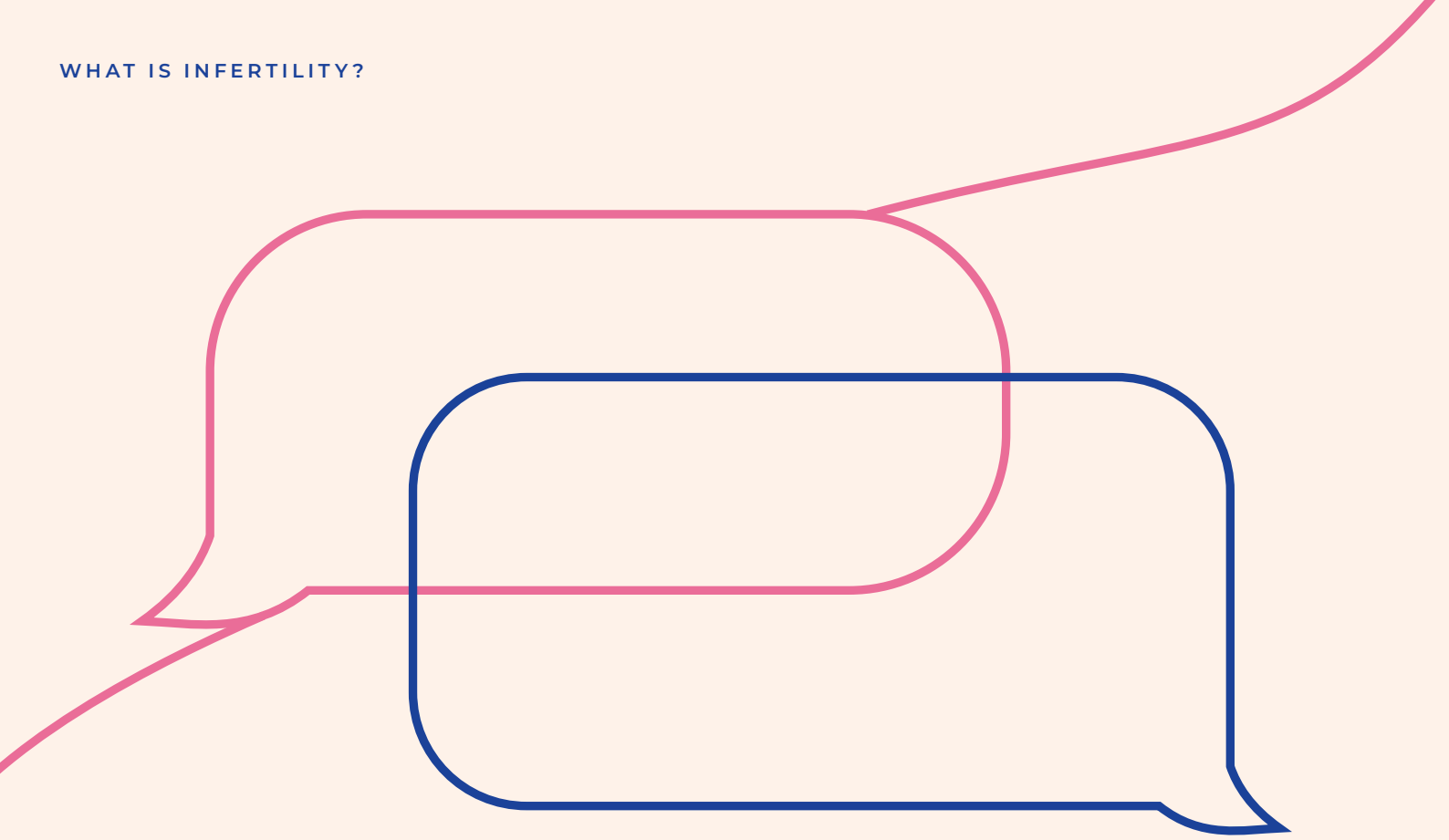
Drinking large amounts of caffeine may increase the chances of miscarriage.

For those assigned male at birth:



Ditch the budgies⁸

Trade them for a pair of loose cotton boxers, tight fitting underwear can be harmful to sperm production.



lets talk about sex²³

Yes, talking about sex can be uncomfortable, but for heterosexual couples, sex does play a role in improving the chances of fertility. And you may have heard some 'tried and true' methods to improve your odds, but which ones are *actually* true?

Common questions you may have...

Do I have to have sex every day?

Not every day. But every other day during ovulation may help increase your chances of conception.

Is there a specific position that will increase chances?

Unfortunately, there is no magical position that has been proven to work. Frequency (as mentioned, every other day during ovulation) will be more impactful.

What about lubrication?

Be careful to read the labels. While some lubrication products are safe for couples looking to conceive, some may actually contain spermicide, which kills sperm.

Does laying down after sex improve the odds?

Sperm are motile, so there is no need to remain laying down to improve the chances of conception.

If you feel like you need more support

please do not hesitate to get in touch with your fertility specialist, nurse or other healthcare professional.

your healthiest you

Learning about infertility may feel overwhelming at first; however, there are a number of ways you can proactively manage your lifestyle choices to help support you to be your healthiest you. We hope you find this information helpful.

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