

# Know your health



## Fertility and reproduction



## About this booklet

This booklet is for people who want to know more about:

- menstruation or periods
- how a woman gets pregnant
- fertility

It is helpful to know about periods and how a woman gets pregnant when thinking about:

- family planning
- contraception
- reproduction

**Ovulation:** when an egg is released from a woman's ovary.

**Menstruation:** when a woman's blood and the lining from her uterus flow out through the vagina. Menstruation is also known as a menstrual period or a period.

**Reproduction:** when a baby is made as a result of either:

- sexual intercourse
- assisted reproductive technology

## The menstrual cycle

A menstrual cycle:

- is a natural process in a woman's life
- involves the processes of **ovulation** and **periods**
- is an important part of **reproduction**
- is counted from the first day of a woman's period to the first day of the next period
- will usually take about 28 days but can take anywhere from 21-42 days
- will be different for each woman



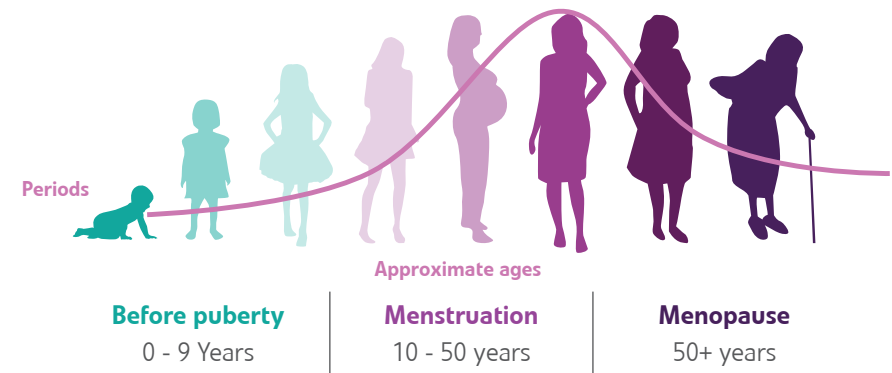
## Periods

Periods:

- are sometimes called menstruation or menstrual periods
- start at **menarche** when a girl is usually between 11 and 14 years old
- end at **menopause** when a woman is about 45-55 years old
- usually last for 3-7 days
- can be painful for some women
- will be different for each woman

**Menarche:** a girl's first period.

**Menopause:** when menstruation stops and when a woman has not had a period for one year.



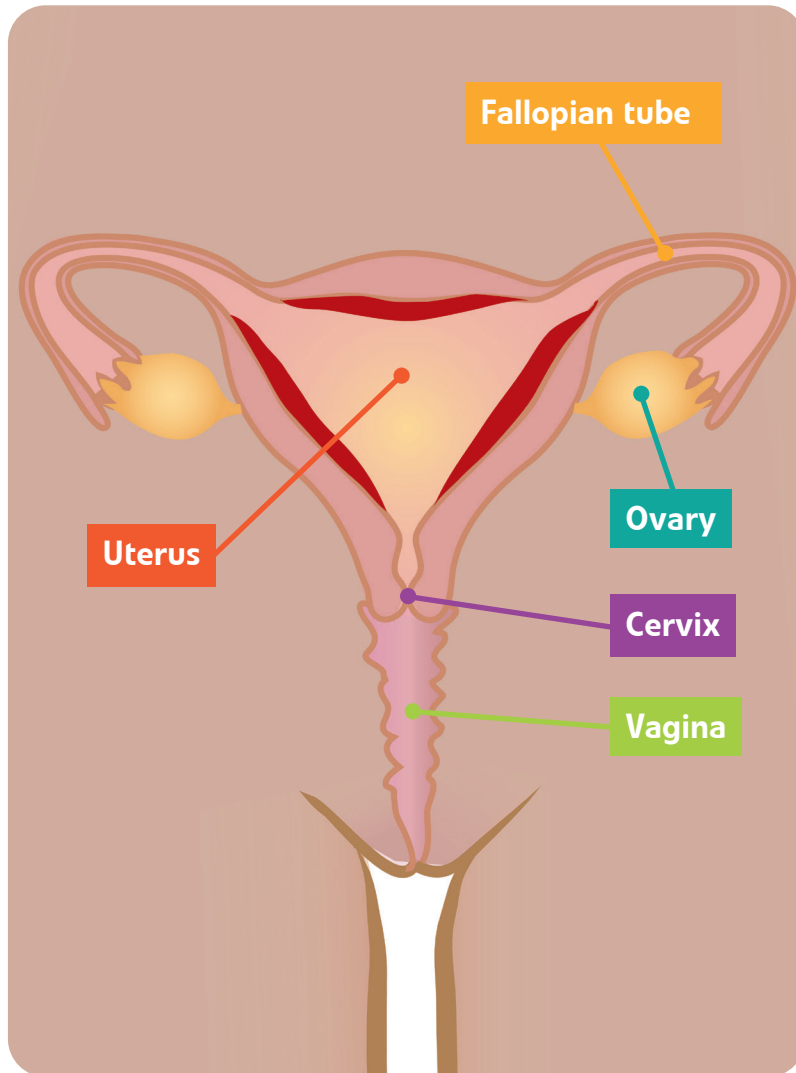
A woman's pattern of bleeding may be different when she first starts her periods at **menarche** and when she finishes her periods at **menopause**.

During **menarche** and **menopause** women may:

- bleed more heavily
- bleed less often
- bleed more often
- bleed for a longer time
- bleed for a shorter time

There are ways to manage painful or heavy bleeding. Talk to your doctor or visit a Family Planning NSW clinic if you are worried about heavy or painful periods.

## Female reproductive system



### Ovary

A woman has two **ovaries**. The ovaries contain a woman's eggs. The ovaries release about one egg per month.

### Fallopian tubes

The **fallopian tubes** connect the ovaries to the uterus.

### Uterus

The lining of the **uterus** thickens with blood each month to get ready for a possible pregnancy.

### Cervix

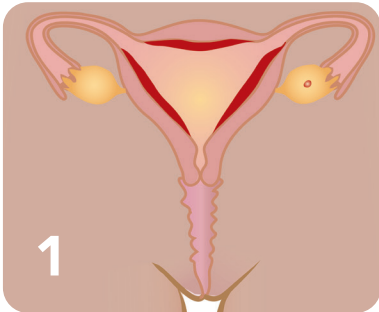
The **cervix** is a small passage that connects the vagina to the uterus. Some things that travel through this passage include:

- sperm travels up to the uterus
- period blood travels down to the vagina

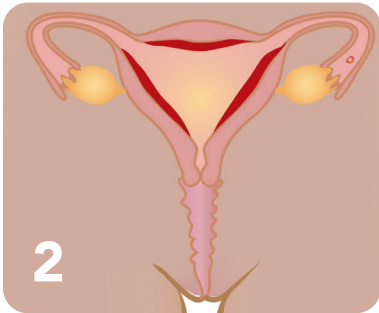
### Vagina

The **vagina** is a stretchy passage that connects the cervix to the outside of a woman's body.

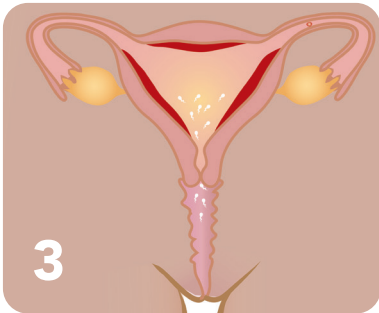
## Menstrual cycle



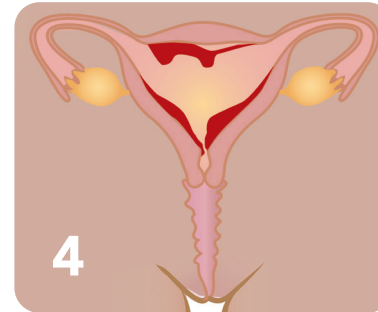
Each month an egg matures in a woman's **ovary**. The lining of the woman's **uterus** will also thicken.



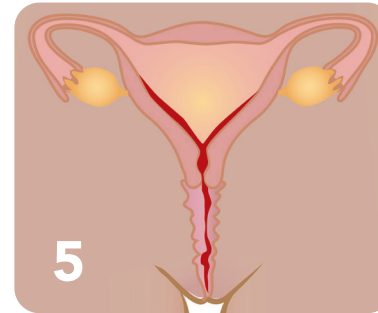
Once the egg has matured it is released from the woman's ovary. This is called ovulation. The egg travels down the **fallopian tube** toward the **uterus**.



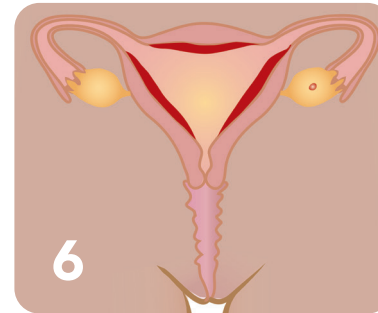
When a man and a woman have sex a man's sperm can go into the woman's **vagina**. It then travels up into the woman's **uterus** and **fallopian tubes**.



If there are no sperm in a woman's **uterus** or **fallopian tubes** the egg will not be **fertilised**. If the egg is not **fertilised** the egg and the lining from the **uterus** break down.

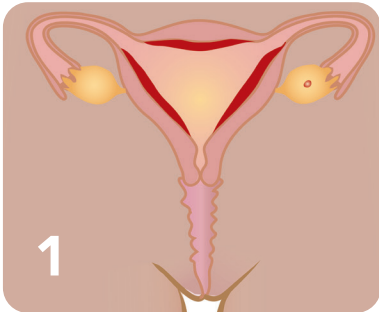


Blood and the lining from the **uterus** flow out through the **vagina** as a woman's period.

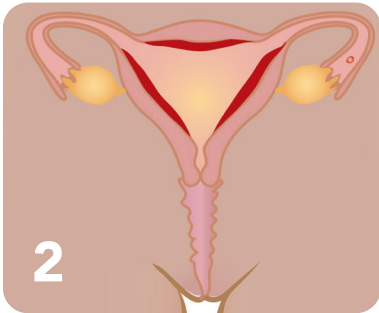


The whole cycle then starts again.

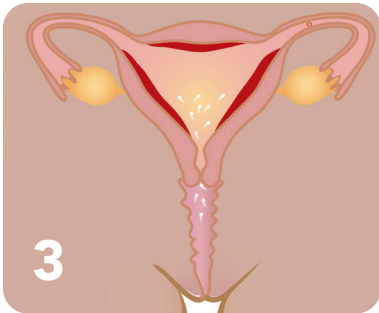
## Reproductive cycle



Each month an egg matures in a woman's **ovary**. The lining of the woman's **uterus** will also thicken.

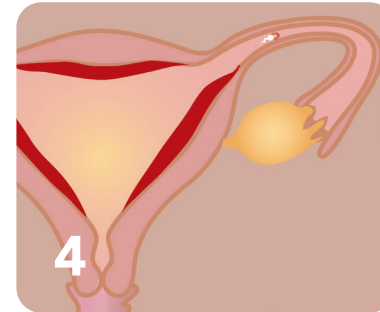


Once the egg has matured it is released from the woman's ovary. This is called ovulation. The egg travels down the **fallopian tube** toward the **uterus**.

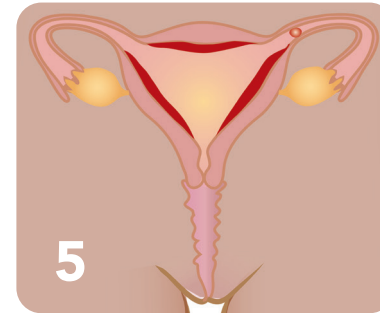


When a man and a woman have sex a man's sperm can go into the woman's **vagina**. It then travels up into the woman's **uterus** and **fallopian tubes**.

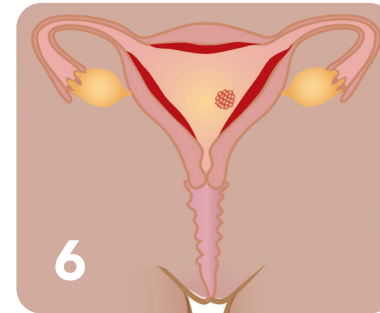
**Fertilisation:** when a man's sperm and a woman's egg join together.



The man's sperm and the woman's egg can join inside the woman. This is called **fertilisation**.



A fertilised egg will travel down the **fallopian tube** towards the **uterus**.



Once the fertilised egg reaches the **uterus** it can stick to the side of the **uterus**. A baby may start to grow in the woman's **uterus**.

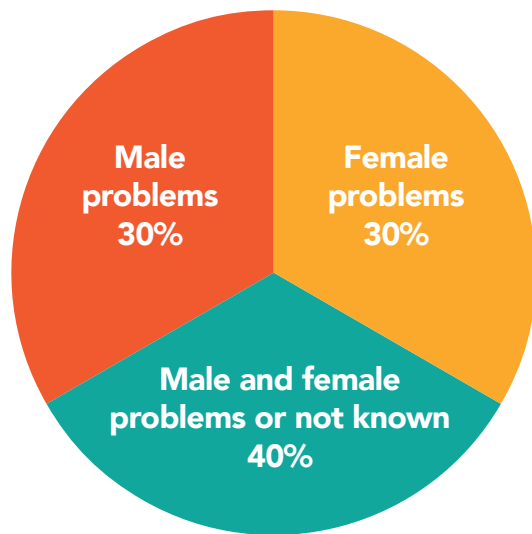
## Fertility

Fertility is someone's natural ability to have children.

Infertility is when a man and woman have been having regular sex without a condom for one year and have not been able to get pregnant.

Infertility is quite common. Both men and women can have problems with fertility.

Fertility problems happen equally among men and women.



There can be many reasons why men and women may have problems with fertility. These can be:

- problems with a man or woman's reproductive system
- **age**
- lifestyle factors such as being overweight, smoking, using alcohol and drugs
- some medical conditions such as:
  - **polycystic ovary syndrome**
  - **endometriosis**
- problems after trying to undo a man's **vasectomy**

**Vasectomy:** a permanent surgical procedure that stops sperm from being released during male ejaculation. This means a woman can not get pregnant when a man and woman have sex.

**Polycystic ovary syndrome:** a common condition in women caused by a hormonal imbalance. Many **follicles** grow in the ovaries. Women can have irregular periods.

**Endometriosis:** when the lining of a woman's uterus grows outside of the uterus. Endometriosis can lead to painful periods.

**Age** is very important for fertility.

As a woman gets older so do her eggs. Her eggs will eventually 'run out'. This is why women may find it harder to get pregnant after the age of 35 years.

The quality of a man's sperm may also lessen as they get older.

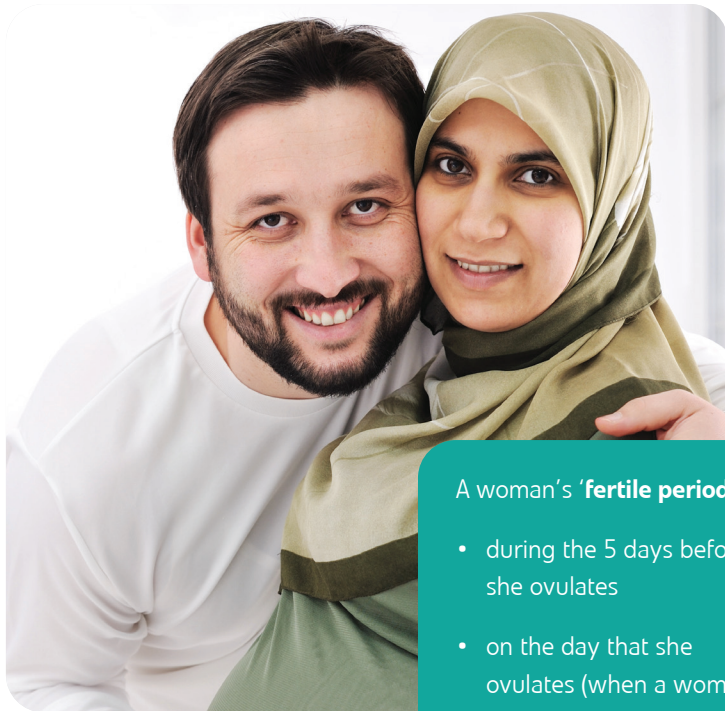
**Follicle:** A sac in the ovaries that holds an egg that is not yet mature.

## Improving your chances of becoming pregnant

There are some things that men and women can do to improve their chances of becoming pregnant.

These include:

- having sex during a woman's **'fertile period'**
- having a healthy lifestyle (see page 18)



A woman's **'fertile period'** is:

- during the 5 days before she ovulates
- on the day that she ovulates (when a woman releases her egg).

## Timing of sexual intercourse

The timing of sexual intercourse is important for people trying to become pregnant.

It is important to know when in a woman's menstrual cycle she is most likely to become pregnant.

To increase their chances of becoming pregnant a man and woman should have sex:

- in the 5 days before ovulation
- the day of ovulation

If a man and woman do not know when a woman's 'fertile period' is they should have sex with each other every 2-3 days.

This will improve their chances of becoming pregnant.



A woman's chance of becoming pregnant:

- increases during her 'fertile period'
- is the greatest on the day that she ovulates (releases her egg)



## How to know when a woman is ovulating

It can be difficult for a woman to know when she is ovulating. The timing of ovulation:

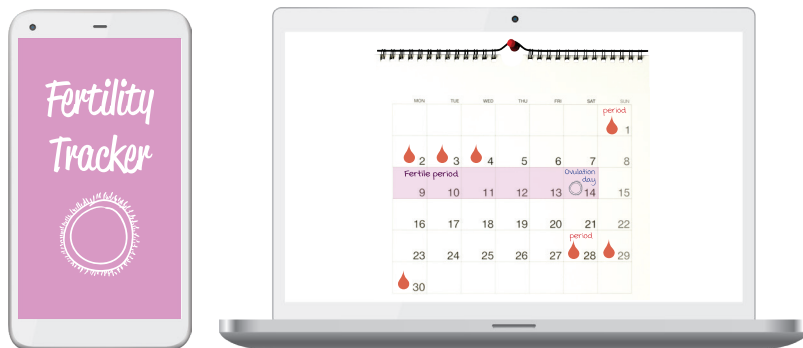
- can vary from one menstrual cycle to the next
- will be different for each woman

Most women will ovulate about 14 days before their period.

There are some things that can help predict when a woman is ovulating. It may be helpful to use:

- an ovulation calculator
- an ovulation calendar
- an ovulation tracking mobile phone app
- an ovulation predictor kit

This will help to track a woman's menstrual cycle and see when she is most fertile.



A woman can check other changes in her body to see when she is most fertile. These can be:

- a change in body temperature
- changes to the **cervical mucus** (cervical mucus is runnier and clearer when a woman is fertile)

**Cervical mucus:** the mucus that comes from glands of the cervix.



## Healthy lifestyle

There are things that men and women can do to have a better chance of becoming pregnant.

Men and women can:

- limit alcohol or not drink alcohol at all
- not smoke cigarettes or take illegal drugs
- maintain a healthy weight
- eat a healthy, balanced diet including vegetables, fruits and whole grains
- do regular, gentle exercise

It is recommended that women who are trying to get pregnant take folate supplements (which can be bought from a chemist or supermarket). Folate helps to support the growth of a healthy baby. Folate should be taken:

- At least one month before getting pregnant
- During the first 12 weeks of pregnancy

Folate does not improve a woman's chance of becoming pregnant.



Most healthy couples will become pregnant within one year of trying. It might be helpful to visit a GP or family planning clinic to talk about your options if you are:

- under 35 years old and have not become pregnant after one year of trying
- over 35 years old and have not become pregnant after six months of trying

There are several options for the treatment of infertility. These include:

- change of lifestyle
- certain medications prescribed by a doctor
- surgery
- assisted reproductive technology

## Assisted reproductive technology

Assisted reproductive technology (ART) are procedures that help people become pregnant. It is sometimes called assisted reproductive treatment. ART can be used:

- by couples where the man is infertile
- by a single woman who wants to have a baby
- by women who cannot become pregnant
- by women who cannot stay pregnant
- to lower the chance of a **genetic disorder** being passed to the baby from a parent
- to **preserve fertility**

A **genetic disorder** is a disorder that is passed from parent to child. The disorder is caused by changes in DNA.

**Fertility preservation** is when eggs, sperm, or reproductive tissue is saved. They are saved so that a person can use them to have children in the future.

There are many different types of ART treatments. Some of these are:

- medication to help a woman ovulate
- artificial insemination (IUI)  
This is when sperm is put into a woman's uterus when the woman is ovulating.



- in vitro fertilisation (IVF)  
This is when a woman has injections to help her to produce eggs. Some eggs are taken out of the woman's ovary. The eggs are mixed with sperm in a **culture dish**. Sometimes an egg and sperm will join. If an egg and sperm join, they are then put into the woman's uterus.

A **culture dish** is small, round dish. Scientists use culture dishes to hold or grow cells in.

- intracytoplasmic sperm injection (ICSI)  
This is when a woman has injections to help her to produce eggs. Some eggs are taken out of the woman's ovary. A sperm is injected into each egg in a laboratory. The eggs and sperm are put into the woman's uterus.

Deciding whether to use ART treatment is a big decision. Some things to think about are:

- the side effects of using ART  
ART treatments can have some side effects. Talk to your GP or visit a Family Planning NSW clinic to find out more about the possible side effects of ART.



- your age and medical history  
ART treatments may take a period of time before a woman becomes pregnant. Sometimes ART treatments do not work at all. How well your treatment goes will depend on your age and medical history.
- the cost of treatment  
How much treatment costs will depend on the type of treatment that is used. Sometimes people can get a rebate from Medicare that covers some of the cost of ART treatment. Some of the costs of ART can sometimes be covered by Private Health Insurance companies.

It is good to talk your partner, family or friends if you are thinking of going through ART fertility treatment. It is also a good idea to talk to your GP or visit a Family Planning NSW clinic to find out more about ART treatments.

Talk to your GP or visit a Family Planning NSW clinic if:

- you or your partner are having problems becoming pregnant or staying pregnant
- you are worried about infertility
- you are a single woman who wants to have a baby
- you are in a same sex relationship and want to have a baby

For more information on ART visit

<https://www.yourivfsuccess.com.au/>

For more information on menstruation, the menstrual cycle, fertility or infertility see your GP or visit a Family Planning NSW clinic. Visit [www.yourfertility.org.au](http://www.yourfertility.org.au) for more information about fertility.

## Feeling pressured?

A woman should be able to choose if and when she gets pregnant. She should not feel pressured by her partner or family to get pregnant if she does not want to.

If you are feeling pressured to get pregnant you can talk to your G.P or visit a Family Planning NSW clinic.

A woman can ask for help if she has been forced to have sex. She can visit her G.P or a Family Planning NSW clinic to get an STI test and the emergency contraceptive pill.

Sex that is forced or makes a person feel uncomfortable can be sexual abuse. This is a crime.

If you are worried about what is happening in your relationship you can contact 1800 RESPECT on **1800 737 732** (24 hours) or **[www.1800respect.org.au](http://www.1800respect.org.au)**.



Notes



For more information, visit our website [www.fpnsw.org.au](http://www.fpnsw.org.au)  
or call the **Family Planning NSW Talkline** on **1300 658 886**.

*Funded by NSW Health*