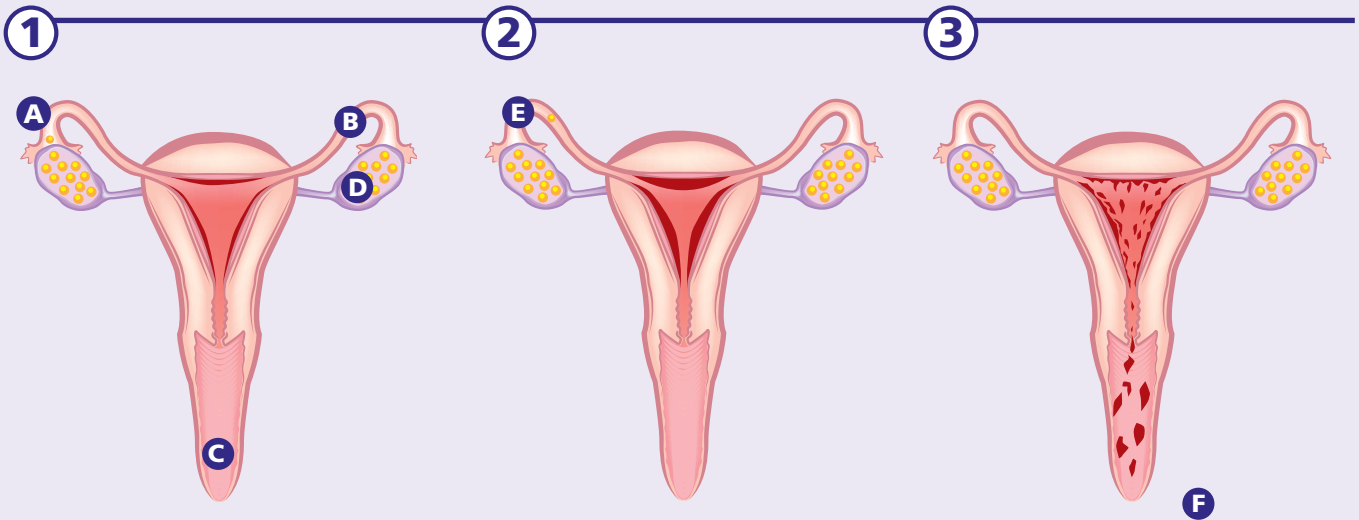


# 1

## Becoming pregnant

### Ovulation



- A** Egg being released
- B** Fallopian tube
- C** Vagina
- D** Ovary

- E** Egg progressing down the fallopian tube

- F** Uterus lining being shed

Ovulation occurs each month when an egg (ovum) is released from one of the ovaries. Occasionally, more than one egg is released, usually within 24 hours of the first egg. The 'fingers' at the end of the fallopian tubes help to direct the egg down into the tube. At the same time, the lining of the uterus begins to thicken and the mucus in the cervix becomes thinner so that sperm can swim through it more easily.

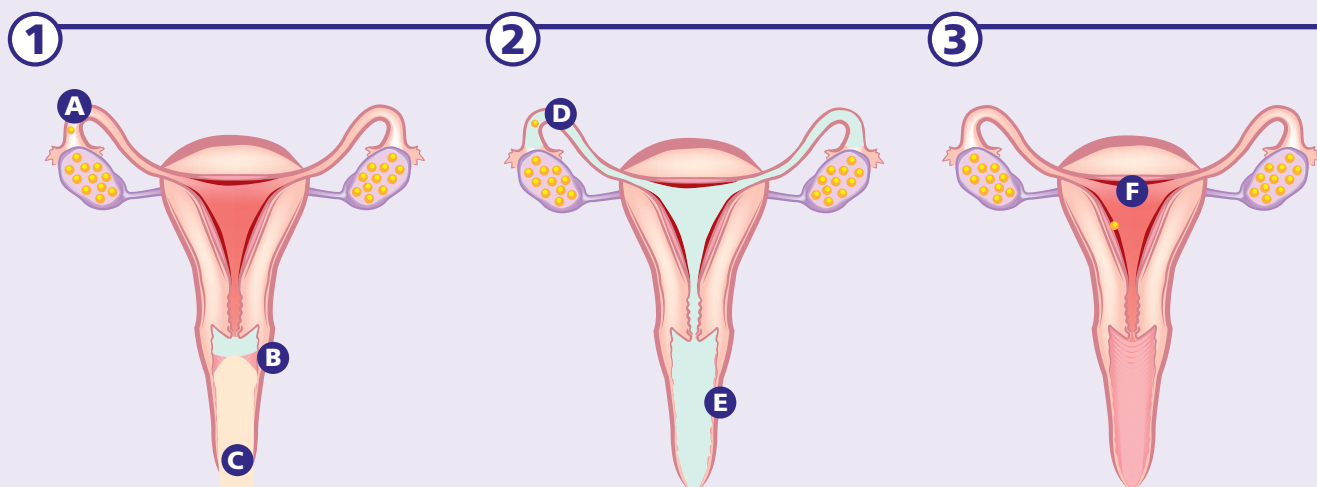
The egg begins to travel down the fallopian tube. If a man and woman have recently had sex, the egg might be fertilised here by the man's sperm. The lining of the uterus is now thick enough for the fertilised egg to be implanted.

If the egg is not fertilised, it will pass out of the body during the woman's monthly period along with the lining of the uterus, which is also shed. The egg is so small that it cannot be seen.



## Conception

Conception is the process that begins with the fertilisation of an egg and ends with the implantation of an egg into a woman's uterus.



**A** Egg

**B** Sperm being ejaculated

**C** Penis

**D** Egg being fertilised

**E** Sperm

**F** Attached embryo

### Ovulation

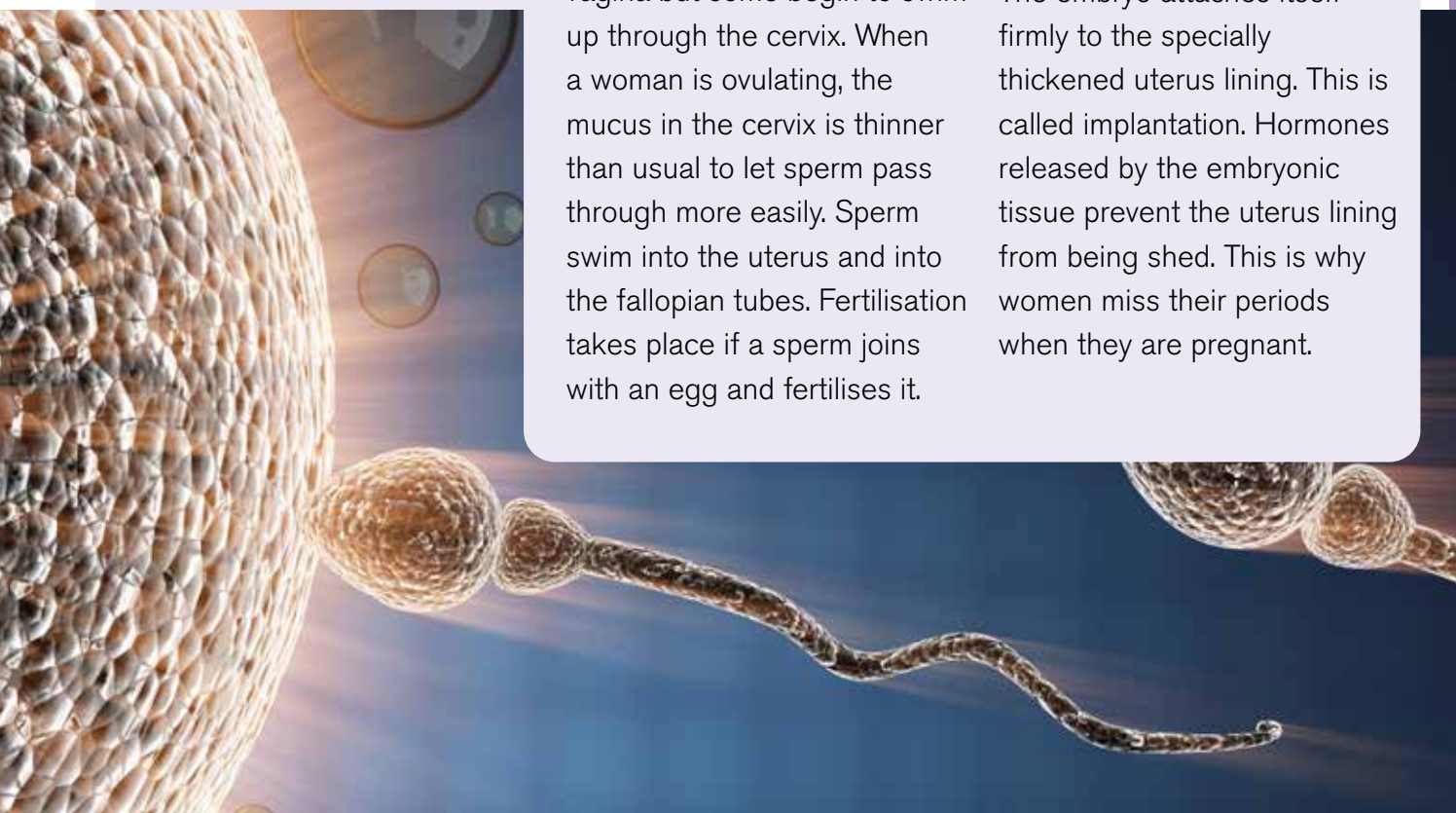
A woman conceives around the time she is ovulating; that is, when an egg has been released from one of her ovaries into one of her fallopian tubes.

### Fertilisation

During sex, sperm are ejaculated from a man's penis into a woman's vagina. In one ejaculation there may be more than 300 million sperm. Most of the sperm leak out of the vagina but some begin to swim up through the cervix. When a woman is ovulating, the mucus in the cervix is thinner than usual to let sperm pass through more easily. Sperm swim into the uterus and into the fallopian tubes. Fertilisation takes place if a sperm joins with an egg and fertilises it.

### Implantation

During the week after fertilisation, the fertilised egg (which is now an embryo) moves slowly down the fallopian tube and into the uterus. It is already growing. The embryo attaches itself firmly to the specially thickened uterus lining. This is called implantation. Hormones released by the embryonic tissue prevent the uterus lining from being shed. This is why women miss their periods when they are pregnant.





## Hormones

Both men and women have hormones, which are chemicals that circulate in the bloodstream. They carry messages to different parts of the body and result in certain changes taking place. Female hormones, which include oestrogen and progesterone, control many of the events of a woman's monthly cycle, such as the release of eggs from her ovaries and the thickening of her uterus lining.

During pregnancy, your hormone levels change. As soon as you have conceived, the amount of oestrogen and progesterone in your blood increases. This causes the uterus lining to build up, the blood supply to your uterus and breasts to increase



and the muscles of your uterus to relax to make room for the growing baby.

The increase in hormone levels can affect how you feel. You may have mood swings, feel tearful or be easily irritated. For a while you may feel that you cannot control your emotions, but these symptoms should ease after the first three months of your pregnancy.

## Boy or girl?

Every normal human cell contains 46 chromosomes, except for male sperm and female eggs. These contain 23 chromosomes each. When a sperm fertilises an egg, the 23 chromosomes from the father pair with the 23 from the mother, making 46 in all.

Chromosomes are tiny, thread-like structures which each carry about 2,000 genes. Genes determine a baby's inherited characteristics, such as hair and eye colour, blood group, height and build. A fertilised egg contains one sex chromosome from its mother and one from

its father. The sex chromosome from the mother's egg is always the same and is known as the X chromosome. The sex chromosome from the father's sperm can be an X or a Y chromosome.

If the egg is fertilised by a sperm containing an X chromosome, the baby will be a girl (XX). If the sperm contains a Y chromosome, the baby will be a boy (XY).



## Twins, triplets or more

Identical twins occur when one fertilised egg splits into two; each baby will have the same genes – and therefore they will be the same sex and look very alike. Non-identical twins are more common. They are the result of two eggs being fertilised by two sperm at the same time. The babies may be of the same sex or different sexes, and will probably look no more alike than any other brothers and sisters. A third of all twins will be identical and two-thirds non-identical.

Twins happen in about 1 in every 65 pregnancies. A couple is more likely to have twins if



there are twins in the woman's family. Triplets occur naturally in 1 in 10,000 pregnancies and quads are even rarer. Nowadays, the use of treatments such as in vitro fertilisation (IVF) has made multiple births more common.

### Are you carrying twins?

You might suspect that you are carrying more than one baby if:

- you are very sick in early pregnancy;
- you seem bigger than you should be for your 'dates';
- you have had fertility treatment.

It is usually possible to find out through your dating ultrasound scan, which happens between eight and 12 weeks (see page 63).

You may need another scan after this to find out whether the babies share a placenta (are

identical) or if they have two separate placentas, in which case they can be either identical or non-identical. It is important to know this because women with babies who share a placenta will need to have more appointments and scans. If this cannot be determined, you should be offered a further scan. A third of identical twins have two separate placentas. This happens when the fertilised egg splits in the first 3–4 days after conception and before it implants in the uterus.

### What is different about being pregnant with twins or more?

Multiple pregnancies have a higher risk of complications – particularly premature birth. If your babies share a placenta (identical twins) or if you are having more than two babies, you should be offered pregnancy care at a special clinic for multiple pregnancies. These clinics are not held in every

hospital in Northern Ireland, and you might need to travel to another hospital. Your doctor might also refer you to the Regional Fetal Medicine Service in Belfast if you require more specialised care. If your babies are triplets or if they share a placenta it is recommended that you are scanned every two weeks from 16 weeks onwards, and every four weeks if your babies have separate placentas. You are more likely to have a caesarean section but twins can sometimes be delivered vaginally. Your doctor should discuss this with you.

It is possible to breastfeed twins and triplets and there is more information about how you can do this in chapter 10. Advice on the care you might expect during pregnancy is available from the National Institute for Health and Care Excellence (NICE), [pha.site/multiple-pregnancy](http://nhs.uk/pha.site/multiple-pregnancy)

