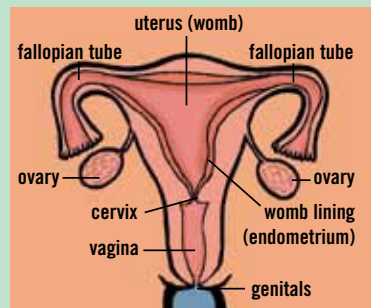


PREGNANCY

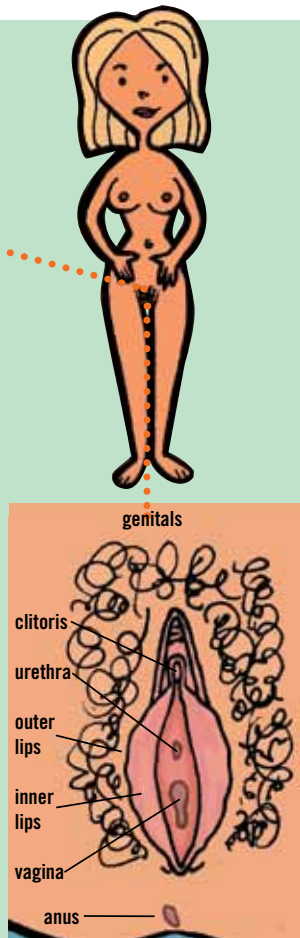




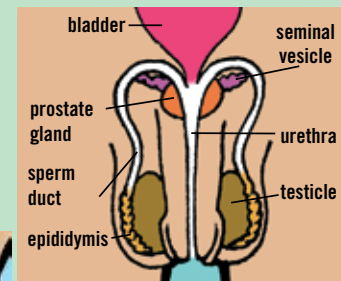
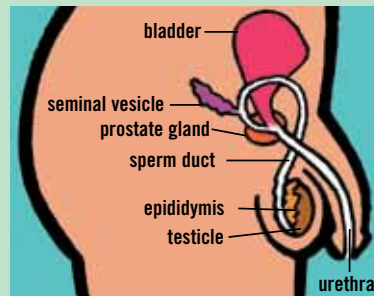
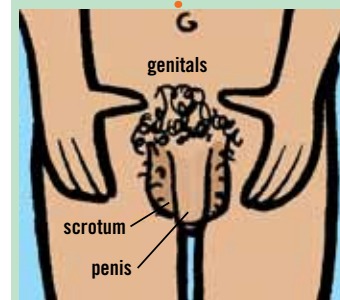
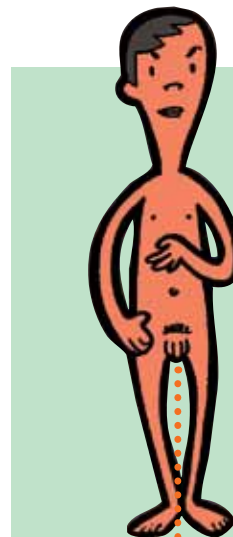
HOW DOES IT ALL WORK?



A woman has two **ovaries**, one on each side of her **uterus** (womb). These contain her **eggs** (ova). She is born with all her eggs in place.



HOW DOES IT ALL WORK?



A man has two **testicles** (balls).

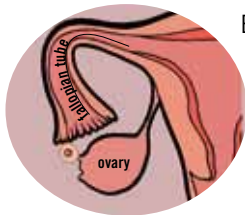
Sperm are made continuously in great numbers inside each testicle and stored in the **epididymis** (a small tube at either side of each testicle) until they are fully mature and ready to be ejaculated.

Sperm are damaged by heat, so the balls are carried outside the body in a soft bag of skin (the **scrotum**) to keep cool.



WHAT IS A MENSTRUAL CYCLE?

The menstrual cycle is from the **FIRST DAY OF A PERIOD** until the **DAY BEFORE THE NEXT PERIOD STARTS**. The average length of the cycle is around 28 days, but it can be as short as 21 or as long as 40. **This is normal**. Whatever the length, **ovulation** will happen about 10–16 days before the start of the next period.



Each month, the **brain** sends a chemical message to the ovaries. This causes around 20 eggs to grow in one or other ovary. At the same time the hormone **estrogen** begins to thicken the lining of the womb.

Usually one egg becomes larger than the others and is released into the fallopian tube by the ovary. This is called **OVULATION**.



Ovulation triggers a second hormone, **progesterone**, to continue to thicken the **endometrium** (the lining of the womb) in preparation for a fertilised egg.



The egg lives in the fallopian tube for up to 24 hours. If it is not fertilised and does not implant to start a pregnancy, levels of hormones fall, the womb lining breaks up and a period happens.

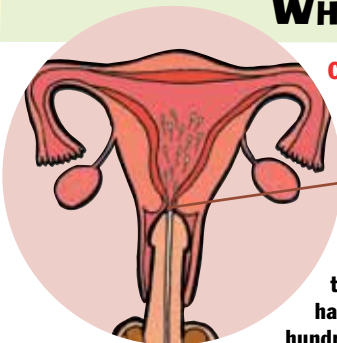


WHAT ABOUT SPERM?

At puberty, boys start to make sperm in their testes (balls). Sperm are made continuously, so you cannot run out of sperm. It takes about 80 days for a sperm to be produced.



WHAT IS CONCEPTION?



Conception is a process that begins with the fertilisation of an egg by sperm and ends with implantation. When a man and a woman have sex the man's penis fits into the woman's vagina. After ejaculation (coming), sperm are released through the penis into the vagina. They swim through the woman's cervix, into the womb, and then into the fallopian tubes. If an egg has been released into the fallopian tube, hundreds of sperm swim up to reach it.

1. One sperm may attach itself to the egg wall and slowly penetrate the wall. It takes about three hours for the sperm to enter the egg.

Once the sperm is inside, the egg wall hardens to make it impossible for other sperm to get in.

2. The egg has now been fertilised and moves down the fallopian tube towards the womb.

3. During the short journey the fertilised egg develops by dividing into two cells, then into four, eight, 16 and so on.



4. About 3–4 days after fertilisation, the egg is now 64 separate cells.

5. About 5–10 days after ovulation, the fertilised egg begins to attach itself to the thick, nutritious womb lining. Implantation of the fertilised egg has taken place. It is now called an **embryo** and the pregnancy has begun...

When the man **ejaculates** (comes), the sperm travel from the **testes** through the **sperm ducts** to the **penis**. As they travel, fluids are added to them to produce a mixture called **semen**. He ejaculates about a **teaspoonful** of semen containing up to 300 million sperm. Just one drop, pinhead-size, contains around 1,500 sperm!

Glands in the woman's vagina and the man's penis produce secretions which make it easier for the penis to enter the vagina. A woman can get pregnant even if the man withdraws before ejaculating. This is because the fluid which leaks out of the penis before he comes (pre-cum) may contain sperm.



WHEN DO YOU BECOME FERTILE?

You can get pregnant when you have sex around the time that you ovulate. Your fertile time lasts for 8–9 days. But it's not always easy to work out when this is – especially if your periods aren't regular.

You ovulate 10–16 days before the start of your next period. Although the released egg will only live for up to 24 hours, sperm can live for up to seven days. If sperm are already present before ovulation, they may meet the egg when it is released.



Learning to recognise the fertile and infertile times of the menstrual cycle can help to plan or prevent a pregnancy. This needs to be taught by a **trained fertility awareness teacher**.

Different signs or indications are observed and recorded every day of the month. These are:

- changes in body temperature
- changes in cervical secretions
- menstrual cycle dates.

Fertility in women begins to decline when they are in their 30s, until after the menopause, when periods eventually stop.

Men can be fertile for longer than women. Some men in their 70s have fathered babies.



HOW DO YOU PREPARE FOR PREGNANCY?

STOP SMOKING It may be the most important thing you can do for the health of your baby.



'I used to smoke 20 a day and I feel SO pleased with myself giving up for the baby.'

MEN who smoke have weaker erections and less healthy sperm.

WOMEN who smoke, or whose partners smoke, or who are exposed to smoke at work, are less likely to conceive. If they become pregnant, they may have greater complications during labour and are more likely to have a premature birth or stillbirth.

DRINK SENSIBLY Drinking alcohol may increase the frequency of sex – a lot of pregnancies happen because people get carried away – but heavy drinking can reduce fertility and even make men **impotent**.



Drinking too much during pregnancy can damage the fetus. The safest approach is not to drink at all. If you do drink you should avoid getting drunk, and try to limit alcohol to the occasional drink and not more than one or two units once or twice a week.

(A unit is a **single pub measure of spirits, a small 125ml glass of wine, or a half a pint of regular beer, lager or cider.**) A lot of women give up alcohol altogether during pregnancy.

Smoking, drinking, drugs, poor diet and sexually transmitted infections can reduce fertility in men and women, and may damage the health of the mother during pregnancy, or her baby when it's born.

EAT A WELL BALANCED DIET

Men and women wanting to start a pregnancy should eat:

- lots of **fruit and vegetables**
- plenty of **starchy carbohydrates** such as **bread, cereal and pasta**
- **protein** such as **beans, pulses, meat, fish, cheese and eggs**.



FOLIC ACID can reduce risks to the spine of the baby. Women need to take **folic acid supplements** three months before trying for a baby and during the first 12 weeks of pregnancy. Good natural sources of folic acid are:

- green leafy vegetables
- breakfast cereals
- some bread.

GET VACCINATED Babies can have severe problems if their mother contracts **rubella** (German measles) in early pregnancy so it's important that women who haven't had it are vaccinated against it **before** trying to conceive. This vaccination is now routinely offered to young babies.

GET TREATED Sexually transmitted infections (STIs) can affect fertility in men and women, and an untreated infection can be passed on to the fetus. Some infections can't be cured but treatment can be given to try and prevent the baby getting it. If you think you may have an infection, go to a genitourinary medicine (GUM) clinic, sexual health clinic or your general practice.



WHAT ARE THE SIGNS OF PREGNANCY?



feeling tired



swelling or tenderness in the breasts



missing a period



a shorter, lighter period than usual



appetite changes (going off some foods)



nausea or vomiting (often called morning sickness, though it's not always in the morning)



feeling bloated or period-like cramps



frequent urination (peeing a lot)



digestion changes



mood changes

If you think you are pregnant, or have missed a period, you can get a free **PREGNANCY TEST** at:

- a young person's clinic or Brook clinic (see page 16)
- some general practices (ask the GP or practice nurse)
- many contraception clinics
- some sexual health or genitourinary medicine (GUM) clinics.

You can buy a **home pregnancy test** kit from pharmacies. These are very reliable.

WHAT ABOUT FERTILITY TESTS?



SOME women become pregnant the first time they have sex. Others have to wait a long time. Four out of five women who have regular sex without using contraception will conceive within a year, so many doctors recommend trying for at least a year before referring a couple for **FERTILITY TESTS** and **TREATMENT**.

TESTS investigate the number, shape and movement of the man's sperm, the

woman's ovulation patterns, and the health of her fallopian tubes, cervix and womb.

TREATMENT includes:

- hormone injections to encourage ovulation
- other methods such as artificial insemination and bringing the egg and sperm together outside the womb – sometimes known as assisted conception or **IVF**.

WHAT'S IT LIKE TO BECOME PREGNANT?



Becoming pregnant can be a time of great happiness and joy. For some, it's a long-awaited event – the result of trying for many months (even years). For others, after the initial shock, it's a happy accident. It can be joyful and welcome, or difficult and scary, or a complete disaster. Or all these things.

But some people (even if the pregnancy is planned) will feel it's not what they want.

For many women the decision to continue with the pregnancy is an easy one. For others it is harder. Some women may decide they want to have an abortion; others may decide to have the baby adopted.

If you need help in deciding what to do, act quickly. You can get help from your general practice, a young person's clinic, FPA or other organisations listed on page 16.



THE LAW It's up to the woman whether to tell a man she is pregnant. In law, he has no right to be informed, or to be involved in her pregnancy.



WHAT HAPPENS IN PREGNANCY?

PREGNANCY starts when the fertilised egg successfully implants into the lining of the womb. A normal pregnancy lasts from **37–42 weeks** (nine months) and is measured from the first day of the last period. Pregnancy is talked about in **TRIMESTERS** (three-month periods), because each trimester is very different. After eight weeks, the embryo is called a **fetus**.

1ST TRIMESTER

SIX WEEKS

All the major organs (heart, lungs, liver, etc) are forming; the spinal cord is there and the heart is beginning to beat. The embryo is just over 1cm long and weighs less than 1g.

12 WEEKS

The fetus has arms and legs, fingers and toes, a face and all 32 permanent tooth buds. The heart is working, pumping blood to all parts of the body. The fetus is about 76mm long and weighs 15g.



2ND TRIMESTER

By **20 weeks** the **bones** are starting to **harden** and the pregnant woman may feel the occasional **kick** or **HICCUP**. The eyes are still closed but the fetus can **hear sounds** – the mother's voice, her heartbeat, and her digestive system rumbling.

By **24 weeks** the **eyes** are open. Its heart is beating at twice the adult rate (120–160 beats per minute). In order to develop its digestive system the fetus is **swallowing** and **peeing** in the fluid that surrounds it (amniotic fluid). With help, a baby born now may survive, though often with major problems.

THE BABY'S SEX

People normally have two sex chromosomes in every body cell. But each sex cell (egg or sperm) only contains one of them.



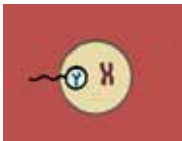
A male has an X and a (smaller) Y chromosome.



A female has X and X.



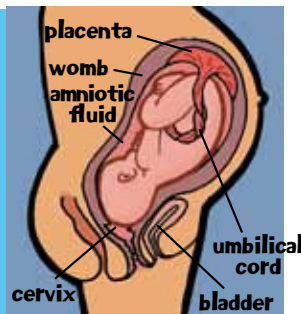
When an egg is fertilised by a sperm with an X chromosome, it will be a girl.



If it's fertilised by a sperm with a Y chromosome, it will be a boy.

3RD TRIMESTER

For the rest of the pregnancy the fetus is growing and putting on weight and the organs (particularly the lungs) are still developing. Most settle into a head-down (cephalic) position by around 36 weeks. Any time after 37 weeks the baby is ready to be born. The average weight at 40 weeks (term) is 3–4kg and the length from the top of its head to its bottom is 35–37cm.



A few of the cells from the fertilised egg develop into the **PLACENTA** (afterbirth). This forms a roughly circular area attached to the inside lining of the womb. The umbilical cord connects the placenta to the fetus (it's attached to what becomes the tummy button).

By **12 weeks** it supplies the fetus with all the nutrients

it needs for the rest of the pregnancy. It can filter out bacteria, but smaller molecules (such as viruses, or most drugs which the mother takes) will reach the fetus, for example rubella, alcohol, nicotine, colds.

At birth the placenta weighs about one-sixth of the baby's weight.

Before pregnancy, the womb weighed 50g and was about the size and shape of a small pear.

But at 40 weeks it's about 30cm long, weighs 1kg, and, if it were filled with fluid, would hold up to six litres!

MISCARRIAGE – when a pregnancy is lost – can occur for a number of reasons due to problems with the pregnancy. It happens in around 10–15 per cent of pregnancies. Most of them occur during the first 12 weeks. An early miscarriage can be like a very heavy period with bleeding and cramps. A GP will advise if any treatment is needed.

An **ECTOPIC PREGNANCY** is when a fertilised egg implants itself outside the womb, usually in the fallopian tube. This causes severe bleeding and pain. An emergency operation may be needed.

LATER MISCARRIAGE AND STILLBIRTH

Miscarriage occurs less often in later pregnancy. If the fetus dies after 24 weeks, when normally it would be possible for a fetus to survive (with medical help), the death is called a **stillbirth**.

If a fetus dies in the womb after 20 weeks but does not miscarry, the mother will have to deliver it. She will be offered lots of help and support from medical staff.



HOW DOES PREGNANCY FEEL?

Women experience pregnancy differently, not just physically but also emotionally.

Pregnancy alters a woman's body completely. Her skin, breasts, hair, teeth, digestion and hormone levels all change. Her body retains more water and she has over a litre more blood. In fact all the major organs undergo changes at this time in order to support both the woman and her baby.

As well as physical changes women can feel strong emotional changes – most find they laugh and cry more easily than before.



I felt very alone when I first found out I was pregnant. My mum and dad wouldn't talk about it and John didn't want to know. My midwife introduced me to two other young single mums and now I feel less anxious, with someone who understands.

I felt really confident and sexy when I was pregnant! My partner liked that too!

In the first three months I felt tired, nauseous and weepy.

I'm right off coffee, and I can't stand the smell of fried food.

Can a woman have sex while she's pregnant?

YES. With a healthy pregnancy, she can have sex right up to the time labour begins.

Will sex harm the baby?

NO. The fetus is protected by the thick mucus plug that seals the cervix, by the amniotic sac, and by the strong womb muscles.

I was scared right through the pregnancy.

We both felt really close. I'll never forget the first time I felt the baby move.



HOW TO GET READY FOR THE BIRTH



In a straightforward pregnancy a woman may be looked after by a **MIDWIFE** – a healthcare professional trained to work with a pregnant woman and her family throughout the pregnancy, birth and early days with a new baby.

The midwife checks the health and progress of the woman and fetus through the pregnancy. The midwife can advise about:

- involving both partners in the pregnancy
- local classes to help parents prepare for the birth and afterwards
- local services
- meeting other pregnant women and their partners
- where to give birth – in hospital or at home.

The aim of **antenatal** (before birth) care is to look after a woman and her developing baby. A variety of **antenatal tests** may be carried out depending partly on the woman's age and previous birth history.

For example, **ultrasound scans** and **amniocentesis** (sampling and testing the amniotic fluid) may be used to check all is well.

INFORMATION A woman can talk to her midwife and other people, and get information from books, leaflets, magazines, the internet, videos and antenatal classes.

For example, in antenatal classes she'll practise breathing, relaxation and good positions for labour and birth. Partners are usually welcome too.

EXERCISE Giving birth is a very physical activity.

You need to keep fit and active during pregnancy. Walking, swimming or continuing with a regular sport are good preparation for birth.



SUPPORT Many women choose to have a birth partner to support them through the pregnancy and birth. This may be her normal partner or it may be someone else she trusts (such as her mum, or a friend).

Men need support too. They may talk with other men whose partners are pregnant or who have had babies, or go to antenatal classes, or see their GP, practice nurse, other health professional or support group.

Classes were really useful; you didn't have to say anything if you didn't want to. For me the best bit was when us men all went to the pub with an 'experienced dad' to find out what we were in for.



WHAT IS BIRTH LIKE?

Women's bodies are **designed** to cope with pregnancy, give birth and feed a new baby. In reality, all women experience birth differently.

WHAT IS LABOUR?

Labour can be affected by how long it lasts, how tired and hungry the woman feels, and what support she has. It usually lasts for 12–24 hours; sometimes less, sometimes more.

WHAT ARE CONTRACTIONS?

Contractions are the clenching and relaxing of the womb muscles to push the baby down out of the womb. It also involves stretching the opening of the cervix so the baby can pass through the vagina to the outside world.

IS BIRTH PAINFUL?

MOST women find birth painful. This is normal when muscles are working so hard!

Watching TV, listening to music, using a shower, bath or bathing pool, and breathing and relaxation techniques, all help. A birth partner's support can be really useful.

WHAT ABOUT PAIN RELIEF?

Women may choose to use pain relief drugs, such as a numbing injection (epidural anaesthesia), or therapies such as hypnosis. Some women choose to use nothing.

When she was having contractions she needed to grip my hand hard.

I was able to support and hold her while she was pushing the baby out.

I wanted to give birth without pain relief, but it just got too much! It helped lots and I was able to see my baby born.

I listened to my favourite songs over and over again – that helped me relax during contractions.

Some babies are born by **CAESAREAN SECTION** – major surgery involving cutting through the abdomen and womb to get the baby out.

During the caesarean he was just stroking my head, which made me feel better.

Doctors will advise on what is needed if there is an **UNUSUAL PREGNANCY**, for example involving more than one baby, or a baby who comes bottom- or feet-first (breech position) or lies in an unusual position in the womb. Various procedures may be needed to help get the baby out.

FORCEPS (which are like metal salad servers) can be placed round the sides of the baby's head, or a **VENTOUSE** (which looks a bit like a sink plunger) is placed on top of the baby's head to help the baby out by suction.

WHAT HAPPENS AFTER THE BIRTH?

Women and men may experience a wide variety of emotions when the baby is born, from joy and awe through to simple relief or even a feeling of anti-climax.

Cuddling the baby as soon as possible helps a woman bond with her baby, and makes breast feeding easier. It also encourages the release of hormones that help to expel the placenta (afterbirth) from her body. You may also be given an injection to help to expel the placenta.

I couldn't sleep the first night after the birth. I just kept looking at him – I couldn't believe what had happened.

The birth was wonderful – I wouldn't have missed it for the world.

POSTNATAL DEPRESSION

Around one in 10 women gets depressed within weeks (or sometimes months) of their baby's birth. Postnatal depression can result in anxiety, sleeplessness and extreme tiredness, leaving a woman feeling very stressed and unable to cope. It is important that she seeks help from her health visitor, practice nurse or GP.

We'd no idea it would change our lives so much. I feel old compared to all my friends who are going out every weekend without a care in the world.

WHAT ABOUT BEING A PARENT?

Having a baby isn't just about a woman physically giving birth – it's probably the biggest responsibility a man or woman can have.

I thought giving birth was the hard part over with, but being a mother you're on call 24 hours a day.

I try and help out with practical things like shopping or making a meal.

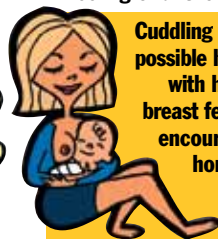
GETTING SUPPORT

Adjusting to being a parent can be hard for anybody, but it can be particularly difficult for young people.

Parents will not be able to go out so often, and it can be hard to maintain friendships.

Talking and meeting other parents can make a woman or her partner feel less alone.

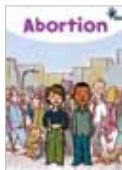
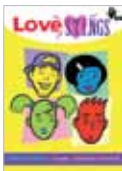
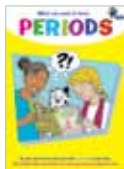
After a while, parents may want to arrange **CHILDCARE** or **BABYSITTING** so they can get out for a break, go to work, or go back into education. They can get advice from organisations listed on page 16.





WHERE CAN I GET INFORMATION?

For information on sexual health, sex and relationships visit www.fpa.org.uk or check out these FPA booklets.



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These organisations can also give you confidential information and advice.

bpas

www.bpas.org

08457 304030

For information and advice on unplanned pregnancy.

BROOK

www.brook.org.uk

For sexual health services and advice for young people.

FAMILY LIVES

www.familylives.org.uk

0808 800 2222

For advice on pregnancy and birth.

GINGERBREAD

www.gingerbread.org.uk

0808 802 0925

Support and advice for single parents.

MARIE STOPES

www.mariestopes.org.uk

0845 300 8090

For information and advice on sexual health.

QUITLINE

www.quit.org.uk

For advice on stopping smoking.

START4LIFE

www.nhs.uk/start4life

For tips and advice on pregnancy.

TOMMY'S

www.tommys.org

0800 0147 800

Freephone PregnancyLine for information on pregnancy.



The
Information
Standard

Certified member

This organisation has been certified as a producer of reliable health and social care information.

www.theinformationstandard.org