

High blood pressure in pregnancy

Information for the public

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About this information

NICE clinical guidelines advise the NHS on caring for people with specific conditions or diseases and the treatments they should receive. The information applies to people using the NHS in England and Wales.

This information explains about advice about the care and treatment of women who have, or are at risk of developing, high blood pressure (hypertension) in pregnancy that is set out in NICE clinical guideline 107.

Does this information apply to me?

Yes, if you:

This information also applies to your unborn baby.

It doesn't cover:

Your care

If you think that your care does not match what is described in this information, please talk to a member of your healthcare team.

In the NHS, patients and healthcare professionals have rights and responsibilities as set out in the NHS Constitution (www.dh.gov.uk/en/DH_132961). All NICE guidance is written to reflect these. You have the right to be involved in discussions and make informed decisions about your treatment and care with your healthcare team. Your choices are important and healthcare professionals should support these wherever possible. You should be treated with dignity and respect.

To help you make decisions, healthcare professionals should explain high blood pressure in pregnancy and the possible treatments for it. They should cover possible benefits and risks related to your personal circumstances. You should be given relevant information that is suitable for you and reflects any religious, ethnic, or cultural needs you have. It should also take into account whether you have any physical or learning disability, sight or hearing problem or language difficulties. You should have access to an interpreter or advocate (someone who helps you put your views across) if needed.

Your family and carers should be given their own information and support. If you agree, they should also have the chance to be involved in decisions about your care.

You should be able to discuss or review your care as your treatment progresses, or your circumstances change. This may include changing your mind about your treatment or care. If you have made an 'advance decision' (known as a 'living will' in the past) about any treatments that you do not wish to have, your healthcare professionals have a legal obligation to take this into account.

All treatment and care should be given with your informed consent. If at any time you are not able to make decisions about your care, your healthcare professionals have a duty to talk to your family or carers unless you have specifically asked them not to. Healthcare professionals should follow the Department of Health's advice on consent (www.dh.gov.uk/en/DH_103643) and the code of practice for the Mental Capacity Act. Information about the Act and consent issues is available from www.nhs.uk/CarersDirect/moneyandlegal/legal. In Wales healthcare professionals should follow advice on consent from the Welsh Government (www.wales.nhs.uk/consent).

In an emergency, healthcare professionals may give treatment immediately, without obtaining your informed consent, when it is in your best interests or in the best interests of your baby.

High blood pressure in pregnancy

The treatment you should be offered depends on what type of high blood pressure you have, and how high your blood pressure is.

Most women will not experience any problems with their blood pressure during pregnancy. However some women may have high blood pressure (hypertension) before they become pregnant or they may develop it during pregnancy. If this is the case, the treatment you should be offered depends on what type of high blood pressure you have, and how high your blood pressure is.

The NICE guideline looks at three types of high blood pressure, called chronic high blood pressure, gestational high blood pressure and pre-eclampsia (see [Types of high blood pressure](#)).

In each of these types the guideline also looks at three levels of high blood pressure, and calls them **mild**, **moderate** and **severe** (see below).

Mild, moderate and severe high blood pressure

- Mild high blood pressure is defined as a reading between 140/90 and 149/99. It may be checked regularly but does not usually need treatment.
- Moderate high blood pressure is defined as a reading between 150/100 and 159/109.
- Severe high blood pressure is defined as a reading of 160/110 or higher.

Questions to ask your doctor

- What do the blood pressure numbers mean?
- How will I know if I have high blood pressure?

Types of high blood pressure

Chronic high blood pressure

Chronic (long-term) high blood pressure may have developed before the woman became pregnant or may develop during the early part of her pregnancy, before she is 20 weeks pregnant. There are two types of chronic high blood pressure.

- **Primary chronic high blood pressure**, where the cause is not known. This is the most common type of high blood pressure.

- **Secondary chronic high blood pressure**, which has a known medical cause (for example, a kidney disorder).

If you have secondary chronic high blood pressure your doctor should offer to refer you to a specialist for additional care during your pregnancy.

Gestational high blood pressure

Gestational high blood pressure (sometimes known as gestational hypertension) is a type of high blood pressure that develops in the later stages of pregnancy (after 20 weeks) and goes away within 6 weeks of the baby's birth.

Pre-eclampsia

Pre-eclampsia is a type of high blood pressure that develops after the woman is 20 weeks pregnant and goes away within 6 weeks of the baby's birth. Unlike women with gestational high blood pressure, women with pre-eclampsia have a lot of protein in their urine (known as proteinuria).

Women who are at higher risk of developing pre-eclampsia

If you are at higher risk of developing pre-eclampsia than other pregnant women, your doctor should advise you to take 75 mg of aspirin once a day from the time you are 12 weeks pregnant until you have your baby.

You are more likely to develop pre-eclampsia than other pregnant women if you have more than one of the following risk factors:

- this is your first pregnancy
- you are aged 40 or over
- your last pregnancy was more than 10 years ago
- you are very overweight
- you have a family history of pre-eclampsia
- you are carrying more than 1 baby.

Your risk of pre-eclampsia is also greater if any of the following apply to you:

- you had high blood pressure before you became pregnant (chronic high blood pressure)
- you had high blood pressure during a previous pregnancy
- you have chronic kidney disease, diabetes, or an inflammatory disease that affects the immune system, such as lupus.

Questions to ask your doctor

- What is pre-eclampsia?
- How will I know if I have pre-eclampsia?
- Can pre-eclampsia harm my baby?
- Please tell me about the risks and benefits to me and my baby of taking aspirin.
- Is there anything else I can do to prevent pre-eclampsia during my pregnancy?
- How likely am I to develop pre-eclampsia?

Before you become pregnant

Women with chronic high blood pressure

If you take drugs for chronic high blood pressure and are planning a pregnancy or have just found out that you are pregnant, your doctor should check whether these drugs are safe for you to take during your pregnancy. You may be advised to switch to another type of blood pressure drug until you have had your baby.

You should limit the amount of salt in your diet to help reduce your blood pressure.

Because there isn't enough evidence to show they are effective, the following supplements are not recommended as a means of preventing high blood pressure during pregnancy: magnesium, folic acid, antioxidants (vitamins C and E), fish or algal oils, or garlic.

If you had chronic high blood pressure before you became pregnant, or you develop it in early pregnancy, you should be offered treatment to keep your blood pressure within the range that is

best for you. Your treatment will depend on what drugs you are already taking, any side effects, and the possible effects on your baby.

While you are pregnant

If you are pregnant and are at risk of developing any type of high blood pressure during your pregnancy you should follow the same advice on rest, exercise and work during pregnancy as for other pregnant women. This advice is explained in NICE's information for the public on routine antenatal care for healthy pregnant women (see [Other NICE guidance](#)).

If you are admitted to hospital you should not be told to stay in bed in order to treat your high blood pressure, because bed rest does not help to lower blood pressure.

Women with gestational high blood pressure

If you develop gestational high blood pressure you should be offered a hospital appointment to check your blood pressure and test your urine for proteinuria.

Depending on how high your blood pressure is, you may also be offered blood tests. If your high blood pressure is severe your doctor should offer to admit you to hospital for tests and treatment.

The treatment you are offered will take into consideration any possible side effects for you and your baby.

Tell your doctor or midwife straight away if you have any symptoms of pre-eclampsia and you are more than 20 weeks pregnant.

Symptoms of pre-eclampsia

- Severe headache
- Problems with your eyesight, such as blurring or flashing before your eyes
- Severe pain just below your ribs
- Vomiting
- Sudden swelling of your face, hands or feet.

Women with pre-eclampsia

If you develop pre-eclampsia your doctor should offer to admit you to hospital for tests and treatment. While you are in hospital your blood pressure should be measured at least four times a day, depending on how high it is. You may be offered a drug to help lower your blood pressure. You should also have regular blood tests and your baby's heart rate should be monitored.

Your doctor may advise you to have your baby early by having your labour induced (starting labour artificially) or by caesarean section. You can find more information about these in NICE's information for the public on induction of labour and caesarean section (see [Other NICE guidance](#)).

If your pre-eclampsia becomes worse you may need to be admitted to critical care (an intensive care or high dependency unit), where you should be offered treatment with drugs to lower your blood pressure. Your baby's heart rate should also be monitored.

Whether you have your baby by caesarean section or by having labour induced will depend on what is best for you and your baby and, if possible, your own preference.

In more serious cases, some women admitted to critical care because of pre-eclampsia have one or more convulsions or seizures before or just after the baby's birth. These are called eclamptic fits. If you have an eclamptic fit, or if your baby is expected to be born within the next 24 hours, you may be given a drug to prevent or stop seizures.

Questions to ask your doctor

- How will I know if my high blood pressure has become severe?
- If I think I have severe high blood pressure, who should I contact and when should I contact them?
- How long will I have to take drugs to lower my blood pressure?
- Will the drugs affect my baby?
- Will I have to have induction of labour or a caesarean section?
- Why do I need to stay in hospital when I feel fine?

During labour and birth

All women with high blood pressure

You should continue to take your blood pressure drugs while you are in labour. Your blood pressure should be checked every hour, or continually if it is very high.

If your blood pressure is very high your doctor may advise you to have an operative birth, which is a birth in which instruments are used to help the baby be born. These may be forceps, which are tongs that cradle the baby's head, or a ventouse, which is a cup that is fitted on top of the baby's head and uses suction. If you are not having an operative birth your doctor may offer you a caesarean section.

If your high blood pressure becomes severe or you develop pre-eclampsia your doctor will offer to admit you to hospital and may advise you to have your baby early by induction of labour or caesarean section.

For more information on caesarean section and pre-eclampsia, see the section on [Women with pre-eclampsia](#).

After you have had your baby

All women who had high blood pressure during pregnancy

If you still need treatment for high blood pressure after the birth and you wish to breastfeed your baby, your doctor should discuss with you the best blood pressure drug to take.

Your blood pressure should continue to be monitored after you have had your baby. You should be offered a check-up with a doctor at your postnatal appointment 6 to 8 weeks after your baby is born.

Women with chronic high blood pressure

If you have chronic high blood pressure, your blood pressure treatment should be checked 2 weeks after your baby is born.

Women who had gestational high blood pressure

If you had gestational high blood pressure and are still taking blood pressure drugs 2 weeks after you leave hospital, you should be offered a check-up by your doctor to see if your treatment needs to be stopped or changed.

If you are still taking blood pressure drugs 6 to 8 weeks after the birth of your baby, your doctor should offer to refer you to a specialist to check your blood pressure treatment.

Women who had pre-eclampsia

If you had pre-eclampsia and are still taking drugs to treat your high blood pressure 2 weeks after leaving hospital, you should be offered a check-up with your doctor to see if your treatment needs to be changed. At your postnatal check-up 6 to 8 weeks after the birth of your baby:

- if you are still taking drugs to treat your high blood pressure, your doctor should offer to refer you to a specialist to check your blood pressure treatment
- you may need to have blood and urine tests
- if there is still protein in your urine you should be offered another appointment 4 to 6 weeks later to check how well your kidneys are working
- you may be offered referral to a kidney specialist.

Questions to ask your doctor

- How long will I need to stay in hospital after I have had my baby?
- What treatment will I need after I have had my baby?
- Will I be able to breastfeed my baby?

Your long-term health

All women who had high blood pressure during pregnancy

Try to stay within a healthy weight range to reduce your risk of developing high blood pressure problems again.

Women who had gestational high blood pressure

If you had gestational high blood pressure:

- you may develop gestational high blood pressure in a future pregnancy
- there is a smaller risk that you may develop pre-eclampsia in a future pregnancy
- you may develop high blood pressure and its complications in later life.

Women who had pre-eclampsia

If you had pre-eclampsia:

- you may develop gestational high blood pressure in a future pregnancy
- there is a risk that you may develop pre-eclampsia in a future pregnancy
- the risk of developing pre-eclampsia in a future pregnancy is greater if the gap between pregnancies is 10 years or more
- if you had severe pre-eclampsia there is a risk of pre-eclampsia in a future pregnancy. Your risk will depend on how many weeks pregnant you were when your baby was born, as well as other factors, which you should discuss with your doctor or specialist
- your risk of kidney problems in later life is small if your blood pressure is normal and there is no protein in your urine at your postnatal appointment
- you may develop high blood pressure and its complications in later life.

Questions to ask your doctor

- Why did I get high blood pressure – could I have done anything to avoid it?
- If my high blood pressure gets better after I have had my baby, do I need any check-ups in future?
- Is it safe for me to have another baby?
- Do I need to make any changes to my diet or lifestyle to avoid high blood pressure in my next pregnancy?

More information

The organisations below can provide more information and support for people with high blood pressure in pregnancy. NICE is not responsible for the quality or accuracy of any information or advice provided by these organisations.

- Action on Pre-Eclampsia (APEC), 020 8427 4217, info@apec.org.uk, www.apec.org.uk
- Blood Pressure Association, 0845 241 0989, www.bloodpressureuk.org.uk
- National Childbirth Trust (NCT), pregnancy and birth helpline 0300 33 00 700, details of local branches 0844 243 6000, www.nct.org.uk

You can also go to NHS Choices (www.nhs.uk) for more information.

Other NICE guidance

NICE has published other information for the public about guidelines on pregnancy and birth:

- Caesarean section (see <http://publications.nice.org.uk/IFP132>)
- Antenatal care for women who are pregnant with twins or triplets (see <http://publications.nice.org.uk/IFP129>)
- Helping pregnant women make the best use of antenatal care services (see <http://publications.nice.org.uk/IFP110>)
- Induction of labour (see <http://publications.nice.org.uk/IFP70>)
- Diabetes in pregnancy (see <http://publications.nice.org.uk/IFP63>)

- Routine antenatal care for healthy pregnant women (see <http://publications.nice.org.uk/IFP62>)
- Care of women and their babies during labour (see <http://publications.nice.org.uk/IFP55>)
- Mental health problems during pregnancy and after giving birth (see <http://publications.nice.org.uk/IFP45>)
- Care of women and their babies in the first 6–8 weeks after birth (see <http://publications.nice.org.uk/IFP37>)
- Quitting smoking during pregnancy and after childbirth (see <http://publications.nice.org.uk/PH26>)

Accreditation

