

WHY BLOOD PRESSURE AND URINE ARE TESTED DURING PREGNANCY

A WOMAN'S GUIDE TO SCREENING FOR PRE-ECLAMPSIA



- Pre-eclampsia is a serious pregnancy complication, which can affect **any pregnancy**
- It can be dangerous to both mother and baby
- It is important for all women to attend all antenatal check-ups to minimise the risks



What is pre-eclampsia?

It is an illness you can get only during pregnancy or straight after your baby is born. It can affect you and your unborn baby. Pre-eclampsia used to be known as 'toxaemia'.

When does it happen?

Most women don't get pre-eclampsia till the last few weeks of pregnancy, but it can start as early as 20 weeks or (very rarely) even earlier. It is also possible for it to develop during labour or soon after the baby is born.

What happens to you?

Pre-eclampsia involves changes in blood vessels all over your body. As a result:

- blood pressure rises
- protein from the blood leaks into the urine

Some swelling is common in normal pregnancy especially in the ankles but in pre-eclampsia water can leak out of the blood vessels and cause sudden swelling (oedema) especially in the face and hands.

Most women with pre-eclampsia are mildly

affected, however some women become seriously ill with extra problems in the liver, brain, lungs or blood clotting system. **Pre-eclampsia can** get worse very quickly - that's why you need to attend all antenatal check-ups.

What happens to the baby?

Your baby may be growing too slowly, because not enough blood is getting to the placenta. This can lead to problems with your baby's health.



It affects about 1 in 10 pregnant women; you're more at risk if:

- You are pregnant for the first time
- You are having your first baby
- Any close relatives (mother, sister) have had pre-eclampsia
- You already have high blood pressure
- You have diabetes, kidney disease or migraine
- You are aged 40 or more
- You are expecting twins, triplets or more
- You have a Body Mass Index (BMI) of 35 or more
- If it has been 10 years or more since your last baby
- You have previously suffered with pre-eclampsia
- At booking you have a diastolic blood pressure of 80 or more
- At booking you have proteinuria (protein in your urine)

What is the cause?

Pre-eclampsia is caused by problems in the placenta. The placenta is the 'special' pregnancy organ that brings the baby food and oxygen from your blood. In pre-eclampsia the placenta can't get as much blood from you as it needs and this affects you and your baby in different ways.

What is the treatment?

Because pre-eclampsia is caused by the placenta, it doesn't get better until sometime after delivery. Many women with pre-eclampsia have their babies early. The doctors and midwives monitor you and your baby very carefully and they may decide it is too risky to continue the pregnancy. While you remain pregnant, your doctor may give you drugs which control blood pressure without harming your baby. 3



What happens next time?

If you have had pre-eclampsia once you may get it again.

It is important in future pregnancies that your midwife knows that you have had it before because you need to be monitored more carefully.

Can pre-eclampsia be prevented?

There is no reliable way to do this, although some women who have had it before may benefit from taking small daily doses of aspirin (75mg) in the next pregnancy. This treatment must be discussed with your doctor.

REMEMBER

Attend all your antenatal appointments

Make sure your blood pressure and urine are checked at every antenatal appointment





Helpline Comments

"When I suddenly developed pre-eclampsia I was terrified because I knew nothing about it. Thanks to APEC, they explained it to me so I knew what was happening" *Helen, Wigston*

"I thought after I suffered from pre-eclampsia I would never be able to have another child but now I have 3 beautiful children" Sam, Swansea

"Knowing the facts about pre-eclampsia was reassuring because it can be managed" *Mandeep, London*

"My imagination was far worse than the reality" Linda, Rochester

" My wife developed pre-eclampsia and because my neighbour had it, she told me about APEC's helpline, and talking to them helped me and my family to understand what was going on" *Steve, Warwick*

5



Your blood pressure and urine should be checked at every antenatal appointment because changes in blood pressure and urine can be signs of pre-eclampsia. Regular checks help keep you both safe.

What is blood pressure?

Blood pressure is the force of blood pumping around your body. It is usually measured by a machine on your upper arm with an inflatable cuff.

Blood pressure is recorded as two numbers for example 120/80.

- The first number (e.g.120) is called the systolic and shows the pressure of the heart pumping.
- The second number (e.g. 80) is called the diastolic and shows the pressure as the heart relaxes.

Blood pressure:

- Varies between people
- It also changes with the time of day and what you are doing
- It can also increase if you are worried or stressed
- An average blood pressure of 120/80 is normal for women. However yours may be slightly higher or lower and still be completely normal for you.





What if my blood pressure is high?

- Your midwife (or GP) will find out your blood pressure at your first antenatal appointment and again at every visit after that.
- Stress, worry or activity can raise your blood pressure for a while, but if it stays high it may be the start of pre-eclampsia.
- There is no clear line between normal and high blood pressure, but a persistent reading of 140/90 or greater is a cause for further investigation by your midwife or doctor.
- If your blood pressure is showing signs of increasing, your midwife or doctor will need to check it more often. Each time they check it they should also check your urine for protein.

Urine checks for protein - Your urine gives vital clues about the health of you and your baby.

- It should be checked at every appointment for the presence of protein which can be a sign of pre-eclampsia.
- Protein in the urine is called proteinuria and is usually measured with a dipstick as either 'trace', +, ++ or +++. Anything greater than a 'trace' is of concern and needs investigation.
- You can help by remembering to take a recent urine sample with you.

What if protein is found in the urine?

If you have one + or more of protein and high blood pressure, you may have pre-eclampsia and will need extra medical care. Your urine may be checked for other causes of protein, such as an infection but it is unlikely unless you also have symptoms.

What symptoms to look out for





- Headaches, like migraine, that don't go away sometimes accompanied by vomiting
- Blurred vision, flashing lights or spots before your eyes
- Severe pain just below your ribs, especially on the right side
- Severe swelling (oedema) especially of hands and face or upper body (swelling in legs or ankles only is common in normal healthy pregnancy)

These symptoms are not always serious, but can indicate pre-eclampsia problems. To be safe contact your midwife or doctor at once, if you experience these symptoms. They should always check your blood pressure and urine.

Checklist to keep you and your baby safe





- Never miss an antenatal appointment however well you feel
- Make sure your blood pressure and urine are checked each time and the results written into your notes
- Call your midwife, GP or the labour ward if you feel unwell between appointments
- If you are found to have high blood pressure or protein in your urine, ask for another check-up within the week or ask to be referred to a day assessment unit
- If your doctor/midwife suggests you need to be in hospital then you should take their advice, even if it is inconvenient
- If you cannot contact your GP or midwife you can always contact your labour ward, day assessment unit or APEC



Pre-eclampsia and you

- If your midwife suspects pre-eclampsia you will probably need to be checked at a hospital
- Your blood pressure and urine will be checked often and if your blood pressure is high - 160/100 or more you may need drugs to control it. These will not harm your unborn baby.
- Pre-eclampsia can affect blood vessels in many parts of your body, and you may also be tested for problems with your liver, kidneys and blood clotting system.

Pre-eclampsia and your baby

- Pre-eclampsia can also affect the health of your unborn baby.
- He or she will be checked regularly for slow growth and other signs of ill health.
- Some babies remain healthy even when their mothers have severe pre-eclampsia, but if your baby seems unwell, or your own health is starting to be affected, your doctor may advise an early delivery either by induction or Caesarean section.
- These days most premature babies (as early as 24 weeks) can do extremely well and catch up quickly, depending on age at delivery

Birth and afterwards

- If you have pre-eclampsia, you and your baby will be monitored closely during labour and delivery.
- After your baby is born most women start to recover in a few days.
- A few women take weeks or, occasionally, months for their health to return to normal, but the pre-eclampsia eventually goes away.



If you feel ill during pregnancy

- Many women feel well even with severe pre-eclampsia, but feeling ill can be a warning sign that you have the illness or that it is getting worse.
- If you start to feel unusually ill you should contact your midwife or doctor and at least get your blood pressure and urine checked.

Checking yourself at home

Women at high risk of pre-eclampsia or with early signs of the illness sometimes find it reassuring to check their own blood pressure and/or urine at home between antenatal appointments. It is important to do this with the knowledge and support of your doctor or midwife.

Contact Action on Pre-eclampsia (APEC) for details of home blood pressure meters that are validated for use in pre-eclampsia (most are not) and where to obtain protein dipsticks.

It's not your fault!

The exact cause of pre-eclampsia is unknown and cannot be predicted with any certainty nor prevented with any known actions. Research has tested many factors such as stress, work, exercise, diet and vitamins but none of these were found to make a difference



Action on Pre-eclampsia was founded in 1992 by Professor Chris Redman and Isabel Walker to raise public and professional awareness, improve levels of care and ease or prevent physical and emotional suffering caused by the condition.

APEC urgently needs and welcomes donations to offer a lifeline to women and their families who have been affected by pre-eclampsia.

Donations: for bank transfer our bank details are Sort Code 089299 Account No. 65304974. Cheques to be made payable to APEC



NO AMOUNT IS TOO SMALL

Fundraising:

We also need marathon runners, cyclists, mountain climbers or parachute jumpers to take part in sponsored fundraising events. Bequests are extremely valuable to us as are opportunities for matched giving by employers. Funds raised from car boot stalls, raffles, or alternative birthday gifts are essential to the charity's survival. Let us know if we can help your fundraising in any way by providing leaflets or collection boxes.

- For telephone support call the APEC Helpline, weekdays
 9am 5pm, on 020 8427 4217 (plus after hours answer machine)
- For detailed info on medical antenatal care ask for a copy of PRECOG guideline (Pre-eclampsia Community Guideline)
- For more information see our website www.apec.org.uk

Action on Pre-Eclampsia F€Í ÁP∄ @ÂUd^^cÁ Òç^• @æŧ Y [¦&^•c*¦• @ā^Á Y ÜFFÁ ÒÓ Email: info@apec.org.uk

Registered Charity No: 1013557 Registered Company No: 2736320 © APEC 2012