In 2017-19, **191 women died** during or up to six weeks after the end of pregnancy, from causes associated with their pregnancy, among 2,173,810 women giving birth in the UK.

**8.8 women** per 100,000 died during pregnancy or up to six weeks after childbirth or the end of pregnancy. There is no statistically significant difference in maternal mortality compared to 2010-12.

**Preventing maternal deaths**
- we are all part of the solution
saving Lives, Improving Mothers’ care 2021: Lay Summary

Lisa Hinton on behalf of the MBRRACE-UK lay summary writing group: Clotilde Abe (Five x More), Shaista Gohir (RCOG Women’s Network), Marcus Green (Action on Pre-Eclampsia), Jennifer Holly (NCT), Sara Kenyon (MBRRACE-UK), Kirsty Kitchen (Birth Companions), Marian Knight (MBRRACE-UK), Jenny Kurinczuk (MBRRACE-UK), Liz Thomas (Action against Medical Accidents), Maureen Treadwell (Birth Trauma Association), Pete Wallroth (Mummy Star), Nathalie Turville (Elizabeth Bryan Multiple Births Centre), Alison Stanley (Group B Strep Support)

The United Kingdom’s Confidential Enquiry into Maternal Deaths represents a gold standard around the world for investigations and improvements in maternity care. Through its rigorous reviews, the Enquiry recognises the importance of learning from every woman’s death, during and after pregnancy, not only for staff and health services, but also the family and friends she leaves behind. This year the report examines in detail the care of 495 women who died during, or up to one year after, pregnancy between 2017 and 2019 in the UK. The report includes detailed chapters on mental health and multiple adversity, cancer in pregnancy and thromboembolism (blood clots). The report also includes a Morbidity Confidential Enquiry into the care of 37 women who gave birth over 45 years and who did not themselves die but many lost their babies. The report is relevant to maternity staff, service providers and policy-makers, and includes important learning for women and their families and third sector and advocacy organisations.

What this year’s report shows

Pregnancy remains very safe in the UK. In 2017-2019 191 women, of the 2,173,810 giving birth, died during or up to six weeks after pregnancy; 495 during or up to one year after their pregnancy. This is a small, but not statistically significant, decrease in the overall maternal death rate. Heart disease remains the leading cause of death, followed by epilepsy and stroke. Sepsis and thrombosis and thromboembolism (blood clots) are the third and fourth most common causes of maternal death during or up to six weeks after the end of pregnancy. The maternal death rate from pre-eclampsia and eclampsia continues to be low but remains higher than the lowest rate, in 2012-14. Cancer is the most frequent cause of death for women between six weeks and a year after the end of pregnancy. Maternal suicide remains the leading direct (pregnancy-related) cause of death over the first year after pregnancy.

The recurring theme in this year’s report is risk that is not static, but dynamic during pregnancy and beyond. There is a need for recognition that women can be placed at additional risk by clinician behaviours which focus on concerns over a woman’s pregnancy rather than concerns over a woman herself. This was seen in particular in cancer care. A key message therefore this year is to treat women who may become pregnant, are pregnant or have recently been pregnant the same as a non-pregnant person unless there is a very clear reason not to.

As reported in previous reports, outcomes for women are not equal. There remain gaps in mortality rates between women from deprived and affluent areas, women of different ages and women from different ethnic groups. This year’s report shows a continued gap between the mortality rates for women from Black, Asian, mixed and white

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Remember risk is dynamic
ethnic groups, with women from Black ethnic groups four times more likely to die than women from White groups. Women from Asian ethnic backgrounds are almost twice as likely to die in pregnancy compared to White women.

Other inequalities continue to grow. Women living in the most deprived areas are twice as likely to die than those who live in the most affluent areas. Social services were involved in the lives of 17% of women who died. The number of women who are known to be experiencing multiple disadvantages when they die remains at 8%. Women in these situations will often face mental ill-health, domestic abuse and/or misuse substances. However these and other issues are poorly recorded, so these figures should be treated as a minimum estimate.

Reporting of these and other complex social factors needs to improve.

The report this year also includes a morbidity enquiry into the care of women who gave birth over the age of 45. Pregnancy at advanced maternal age is known to be associated with higher mortality, higher rates of pregnancy loss and other pregnancy complications. Yet the average age at first childbirth continues to increase. Fewer than a third of women received care in line with guidance. In particular, the chapter illustrates that very few women who are planning pregnancy at advanced maternal age have documented discussions over the risks and potential health impacts to them and their unborn child.

The key messages from these reports are persistently similar year on year. In examining all causes of deaths, assessors judged that in 37% of cases improvements in care may have made a difference to the outcome. This will be the last report to describe messages from the care of women who died before the COVID-19 pandemic. Data published in 2021 in the rapid reports on SARS-CoV-2 demonstrate that the issues highlighted in this report, in particular around the impacts of social and ethnic inequalities and multiple disadvantage, have been amplified during 2020-2021. The impact of COVID-19 on health outcomes in the coming years will be profound, which renders the issues raised in this year’s report particularly salient as they are likely to be exacerbated. The imperative to address the systemic issues of cultural and structural biases affecting women’s care on the basis of their pregnancy is more fundamental than ever to the prevention of maternal death and disease.

**Key messages for older mothers - healthy for pregnancy and after**

**Before** Make sure you are as healthy as you can be. Some things to think about include being a healthy weight and taking folic acid. Don’t stop existing medication but talk to your doctor or midwife about what is the best medicine for you if you are planning pregnancy. If you are considering fertility treatment or IVF make sure you have discussed your health and the impact a pregnancy might have. Find out about how to have just a single baby as twin and triplet pregnancies will put you and your babies at higher risk.

**During** To keep your pregnancy healthy remember folic acid and to continue other medications unless you have discussed stopping them with your specialist maternity medical team. You might need repeated scans and testing for diabetes.

**After** Being healthy for your baby includes awareness of the symptoms and signs of blood clots, your mental health and keeping up with any medications.
Care for women with mental health problems and multiple adversity

Mental health remains one of the leading causes of maternal death in pregnancy and the first postnatal year. Many of the women who died from suicide or substance misuse faced multiple adversity. Assessors felt that improvements in care might have made a difference in outcome for 67% of women who died by suicide, 29% who died from substance misuse and 18% of those who died by homicide. This report emphasizes once again the importance of immediate risk management and the potential for rapid deterioration, particularly postnataally. These messages are equally important across pregnant women of all ages, especially those who have had a pregnancy loss event, but this report does show a need for special attention around mental health for pregnant teenagers.

Key messages for women and their families

Signs to be aware of – red flag symptoms (in yourself, a loved one, or friend)

- Do you have new feelings and thoughts which you have never had before, which make you disturbed or anxious?
- Are you experiencing thoughts of suicide or harming yourself in violent ways?
- Are you feeling incompetent, as though you can’t cope, or estranged from your baby? Are these feelings persistent?
- Do you feel you are getting worse, or at risk of getting worse?

Speak out as early as possible if you or your partner or friend have any of these symptoms.

Key messages for health professionals

- Consider previous history, the pattern of symptom development and ongoing stressors.
- The loss of a child, either by miscarriage, stillbirth or neonatal death or a child being taken into care increases vulnerability to mental illness.
- GPs and maternity services must be joined up in sharing awareness of a woman’s pregnancy and past psychiatric history.
- If the woman is already known to mental health services, those services should be made aware she is pregnant.
- Ask about domestic abuse clearly and sensitively at the first antenatal appointment or when a woman is alone. If she is always accompanied you may need to create an opportunity to speak with her alone.
- Listen to relatives, particularly if they escalate concerns.
- Women’s mental health needs can change and escalate quickly in pregnancy and the postnatal period.
- While relatives can provide invaluable support to the woman they should not be given responsibilities beyond their capabilities nor be expected to act as a substitute for effective mental health response.
Cancer care – see the symptom not the pregnancy

Cancer in pregnancy is rare but pregnancy doesn’t protect against developing it. Cancer care in pregnancy has improved, and knowledge increased, but it remains vital to pick up symptoms, not dismiss them or delay because of the pregnancy, and investigate them thoroughly. Investigations to check for cancer, including x-rays, can be done safely; many cancer treatments are safe to use during pregnancy. For women known to have cancer early planning is key. Ensure appropriate contraception advice and involve the wider multidisciplinary maternal medical team to ensure women get the investigations and treatments they need.

Given the likelihood of delayed presentation during the COVID-19 pandemic, these messages for the care of women with cancer before, during and after pregnancy are especially important.

Key messages for women and their families
- A serious symptom outside pregnancy is a serious symptom during pregnancy. Don’t dismiss or delay reporting worrying symptoms.
- Be body aware. Don’t stop your regular checks during pregnancy.
- Think about postponing pregnancy for at least two years if you have recently been treated for cancer – that means making sure you have contraception.
- Treatment and surgery for cancer can take place during pregnancy. You should see a specialist who can assess what treatments are advisable for you and your baby.

Key messages for health and care professionals
- Women must be investigated and treated for their symptoms, do not delay because of pregnancy.
- Women with cancer need pre-pregnancy planning and contraception advice.
- Ensure pregnant women with current or recent cancer treatment are seen by an obstetric consultant in the first trimester.
- Ensure symptoms of possible cancer are followed up postnatally.

Treat women who may become pregnant, are pregnant, or who have recently been pregnant the same as a non-pregnant person unless there is a very clear reason not to.
Prevention and treatment of thromboembolism (blood clots)

This year’s report details in particular the deaths of young, extremely obese women with venous thromboembolism (VTE).

Key messages for women and their families

Women who are older, or are overweight or have had a recent operation are at higher risk of developing blood clots during or immediately after pregnancy. You should be aware if you have any of these risk factors. Injections or tablets to thin the blood and prevent clotting can be important if you have risk factors, or have developed a clot and are safe in pregnancy and while breastfeeding. If you are sent home with injections you must complete the course you have been prescribed, whether that is a week, 10 days or 6 weeks, with no gaps in treatment. Check out how long you need to continue treatment and see your GP if you need more medication. Remember, your risks may change during or after pregnancy, particularly if you have had an operation or a caesarean birth.

Symptom checker Be aware of calf pain or severe breathlessness and report these to your doctor urgently, even if you are only in the early weeks of pregnancy.

Key messages for health and care professionals

- Women with previous VTE should be offered pre-pregnancy counselling, particularly if they have a raised BMI.
- Health professionals are advised to discuss restricting weight gain in pregnancy with women who are overweight or obese as small weight gains can significantly increase their risk.
- Women’s risks before, during and after pregnancy are not static.
- Recognising signs of VTE and knowledge of where to seek help should form part of discharge information.

We are all part of the solution

Patient Advocacy and peer support

Advocacy and peer support groups are a critical part of the maternity landscape. They are able to provide information, emotional and practical support, help people seek advice and improve access to or engagement with services.

- Make sure women are supported in a way that ensures they are able to make informed choices and voice their concerns
- Family members or birth partners can be very powerful advocates, as can services provided by specialist voluntary sector agencies – find out what’s available in your area
- Shared experiences can be very powerful

Health professionals

- Recognise the complexity and multiple challenges facing each woman you care for
- Don’t allow women to fall through the gaps
- Stay aware that women’s risk is dynamic
- Know who else you can bring in to support women if you feel it is necessary
- Be the person to hear and act