UK National Screening Committee

UK National Screening Committee (UK NSC)

Screening for Iron Deficiency Anaemia (IDA) in Pregnancy

Contents

Aim

We are providing an update on the public consultation phase of the evidence map on screening for iron deficiency anaemia (IDA) in pregnancy and requesting feedback on the responses drafted.

Background

The UK National Screening Committee (UK NSC) does not recommend screening for IDA in pregnancy. The Committee based this recommendation on the evidence reported in the 2021 UK NSC evidence summary on screening for IDA in pregnancy, which concluded that there was a notable lack of evidence for the benefits and harms of screening.

As a topic which is on the list of those regularly reviewed, IDA in pregnancy was scheduled to be reviewed again in 3-years' time.

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2025 Evidence Map

The UK NSC evidence team commissioned an evidence map to review the volume and type of evidence available on IDA in pregnancy in 2025. The evidence map was conducted by Costello Medical. The following three questions were addressed to capture evidence that had been published since the last review:

1. What is the volume and type of evidence on the maternal and infant outcomes associated with untreated ID, with or without mild or moderate anaemia in pregnancy?

2. What is the volume and type of evidence on the benefits and harms of treating pregnant women for IDA to pregnant women and their infants?

3. What is the volume and type of evidence on the benefits and harms of screening for IDA during pregnancy?

Summary of Findings

Question 1

There were 21 studies identified that reported a population with ID or IDA in pregnancy, of which 3 studies reported a population of pregnant mothers with ID or IDA who were explicitly not treated with any iron-containing therapy. These three studies consistently reported that untreated ID, with or without anaemia in pregnancy, was associated with adverse maternal and neonatal outcomes compared to a cohort without ID or IDA.

While the evidence from the 3 studies on untreated patients is strong, there is an insufficient volume of evidence in this area to justify commissioning an evidence summary at present. Therefore, it is unlikely to lead to a change in the UK NSC's current position.

Question 2

In total, 17 studies were identified, of which 8 studies were prioritised for being conducted in high-income countries, though none in the UK.

Overall, the evidence, as it is reported, appears to be mixed. Some studies report reductions in maternal or neonatal outcomes such as preeclampsia and caesarean delivery with oral or IV iron, while others show minimal or no improvement. Without thorough quality appraisal of the included studies, it is unclear whether the variable outcomes reported are due to poor study quality. It remains uncertain whether pregnant women with mild to moderate IDA benefit from treatment, and a change in the UK NSC's current recommendation is unlikely.

Question 3

In total, 3 references were included, two of the 3 included references were retrospective cohort studies conducted in Australia, and the third was a prospective cohort study conducted in Denmark.

In summary, limited evidence has been identified suggesting possible benefits of screening and treating IDA in pregnancy. As such, at present there is an insufficient volume of evidence in this area to justify commissioning an evidence summary. The type of evidence identified is unlikely to lead to a change in the UK NSC's current position.

Conclusions

The findings of this evidence map are unlikely to impact the current recommendation on screening for IDA in pregnancy as limited evidence was identified that would change this conclusion.

Recommendations

On the basis of this evidence map, the volume and type of evidence related to screening for IDA in pregnancy is currently insufficient to justify an update review at this stage and so should be re-considered in 3 years' time.

Public Consultation

A 3-month public consultation was hosted on the UK NSC GOV.UK website from 2nd December 2025 to 24th February 2026. The UK NSC consulted on the findings of the evidence map and the recommendation not to conduct any further evidence synthesis on population screening for IDA in pregnancy within the UK. Direct emails were sent to 11 stakeholders (Annex A). A total of 6 consultation responses were received (Annex B).

The key points raised by stakeholders are summarised below:

1. The comments largely take the view that IDA in pregnancy is a serious condition, and screening should be implemented and disagree with the findings of the evidence map.

> **Response:** The Committee recognises that IDA in pregnancy can be a serious condition with important implications for maternal and fetal health; however, progression towards screening under the UK NSC criteria depends on the availability of suitable evidence on screening effectiveness and outcomes. If a sufficient volume of suitable evidence is found, then more detailed evidence synthesis work, including quality assessment of studies, would be commissioned. Two of the three key studies have small samples, and none were conducted in UK. The evidence on the benefits and harms of IDA screening in pregnancy is therefore insufficient to proceed with further evidence synthesis at this time. The topic will be reviewed again in three years time.

2. Some respondents identified topics they felt were not included in the evidence map. These including screening for post-partum anaemia within high-risk populations and in cases of multiple pregnancies.

> **Response:** The scope of the current evidence map was limited to population-based screening. The recommendations in this review do not extend to the assessment of particular clinical groups. For the UK NSC to consider targeted screening for high-risk populations or any other clinical group, we would encourage submissions through the UK NSC open call for topics.

3. There was a request for there to be clearer distinction between screening and clinical care and a comment that screening for IDA was being withdrawn.

> **Response:** There is an important distinction between screening programmes and testing as part of clinical care. The UK NSC has not previously recommended screening for IDA during pregnancy as part of any national screening programme, and the results of this 2025 evidence map do not change this. There is separate routine clinical care guidance on IDA in pregnancy within the NICE antenatal care guideline NG201. This recommends offering a full blood count at booking and at 28 weeks. The UK NSC recommendation on IDA in pregnancy does not impact on the routine testing in the NICE guidance.

Fetal Maternal Child Health Reference Group (FMCH) Meeting 29/04/2026

1. The FMCH members confirmed that they were happy with the responses to the consultation comments received.

2. The FMCH members agreed with the recommendation that, the findings of this evidence map are unlikely to impact the current recommendation on screening for IDA in pregnancy as limited evidence was identified and that this topic should ideally be re-considered in 3 to 4 years time.

UK NSC Meeting June 25/06/2026

1. The UK NSC members confirmed that they are happy with the consultation responses.

2. The UK NSC members agreed to the recommendation that, due to insufficient volume of evidence and a lack of relevant populations in identified studies, no further evidence synthesis work be undertaken and that this topic should ideally be re-considered according to the regular processes of the UK NSC.

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Annex A: List of Organisations Contacted

1. Action Bladder Cancer UK
2. British Dietetic Association Paediatric Specialist Group
3. Royal College of General Practitioners
4. Royal College of Obstetricians and Gynaecologists
5. Royal College of Physicians
6. Royal College of Physicians and Surgeons of Glasgow
7. Royal College of Physicians of Edinburgh
8. British Society for Haematology
9. Royal College of Midwives
10. The National Perinatal Epidemiology Unit
11. The 'PANDA' research programme (Primary prevention of maternal ANaemia to avoid preterm Delivery and other Adverse outcomes)

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Annex B: Consultation Responses

1. XXXX XXXX, Kings College London

Affected Comment:

It has affected my women patients during a lifelong career in obstetrics

Discussion comment:

The avoidability of a ‘near-miss’ massive haemorrhage (let alone a maternal death) or a miserable symptomatic postnatal course thanks to losing blood from a lower background level in an era of approaching 50% caesarean, is huge and not captured in the evidence.

Recommendation comment:

Yes. As above. The issue isn’t about whether the anaemia is symptomatic during pregnancy but avoiding it postpartum in an era when postpartum haemorrhage is rising.

Alternatives comment:

Alternatives would be a national food security policy but what happened to public health standing up to vested interests and eradicating poverty?

Other comments:

Yes. There is a double standard. Here NSC has reviewed the evidence of a cheap screening programme for the relatively small number of pregnant women in the UK and is removing a bedrock of antenatal care. The NSC has NEVER done the proper clinical and cost-effectiveness for breast cancer screening which has much more serious implications for overdiagnosis and doesn’t even ‘work’. There are no savings in deaths and increases in morbidity. It cannot be cost effective. Why is simple anaemia testing withdrawn and breast screening isnt?

2. XXXX XXXX, retired NHS Consultant Obstetrician

I was the first full time NHS Consultant Obstetrician appointed last century and now retired.

I'm so old that I remember ANC drawers full of 'free' iron tablets that were given out willy nilly to all and sundry. Pharma's early attempts at loss leaders.

However. This review must be one of the NSC's greatest wastes of time.

It doesn't take a genius to work out that for the benefit of the small number of women who are profoundly anaemic at 'booking' it is necessary to screen everybody: simple, cheap, accutate and you have already got a needle in their arm for the other necessary bloods.

The problem is that the vast majority of pregnant women aren't anaemic (in the UK) so the results of any 'trial' looking at outcomes are going to be skewed towards no benefit.

Your policy (which you don't plan to change) is throwing out the baby with the bath water.

Think again, and only look at those studies that publish outcomes in the severely anaemic group.

Good luck

XXXX XXXX

3. Julie Ann Reynolds, Joint Principal, Head of Research and Clinical Year, The Acupuncture Academy Ltd

Comment

I have recently completed the first draft of a review into iron deficiency and had already read the screening map as part of that. My review highlights a lot of important research since that time, and my overall case is best read in full, because if we can identify and treat this issue sooner, the implications for health more widely, for example as those infants grow up, is huge. The problem has been in not joining the dots here. I hope my attached work is helpful and am happy to discuss any of it.

Note: The draft review mentioned in this comment was reviewed and considered within the UK NSC response but is not replicated in this document.

4. XXXX XXXX and XXXX XXXX, Royal College of General Practitioners (RCGP)

Document section and page number	Text or issue to which comments relate	Comment
Search methods and results Page 7	**One reviewer examined all titles and abstracts** against the prespecified eligibility criteria (available in Appendix 1). All references were reviewed at abstract level, and in some cases full texts were reviewed to clarify uncertain pieces of information. A formal quality appraisal of the evidence was not required, given the remit of the evidence map.	We are concerned that the approach described risks introducing bias. In addition, the absence of a formal quality appraisal may result in uncertainties being attributed to the evidence base when, in fact, they may reflect limitations in study design, methodological weaknesses, or unaddressed confounding variables. Greater clarity on how study quality has been assessed and accounted for would strengthen confidence in the conclusions drawn.
Question 2 Page 11	"Of the 8 prioritised studies, one was a Systematic Literature Review (SLR), one was a prospective cohort study, 5 were retrospective cohort studies, and one was a case-control study. Three studies were conducted in Europe; however, **no UK-based studies were identified**."	We have concerns regarding the external validity of the evidence base, particularly in relation to the London population. Maternity pathways, population demographics, baseline diet, levels of socioeconomic deprivation, and the prevalence of haemoglobinopathies and other comorbidities differ significantly across regions. These factors are likely to influence the prevalence and severity of iron deficiency and iron deficiency anaemia, which may be higher in some London populations. The absence of UK-based data therefore limits the applicability of the findings to our setting. We also note that the studies do not appear to specifically address high-risk groups, who may be

		disproportionately affected and for whom targeted approaches may be most relevant. In addition, it is unclear whether the UK National Screening Committee criteria have been fully addressed within the review. Current UK maternity pathways already include haemoglobin testing at the booking appointment, which in effect functions as a screening process for anaemia in pregnancy. In some areas, asymptomatic individuals identified through this process are treated with iron supplementation. While this may mean that a new formal screening programme is not required, there is a clear need for clarification and standardisation of existing pathways. We suggest greater consistency which would help promote equity and reduce inequalities in the identification and management of iron deficiency anaemia in pregnancy.
General		We found the distinction drawn in the review between "screening" and "routine" antenatal testing to be unclear and potentially confusing. In UK practice, routine haemoglobin testing at the booking appointment and later in pregnancy already functions in many respects as a screening process for anaemia. Greater clarity in definitions and terminology would help ensure that conclusions are interpreted appropriately within the context of existing maternity care pathways. We also note that the review does not appear to adequately explore the potential harms associated with screening for iron deficiency anaemia in pregnancy. A balanced assessment would benefit from clearer consideration of possible unintended consequences, including overdiagnosis, unnecessary treatment, side effects of supplementation, resource implications, and the impact on patient experience.

General		As noted above, we recognise that current UK maternity pathways already include routine haemoglobin testing at booking and at 28 weeks. This functions, in practice, as a form of screening, and is widely embedded in antenatal care across general practice and maternity services. The review suggests that evidence for intervention in mild to moderate iron deficiency anaemia (IDA) is limited, which may underpin the recommendation not to introduce a formal screening programme. However, severe IDA is generally accepted as requiring treatment, and it is not possible to distinguish between no, mild, moderate, or severe anaemia without undertaking blood testing. This creates a degree of practical tension between the evidence synthesis and current clinical pathways. We note that the evidence is clearly presented and supports the recommendation that a formal screening programme for IDA in pregnancy is not recommended. However, screening for IDA remains common practice and is arguably considered standard antenatal care. This apparent contradiction likely reflects NICE NG201, which recommends offering a full blood count at booking and at 28 weeks. We believe that there would be value in clearer alignment and communication between the National Screening Committee and NICE to support clinicians in understanding the distinction between a population screening programme and routine antenatal testing. In particular, greater emphasis may be needed on the meaning of “offer”, which may not always be fully considered in practice. Clearer guidance on the evidence base, potential harms, and resource implications, including workload impact in primary care, would support more informed discussions with pregnant women and greater consistency in implementation.
General		We note that the review does not appear to consider screening for anaemia in the postnatal period. This is a significant gap, as postpartum anaemia is common and may have important consequences if undiagnosed.

		Ongoing post-partum anaemia can contribute to fatigue, low mood, impaired functioning, and difficulties with infant care and bonding. In more severe cases, it may delay recovery and increase healthcare utilisation. We recommend that the potential harms of missed postnatal anaemia should be explicitly considered when assessing the overall balance of benefits and harms.

5.Toby Richards, The Iron Clinic

The WHO describes the 10 principles of screening by Wilson and Jungner as criteria for developing a screening program. The principles aim to identify members of the apparently healthy population who are at an increased risk of a health concern, with early detection allowing for early intervention

Interestingly, in the original publication of the principles, Wilson and Jungner support that the distinct prevalence of IDA in menstruating women would present an appropriate opportunity for screening within this subpopulation, stating: “Iron deficiency anaemia is, of course, most prevalent in women who menstruate, and it is likely that women in the age groups concerned would be found to be anaemic much more frequently. For this reason, iron-deficiency anaemia is a condition specially suited to the selective screening of women between the ages of, say, 20 and 44.

Iron deficiency (ID) is the most common cause of anaemia globally and is of particular concern for women and girls of reproductive age who experience high iron demands from pregnancy and menstruation, especially for those experiencing the symptom heavy menstrual bleeding (HMB).

Iron not only plays a fundamental role in hemoglobin-facilitated oxygen transport but also in mitochondrial function, DNA synthesis, aerobic metabolism, nerve myelination, and neurotransmitter synthesis. Iron deficiency can impair these processes, resulting in an array of symptoms such as fatigue, sleep disturbances, hair loss, restless legs, reduced cognitive performance, low mood, reduced health-related quality of life, and decreased athletic performance.

In pregnancy, ID has been associated with adverse obstetric outcomes, such as increased risk of prolonged labor, postpartum hemorrhage, and cesarean section, along with abnormal fetal neurodevelopment, low birth weight, pre-eclampsia, intrauterine growth restriction, and other adverse birth outcomes.

In high-income countries (HICs), half of women experience ID at some point in their reproductive years, despite many of these women presenting as apparently fit and healthy. The risk of ID is increased for women residing in lower socioeconomic areas and is exaggerated when comparing women in HICs to those in low- and middle-income countries (LMICs).

In this article https://obgyn.onlinelibrary.wiley.com/doi/full/10.1002/ijgo.14948

We address the 10 Principles of Screening, we present a case for IDA screening in women and girls of reproductive age.

for 10 years our team has undertaken a validated 3-4 minute questionnaire and fingerprick blood test for haemoglobin. This is acceptable, cheap and well received.

With over 5000 women screened 1 in 3 have heavy periods and 14-22% have anaemia. This could be easily rolled out in chemists and even supermarkets or public places (as we have done)

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Professor Toby Richards

6. Dr Elizabeth Bailey, Professor of Multiple Births and Midwifery (Director), Elizabeth Bryan Multiple Births Centre

Document section and page number	Text or issue to which comments relate	Comment
Page 6	Aims of the evidence map	Aims and therefore questions focus on pregnancy but without specificity for singleton or multiple pregnancy. Across all three question sets, the evidence base was overwhelmingly derived from singleton pregnancies, with only limited and inconsistent reporting on multiple gestations. Many studies explicitly excluded multiples (14 (+1 from the review paper)), while a substantial number did not specify whether multiple births were included (13). A smaller number of studies (5) clearly included multiple gestations; in these, multiple pregnancy was usually reported as part of the sample characteristics or included in adjusted analyses, and in at least one case was associated with a higher likelihood of iron deficiency anaemia. However, none of the studies was primarily designed to investigate outcomes in multiple pregnancies, and multiples were not examined as a distinct analytic focus. Overall, the handling of multiple gestations was often secondary to the main research questions of the papers, leaving a gap in understanding how iron deficiency or anaemia may specifically affect multifetal pregnancies. This evidence base means that the review is not fit for purpose for supporting decision-making around anemia screening for those with multiple gestations.
Page 9	Question 1: What is the volume and type of evidence on the maternal and infant outcomes associated with untreated ID, with or without mild or moderate anaemia in pregnancy?	Across the papers reviewed, the majority explicitly focused on singleton pregnancies, with eight listing multiple births in their exclusion criteria. Nine studies did not specify their inclusion or exclusion of multiple births, or it was unclear, with the study population potentially including multiples, for example, the study population being drawn from a cohort study or premature infants. Two studies specified multiple births in their inclusion criteria, and one study was a review, where one paper specifically excluded multiple birth gestations. Among the studies that did include multiples, authors generally treated multiple gestation as a risk factor or adjustment variable, often noting higher rates of anaemia or adverse outcomes in these groups. Yarko et al. (2024) noted that individuals with iron deficiency anaemia were more likely to have multiple pregnancies.

		Overall, the evidence base is predominantly drawn from singleton pregnancies, with limited and inconsistent reporting on multiples.
Page 11	Question 2: What is the volume and type of evidence on the benefits and harms of treating pregnant women for IDA to pregnant women and their infants?	Here, the papers reviewed were more mixed, with three explicitly excluding multiple gestations, three including multiple gestations or adjusting for them, and three being unclear. Where multiple pregnancies were included, they were generally reported as part of the sample characteristics or adjusted for as a covariate, rather than being analysed as a separate outcome. None of the Q2 studies drew specific conclusions about multiples.
Page 13	Question 3: What is the volume and type of evidence on the benefits and harms of screening for IDA during pregnancy?	Here, two studies clearly stated they included singleton-only pregnancies (Hansen et al., Purcell & Beckmann). The remaining one study (Naidoo et al.) did not specify whether multiples were included. Thus, no studies explicitly included or analysed multiple gestations.
Page 15	Conclusions and Recommendations	Overall, the evidence base had no meaningful reporting or analysis relating to multiple gestations. In reporting of this recommendation please consider making it clear that this recommendation is based on evidence conducted primarily in singleton pregnancies and that for multiple pregnancy there is an additional NICE recommended IDA screening point at 20-24 weeks as outlined in the Twin and Triplet pregnancy guideline. This should remain until such time as that there is sufficient additional evidence to update the guidance. Current NICE Guidance for Twin and Triplet pregnancy outlines the following recommendations in appreciation of the increased risk of anaemia and post-partum haemorrhage in multiple pregnancy:

		1.2.4 ***Perform a full blood count at 20 to 24 weeks to identify women with a twin or triplet pregnancy who need early supplementation with iron or folic acid (this is in addition to the test for anaemia at the routine booking appointment recommended in NICE's guideline on antenatal care). Repeat at 28 weeks as in routine antenatal care. [2011]*** This recommendation supports the following further recommendations on planning for birth and preparing women for potential complications. *1.13.1 Start assessing the risk of postpartum haemorrhage in women with a twin or triplet pregnancy in the antenatal period and continue throughout labour and the third stage (see the section on risk factors for postpartum haemorrhage in NICE's guideline on intrapartum care). [2019]* *1.13.2 Offer each woman an individualised assessment of her risk of postpartum haemorrhage and explain that multiple pregnancy is a risk factor for increased blood loss at delivery. [2019]* *1.13.3 By 28 weeks of pregnancy, discuss options for managing the third stage of labour with women with a twin or triplet pregnancy. [2019]*