Why is iron important?
Iron is essential for the body to make haemoglobin and is found in our red cells. Haemoglobin carries oxygen from the lungs to the rest of the body. Iron is also used in other important body processes.

What happens if there’s not enough iron in our bodies?
A low level of iron in our body is called ‘iron deficiency’. When this deficiency is severe, the body cannot make enough haemoglobin and the level falls below normal. Low haemoglobin is called anaemia. When anaemia is caused by low iron it is known as iron deficiency anaemia (IDA).

What are the symptoms of iron deficiency and anaemia?
Anaemia can cause tiredness, dizziness and breathlessness. Iron deficiency can also affect mental ability (such as concentration) and physical performance.

What causes IDA?
IDA may develop from inadequate dietary intake, increased demand for iron (eg. during rapid growth or pregnancy, impaired iron absorption or blood loss). The most common cause of blood loss among young women is heavy menstruation. In older people, prolonged blood loss is usually due to bleeding into the stomach (eg. peptic ulcers), or bowel (eg. colonic polyps or bowel cancers). Untreated celiac disease or stomach disease may also result in poor iron absorption. Medications that interfere with stomach acid can also contribute to low iron levels.

Who’s at risk of getting IDA?
Children because of increased iron requirements during growth spurts, young women due to menstrual loss and pregnancy, vegetarians and vegans, regular blood donors and those with stomach or bowel conditions.

How many people does it affect?
IDA is the most common blood disorder and affects about one in four people worldwide.

Why is this important to the Blood Service?
If IDA is treated before an operation, then blood transfusions may be avoided. In fact, appropriate iron therapy can increase haemoglobin by about 20g/L within a few weeks (equivalent to giving two units of red cells).

How do you treat IDA?
To treat IDA, you must replace the iron and determine the source of iron deficiency. IDA may be the first sign of a serious illness so medical assessment is important to determine the cause. Iron replacement should be prescribed by a doctor. Iron can be increased by:
- Eating iron-rich food; red meat, eggs, whole grain bread and pasta, beans and lentils, leafy green vegetables and iron fortified breakfast cereal. Iron absorption increases if taken with orange juice but decreases if taken with tea.
- Oral iron supplements. Many ‘iron supplements’ contain tiny amounts of iron and cannot treat iron deficiency. A larger dose tablet or liquid, as recommended by a doctor, should be taken.
- Iron infusion via a drip into a vein. This process can be used if iron replacement is urgent or if iron is not tolerated or absorbed.

Above: Pale, small and some elongated red cells are hallmarks of iron deficiency.