

## What type of blood bottles are there?

There are two different sizes of blood bottles – large adult blood bottles and small paediatric blood bottles.

There are three main types of blood bottles used for taking samples in children and these bottles all come in both sizes.

- EDTA (Ethylenediaminetetracetic)
- Coagulation bottles
- Clotted bottles

EDTA bottles have sodium citrate/heparin in to stop the blood from clotting. This stops the calcium ions binding together to clot the blood.



EDTA bottles.

Picture owned by Alibaba.com

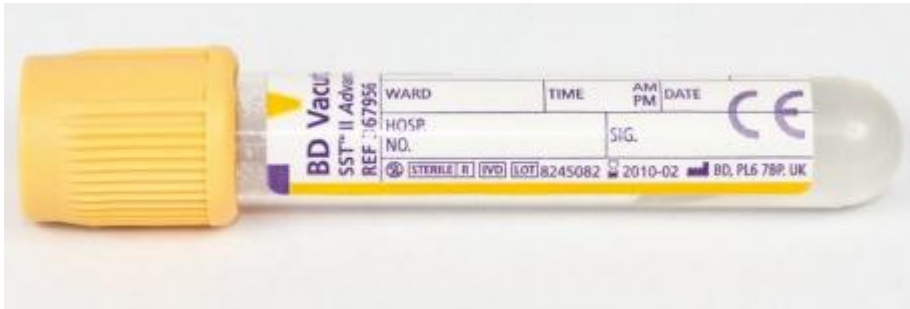
Coagulation bottles contain Trisodium. This binds the calcium in the blood but not as strongly as the EDTA does.



Coagulation bottles

Picture owned by shop.gbo.com

Clotted bottles contain serum. Silica particles work by activating the clotting process. A serum separator called an inert polymer gel floats between the blood cells and plasma. This is so the sample can be spun down and the serum separates easily.



Clotted blood bottles. Picture owned by carehop.co.uk

Taking blood samples from children is also different from adults in the amount of people required to be in the room with the parent and child. With an adult there will be the person who is having the blood taken (patient) and the person taking the blood (phlebotomist/nurse/doctor). With children there has to be the parent/carer, the child, the person taking the blood and there could also be play specialists, health care workers or other nurses. These are all there to make the process of taking blood as smooth and painless as possible for the child (and parent). The child/parent will be asked if they would like come cream (ameptop/emla/LMX) or spray (ethyl chloride) to be applied before the blood sampling is done. The cream is applied to the skin and then a clear dressing (tegaderm) is placed over the top. The cream is applied for 30 mins before the sample is taken, with the spray the desired affect is almost instant.

With children we also use other methods to try to make the whole process less traumatic, by using distracting methods such as books (where's wally and noisy books for smaller children) a 3D television

(can also be used without the 3D), rattles for babies and we can also use bubbles and fibre optic lights.