

Name of Child: \_\_\_\_\_ Date: \_\_\_\_\_

# Blood Transfusions

## What is blood?

Blood is a mixture of fluid and cells. Blood carries oxygen, water and food to all parts of the body. Blood also carries wastes out of the body and fights germs.

## What is a blood transfusion?

A blood transfusion is the replacement of blood, fluids or cells. Blood may be lost from the body or may be present in less than normal amounts.

## Why would my child need a transfusion?

Blood can be lost from the body in many ways. Your child will be given the part of blood he or she needs. When a part of your child's blood is low, your child may look or feel different, or there may be changes in lab results, temperature, blood pressure or pulse.

Here are some of the reasons for a blood transfusion, and what part of the blood might be given:

Reason	Part of Blood Given
anemia; too few red blood cells	packed red blood cells
bleeding problems like hemophilia or Von Willebrand disease	clotting factors or cryoprecipitates
clotting problems from too few platelets	platelets
clotting problems	fresh frozen plasma
too little blood; blood too thick	albumin
too few white blood cells	immune globulin
much blood lost through accident or surgery	packed red blood cells, whole blood
neonatal exchange transfusions	packed red blood cells, albumin, whole

## **Where does the transfusion blood come from?**

Many people give their blood to help others. The blood bank in the hospital gets the blood from United Blood Services. They collect the blood using sterile equipment.

## **Is the blood tested for AIDS and other infections? Is it safe?**

All blood products are tested for HIV, the virus that causes AIDS. Blood products are also tested for hepatitis B and C, HTLV I/II and for syphilis. Donor blood is also cross-matched with your child's blood, to make sure the two blood types can be mixed. These lower the risk a lot, but do not take it away completely. Just remember that if your child needs a blood transfusion, not getting the transfusion is more of a risk than getting one.

## **Can my child get blood from a family member?**

We do not recommend the use of blood from a family member, called donor directed blood.

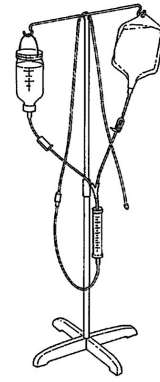
Blood from family members can increase your child's chances of getting graft versus host disease. This is when the blood cells from the family member (the graft) reacts against the child's cells (the host), and makes your child sicker. Treating the blood with radiation can lower your child's risk of graft versus host disease. It takes three to seven days to test and treat donated blood.

Donor directed blood can also make a child sensitive to that blood. If later the child needs a bone marrow transplant, that person may not be able to donate. It may lessen the chance that the bone marrow from that donor will help that child.

A transfusion of blood from family members or friends does not mean your child is less likely to get an infection from the blood. Sometimes family members or friends will not tell you they have used infected needles or have had

# How do you do a transfusion?

- Before the transfusion, a parent will be asked to sign a consent form, with a witness. No consent is needed for albumin, gamma globulin or clotting factor concentrates.
- We will draw a sample of your child's blood to match to a donor's blood type. We will get the blood through an IV poke or a catheter. A nurse or lab technician will watch the blood being drawn, to make sure the blood sample is from the right child.
- Before your child gets the blood, two nurses will check to make sure:
  - the blood product is the same as what the doctor ordered
  - the blood is not too old to be transfused
  - this blood is meant for your child
  - the blood to be transfused will mix well with your child's blood type.Albumin, immune globulin and clotting factors do not have blood types. Both nurses will sign and date the card, to say they've checked these things.
- Before your child gets the blood product, his or her temperature, heart rate, blood pressure and breathing rate will be checked and written down. These will be checked fifteen minutes after the transfusion starts, then every hour until it is done.
- The transfusion will be given through an IV or a catheter into your child's blood stream. It may take from several minutes up to four hours to go in, depending on what blood product and how much is given. Immune globulin may take longer.



**The transfusion goes into your child's bloodstream through an IV.**

## Does a transfusion hurt? Are there any side effects?

The transfusion will be given through an IV or a catheter. If your child does not have one, an IV will be put in. If you want to know more about IVs, ask your nurse.

A transfusion is not painful, but a child may feel pressure as the blood is going in. A warm compress on the IV site may help.

Most reactions to blood transfusions are minor. Some children may get medicine before the transfusion begins to control fever (acetaminophen) or rash (diphenhydramine). This medicine may make your child sleepy. It will keep your child comfortable. It will not hide the signs of a serious reaction, if they occur.

A serious reaction is rare, but possible. That is why the nurse will watch your child closely during the transfusion. The nurse will be looking for these signs that could mean there is a transfusion reaction:

- fever
- chills
- muscle aches, back pain, chest pain, headache
- heat or pain at the IV site
- fast breathing, trouble breathing, coughing
- feeling uneasy
- sick to the stomach, throwing up, cramping in the belly
- fast heart rate, low blood pressure, high blood pressure
- itching, rash, hives, sweating, skin color change
- changes in urine

If the nurse thinks your child might be having a serious reaction, the transfusion will be stopped, the tubing will be flushed and the doctor will be called.

## Now that you've read this:

- Explain to your nurse or doctor why your child needs a transfusion.  
(Check when done.)



- If you have any questions or concerns,
- call your child's doctor or
  - call \_\_\_\_\_

If you want to know more about child health and illness,  
visit our library at The Emily Center at Phoenix Children's Hospital  
1919 East Thomas Road  
Phoenix, AZ 85016  
602-546-1400  
866-933-6459  
[www.phoenixchildrens.com](http://www.phoenixchildrens.com)

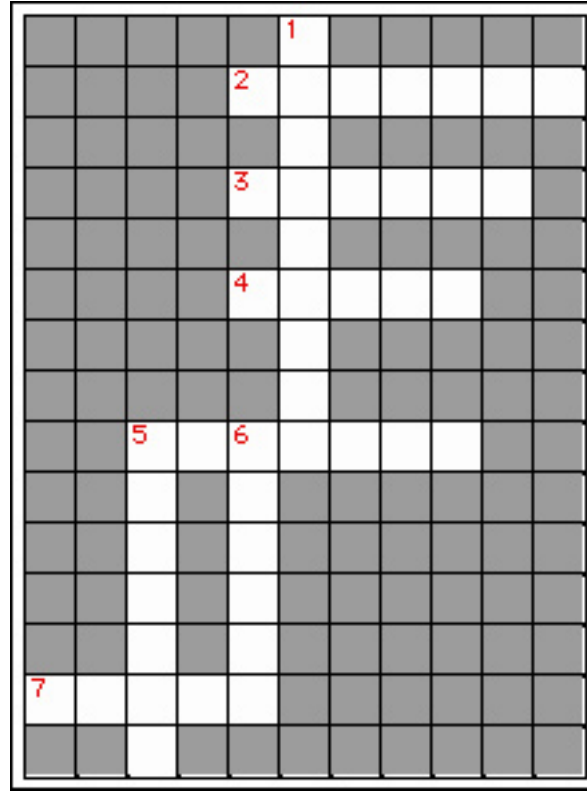
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The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children's Hospital urges you to contact your physician with any questions you may have about a medical condition.

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This handout is also available in Spanish as #459/99s.



# Blood Transfusion Crossword Puzzle



## ACROSS

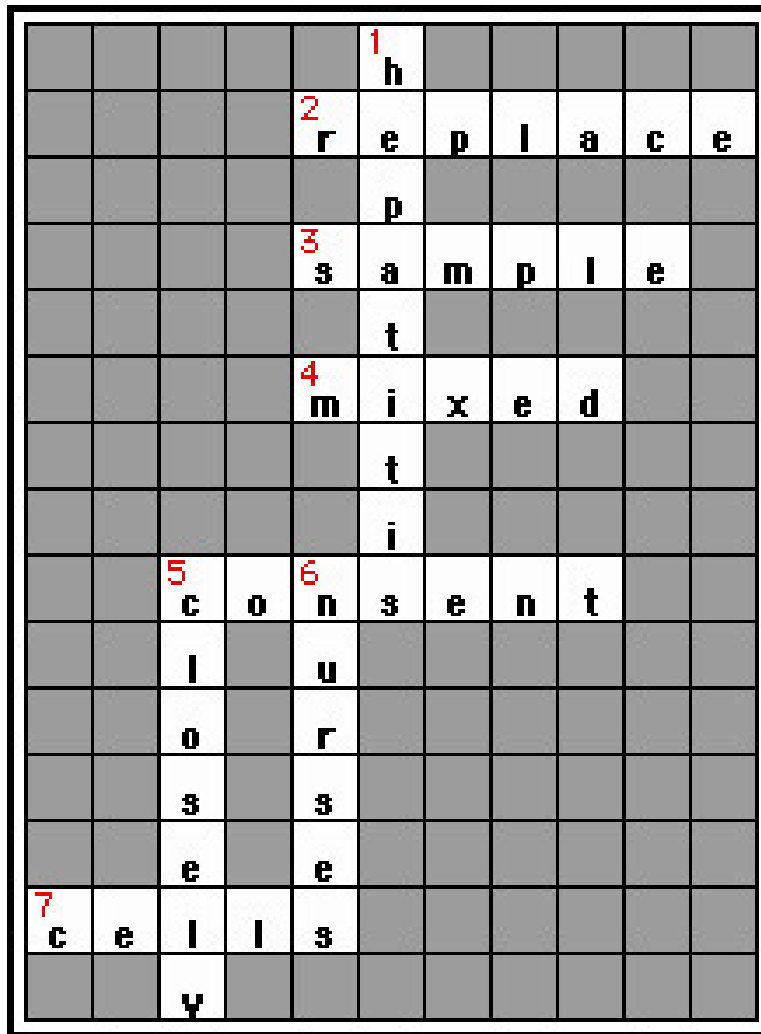
- 2 A blood transfusion is given to \_\_\_ blood that has been lost.
- 3 We will draw a \_\_\_ of your child's blood so it can be matched.
- 4 Blood is cross-matched to see if it can be \_\_\_.
- 5 A parent will be asked to sign a \_\_\_ form, with a witness.
- 7 Blood is a mixture of fluid and \_\_\_.

## DOWN

- 1 All blood products are tested for HIV, syphilis and \_\_\_ B and C.
- 5 A nurse will watch your child \_\_\_ during the transfusion.
- 6 Before your child gets the blood, it will be checked by two \_\_\_.

The answers are on the other side of this page.

# Answers to the Blood Transfusion Crossword Puzzle



If you have any questions about blood transfusions, ask your nurse or doctor.