

700 Children's Drive
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nationwidechildrens.org

CIRCULATION CHECKS

Your child has received a treatment that can affect blood flow (circulation) in the injured arm or leg. You will need to check the blood flow in your child's fingers or toes. This is to prevent injury to the nerves and other tissues caused by swelling.

Do circulation checks 3 or 4 times a day **for as long as the cast or splint is in place, or until your child's doctor tells you it's OK to stop doing the checks.** Do the checks before breakfast, lunch, dinner and at bedtime. Check the following signs and write down what you see in the fingers or toes. Compare the injured side to the uninjured side. Use the *Circulation Checks Record*, HH-II-161, to keep track. These are the signs of normal circulation:

- Color: **Pink**
- Temperature: **Warm**
- Capillary Refill: **Rapid (2 seconds or less)**
- Swelling: **None**
- Numbness or Tingling: **No**
- Sensation: **Yes**
- Motion: **Yes**

HOW TO USE THE CIRCULATION CHECKS RECORD

Symptom	What to Look For	What to Write
Color	The fingernails or toenails should be Pink . A pale or bluish color is not normal.	Write down the color that you see – <i>Pink, Pale, or Blue.</i>
Temperature	The fingers or toes should be Warm to touch. Cool or cold fingers or toes are not normal. Compare the temperature of both sides. If both sides are cool or cold, put a blanket on to cover the finger or toes and check again in one hour.	Write <i>Warm, Cool, or Cold.</i>
Capillary Refill	With your fingers squeeze the tip of the finger or toe on the injured side. Or push down on the nail. Where pressure is applied, the area will look white or lighter. Release the pressure and time how long it takes for the color to return to pink. You can time this with a watch or second hand of a clock. If it takes longer than 2 seconds (the time it takes to say capillary refill), the refill is Slow . Less than 2 seconds is Rapid .	Less than 2 seconds, write <i>Rapid</i> More than 2 seconds, write <i>Slow</i>

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HOW TO USE THE CIRCULATION CHECKS RECORD

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Swelling	Compare to the uninjured hand or foot. There should not be any swelling of the injured side. If there is swelling, try to judge how much.	Write <i>None, Slight, Moderate, Large</i>
Numbness or Tingling	Does your child say that his fingers or toes are “asleep” or tingling? Or does he describe an unusual feeling? No numbness or tingling is normal. If there is numbness or tingling, it is not normal.	Write <i>Yes</i> or <i>No</i> .
Sensation	Does your child feel you touching their fingers or toes? Yes is normal. Your child should be able to feel your touch. Not being able to feel light touch is <u>not</u> normal.	Write <i>Yes</i> or <i>No</i> .
Motion	Can your child move all the fingers or toes on the injured side? Your child should be able to move the fingers or toes of the injured arm or leg. Not being able to move them is <u>not</u> normal.	Write <i>Yes</i> or <i>No</i> . (If movement is less than before, you may write <i>less movement</i> .)

If your child has any results that are not normal, raise the injured arm or leg above the level of the heart. You can prop it up with blankets, firm pillows, cushions, or folded blankets. Your child should lie down flat. Then place the injured the arm or leg with the cast or splint on the pillows or blankets (toes should be higher than the level of the nose). Check the circulation again in one hour.

Depending upon your child’s age, it may be hard to detect some symptoms, such as numbness and sensation. In these cases, rely upon results from the other areas you checked.

WHEN TO CALL THE DOCTOR

Call your child’s doctor or the bone doctor (orthopedist) if:

- The circulation check is not normal and does not improve after 1 to 2 hours with the arm or leg raised.
- Your child’s pain is getting worse, he is unable to move fingers or toes, or has no feeling in the injured fingers or toes.
- Any other concerns that worry you.

FOLLOW UP APPOINTMENT

Call your child’s doctor or the doctor listed below to arrange your follow up appointment.

If you have any questions, please contact your child’s doctor, the bone (orthopedic) doctor, Children’s Hospital Orthopedic Center at (614) 722-5175 or Children’s Sports Medicine at (614) 722-5577.