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FOR IMMEDIATE RELEASE
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FAQs: CASTS & YOUNG BONES

CASTING CENTRAL: QUESTIONS

Why does a child need a cast?

A cast is put on a broken bone because:

- It puts the pieces of broken bone in the right position to grow back together.
- It can ease painful muscle contractions.

–<http://kidshealth.org>, Nemours Foundation

Why is a cast where it is?

The answer: joints (for example, wrists, elbows, knees). The joint above and the joint below the broken bone must be kept still in order for the bone to heal.

–www.nationwidechildrens.org

What are casts made of?

A cast has two layers: a soft layer of padding to protect the skin and a hard outer layer that keeps the broken bone from moving.

The outer layer is made of plaster or fiberglass.

- Plaster casts are made of Plaster of Paris, a white powder. Plaster casts are heavier than fiberglass. It's easier to write on them!
- Fiberglass casts are lighter than plaster casts. They come in an array of colors. Purple and hot pink are girls' favorite colors. Boys like blue; green camo, too.

–Parker Medical Associates, a nationwide supplier of fiberglass casting materials

Plaster and fiberglass come in rolls or strips. The doctor or technician wets the material and wraps it around the soft padding that's already on the broken body part. The material gets hard quickly.

How heavy is a fiberglass spica cast like Sammy's?

Moms on Facebook's DDH Hip Dysplasia page chimed in with answers: depending on the age and size of the child, a spica cast can weigh from 2.5 lbs (11-month baby) to 12 lbs (5-year-old).

What's the big deal about keeping the cast dry?

- If the cast gets wet, it may weaken and be unable to keep the injured bone in place.
- If the cotton padding gets wet, it's slow to dry out. Wet cotton padding might cause a rash or infection.

But my child's cast itches!

Never put anything inside to scratch the skin. Never put creams or powders in the cast to try to help the itching.

One thing you can do safely: use a hair dryer on the "cool" setting to blow air into the cast. This often provides relief. –*The StayWell Company, LLC via Nationwide Children's Hospital*

CastCooler® is a device said to relieve odor, itch and skin rash by keeping cast linings dry. For information and to purchase: www.CastCooler.com

How is a cast taken off?

"The outer shell is taken off in pieces by a loud saw with a dull, round blade that vibrates. The vibration is strong enough to break apart the fiberglass or plaster, but it can't hurt [the] skin. It may even tickle."

–*Cool Cast Facts, KidsHealth, Nemours Foundation*

Weird!

Yes, once the cast is off, the injured area will look weird – smaller than normal because of lost muscle, and probably the skin will be dry and flaky.

Children are great healers, so this weirdness is temporary. The doctor or physical therapist may suggest special exercises to regain strength and flexibility. Or, children may get back to normal all by themselves.

Resources for cast care

- Your child's pediatrician and/or orthopedic surgeon!
- www.orthokids.org
- www.nationwidechildrens.org
- <http://kidshealth.org>

Resources for spica cast care:

- <http://hipdysplasia.org/developmental-dysplasia-of-the-hip/other-resources-for-parents/>
- www.Spicalife.com – includes videos, Q&A, and must-have gear
- www.ivyrosespicachairs.com/101thingstodo.htm

Fabulous Facebook spica cast support groups:

- DDH-Hip Dysplasia-Children Facing Surgery or Spica Casts
- DDH Support Spica Warrior (based in the UK)

WHAT'S IMPORTANT TO KNOW ABOUT YOUNG CHILDREN'S FRACTURES?

When you think about kids and casts, older kids come to mind: football, skiing, horsing around. But broken bones know no age limits. In playgrounds and pre-schools everywhere, you may see a youngster sporting a cast: arm or leg; small or huge.

In the United States:

- In 2012, 5561 children ages 1-4 were discharged from the hospital with a broken arm; 4369 with a broken leg. Collectively, that's 9930 fractures, with boys outnumbering girls 5 to 4. –*American Academy of Orthopaedic Surgeons (AAOS)*
- Children ages 1-4 come to Emergency Rooms far more often than children in other age groups. Falls are the leading cause of young children's ER visits. –*National Center for Health Statistics, [National Hospital Ambulatory Medical Care Survey](#).*
- Spring is the leading season for children's broken bones. Kids are more active after months of being cooped up. (If your climate is lovely year-round, lucky you...and your child!) Their skills may be rusty, but they go full-speed ahead on activities they haven't done in months. The result: injury. – *"Emergency Room Season for Kids," Wall Street Journal, 5/4/2015*

Bones are strong, but even strong bones can break. A child's broken bone heals much more quickly than an adult's.

- Children have better circulation, which promotes healing.
- Children are growing, and their bodies are regularly making new bone.

Because of the super healing ability of children's bones, doctors more often treat their fractures with casts, not surgery. –<http://Orthopedics.about.com>

WHAT'S A FEMUR FRACTURE? WHAT'S A SPICA CAST?

Femur fractures

The largest and strongest bone in the body, the thigh bone is called the femur (FEE-muhr). A sudden strong impact can break the femur. That's what happened to Sammy.

The highest risks for children's femur fractures are:

- Falling hard
- Getting hit in contact sports
- Being hurt in a motor vehicle accident
- Child abuse –*OrthoInfo, American Academy of Orthopaedic Surgeons*

Femur fractures in children peak at ages 2-3. Why? Young children carelessly run fast without looking...climb higher than is safe...dart into the street.

–*American Journal of Public Health, April 2004*

Treating femur fractures: spica (SPY-kah) cast

Treating a child's femur fracture involves lining up the pieces of thigh bone and holding them in place until the bone is healed. In children between 7 months and 5 years a spica cast is applied to keep the broken pieces in the right position until the bone is healed. This is the cast Sammy wore.

- There are different kinds of spica casts, but in general they begin at the chest and go all the way down the broken leg. The cast may also go down the uninjured leg, or stop at that leg's knee or hip. –*OrthoInfo, American Academy of Orthopaedic Surgeons*
- Because young children's bones grow rapidly, the bone ends don't need to be perfectly lined up. The bone will "remodel" (form new bone) over time, making the broken bone as good as new.
- Most infants and young children will need to wear a spica cast 4-6 weeks for adequate bone healing.
- Children ages 5-8 may also be treated with a spica cast, or an orthopedic surgeon may recommend surgery to insert flexible rods into the bone. –<http://Orthopedics.about.com>

Spica casts are also used to treat children with Developmental Dysplasia of the Hip (DDH).

Great resources for caring for a child in a spica cast:

<http://hipdysplasia.org/developmental-dysplasia-of-the-hip/other-resources-for-parents/>

www.Spicalife.com – includes videos, Q&A, and must-have gear

www.ivyrosespicachairs.com/101thingstodo.htm

and

Two terrific Facebook spica cast support groups:

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WHAT'S HIP DYSPLASIA?

Not every child in a cast like Sammy's – a spica (SPY-kah) cast – has a broken leg. Some children, even babies, are in a spica cast to treat hip dysplasia (dis-PLAY-zuh). Hip dysplasia is a condition in which the bones of the hip joint aren't lined up properly. If untreated, it can lead to serious hip pain and problems later in life.

Of every 1,000 infants born each year in the United States, 2-3 will require treatment for hip problems.

- They often undergo surgery(ies) and several periods of wearing a spica cast, a brace and/or a harness.
- While Sammy and other broken-leg children can say good-bye to their cast in a matter of weeks, hip dysplasia children have much longer treatments and recoveries.

Sammy applauds these brave children...and their families!

TRAMPOLINE DANGER

Trampolines: thrilling – and dangerous – for kids. Sammy jumped high...high...higher. Mommy's warning to slow down came too late. Sammy stumbled and fell off. In one minute she went from fine to broken.

The American Academy of Pediatrics (AAP) has taken a strong stand against the recreational use of trampolines: they're too dangerous. The Academy's findings:

- 98,000 children had trampoline-related injuries in 2009.
- Children ages 5 and younger accounted for 48 percent of all trampoline injuries resulting in broken legs or spine. –<https://www.aap.org/en-us/about-the-aap/aap-press-room/Pages/AAP-Advises-Against-Recreational-Trampoline-Use.aspx>

In a 2016 post, Purnima Unni, a pediatric trauma injury prevention coordinator for Monroe Carell Jr. Children's Hospital at Vanderbilt Medical Center, repeated the AAP's warning to avoid recreational trampoline use. But for parents who choose otherwise, she outlined the AAP's guidelines. Among them:

- Only one jumper at any given time.
- Adequate protective padding, properly placed, on the trampoline.
- NO somersaults and flips!
- An adult should supervise trampoline activity. –<http://www.mysouthernhealth.com/tag/prevention>

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