

When children get burned it can be frightening to the child and the family. This handout has been created to give you and your child information about the burn injury and treatment terms you will hear so you can feel more comfortable during the treatment your child receives in the hospital and at home.

You may have many questions----please ask any of the health care members caring for your child.

Some questions that you may have are difficult to answer in the first few days from when your child was injured.

Questions we often hear are-

- “How long will my child be in the hospital?”
- “How bad are his or her burns?”
- “Will he or she need skin grafting?”
- “Will there be scars?”

The burn injury will change quickly over the first several days and adequate time is needed for us to make a careful evaluation of the depth of the burn wound.

When a person has been burned, it affects more than the skin. The heart, lungs, stomach, intestines and muscles are some of the organ stressed if the burn injury is severe. The child may be unable to maintain a constant body temperature if skin loss is severe. Sometimes he or she may shiver; other times, he or she may run a very high temperature.

Types of Burns

First degree burn- The skin may be red and pink with no blistering. An example is a sunburn that does not blister.

Second degree burn (also called a partial thickness burn)- The skin is blistered and may appear pink and red. These burns usually do not require skin grafting and will heal in 2 to 4 weeks with the help of burn dressings.

Burn Care

Third degree burn (also called a full thickness burn)- The skin may appear white or tan and may have some thick, yellow drainage. It may take several days before the deepest extent of the injury will be known. These burns usually need to go to the operating room to be cleaned and require skin grafting.

What is PAWS?

PAWS (Pediatric Acute Wound Service) is the place your child will go to receive dressing changes to his or her burns as ordered by the doctor or Nurse Practitioner. The nursing staff is trained in the specialty care of burns. PAWS will also travel to perform the dressing change for the burn patients in the Pediatric Intensive Care Unit (PICU) as well. PAWS offers care to both children in the hospital and as an outpatient after discharge. PAWS is located on the 10th floor of the hospital.

Dressing Changes

At first, dressing changes may be done every day. If your child is in the PICU, dressing changes will be done in the child's room. On the 10th floor, dressing changes are done in a special area (PAWS) where sterile supplies are also used to decrease the chance of infection. Each person who helps in the dressing change will wear a gown, gloves, hat, and a mask. During the dressing change, the burn will be assessed by the burn care team. Your healthcare team will choose the wound care dressings that are best for your child.

As a caregiver, you are encouraged to look at and be a part of your child's dressing changes when you feel comfortable. However, if your child is given sedation medicine, we ask that you leave once they are asleep. Sedation is medicine that makes your child sleepy and relaxed. It is put in your child's IV or your child breathes it in with a mask. Having you wait in the waiting room or your child's room allows the staff to focus on the most important person in the room, your child. It also allows them to give them the safest care. You may return when your child is waking up.

★ If your child is given medicine by mouth only, two adult caregivers may be present throughout the entire dressing change.

Pain Management

This hospital has a wonderful pain service team comprised of doctors and nurses who help provide maximum pain relief during the dressing changes.

- Pain and anxiety medicines will be given by IV, mask, or by mouth. These medicines help with pain, anxiety and memory of the procedure.
- Each child has different reactions after receiving some medicines. It is important to remember that children do not remember their *reactions* to the medicines.
- Some of the medicines given to reduce pain during dressing changes may cause nausea and vomiting. For this reason, your child may not be able to eat or drink several hours before and directly after a dressing change. This is referred to as NPO (nothing by mouth). This includes gum and candy.

The Burn Care Team

Physicians, Nurse Practitioners, and Nurses

Your child's burn will be assessed by a physician, nurse practitioner, or a nurse with each dressing change. They will determine the best dressing to apply and the plan of care.

Therapy

During your child's hospital stay, Physical Therapy and Occupational Therapy (P.T. and O.T.) may be needed for your child. Therapy is a very important part of your child's recovery!

- A therapist will work with your child during dressing changes to provide range of motion exercises, positioning and splinting. Your child also may be seen in the therapy department to encourage more active movement.
- Therapy helps improve walking, movement, posture, and self care skills. Therapy also provides assistance with scar management.

Social Services

A social worker is involved with all children hospitalized with burns and will help us know more about the child and family needs. A social worker will be available to you and your family throughout your child's hospital stay to provide support during this stressful time.

Burn Care

Nutrition

Burn wounds will not heal properly unless the child is eating enough food and calories to make new tissue and skin. Your child will be given vitamins and placed on a high-calorie, high-protein diet and offered three meals and two snacks a day.

A dietician will talk to you about the increased need for calories, protein, and some vitamins. A diet offering a variety of foods which are high in calories and protein such as whole milk, cheese, pudding and peanut butter will be provided. Please encourage these types of food and limit soda, chips, and candy.

- Some children may need a feeding tube placed in the nose to the stomach in order to deliver nutrition since children are unable to take in enough calories for the burn to heal.
- Children sometimes get constipated when in the hospital. Please tell your nurse if your child has not had a bowel movement in several days.
- Your child will be weighed frequently to watch his or her progress. Don't be worried if there are small changes in weight.

Child Life Services

Your Child life Specialist will assist to minimize the stress and anxiety of a hospital stay while providing positive experiences essential for a child's growth and development. Child Life will help with bedside activities, assistance in whirlpool and dressing changes, to build coping skills, medical play to allow hands-on play with therapeutic dolls and actual medical equipment, and behavioral interventions to help children adjust to hospital routines.

The main playroom and the Teen Lounge on the 8th floor offers the patient a variety of age-appropriate activities from which to choose. These "normal" routines allow the child to exert control, make choices and have fun in a safe, non-threatening environment.

Child Life Services also houses the hospital schoolroom where teachers and volunteers help children with their schoolwork or with fun-filled educational software on the computers.

Chaplain

The St. Louis Children's Hospital interfaith chapel (located on the first floor) has no religious affiliation. If you wish to have the chaplain contact you, please tell your child's nurse. You may also notify your own clergyman to visit you at the hospital.

Psychology

A psychologist who specializes in working with children with medical conditions and their families may be asked to become involved with your child and family. Often when children have undergone an upsetting experience, such as a burn, the child and family members have concerns about how the child will cope with the hospital stay, handle the emotional distress associated with the burn and resulting scars, and deal with questions and comments from others once he or she leaves the hospital. Children and other family members who were involved in (or witnessed) the accident may also have difficulty with intense feelings of sadness, guilt, anger, or fear. These feelings are often accompanied by nightmares, increased “clinginess” from the child, and repeated thoughts or “pictures” in their mind of the accident.

By working with a child psychologist, the child and family members can begin the process of coping with their reactions to the accident, the resulting burn, and the lingering scars. By beginning this process while the child is still hospitalized, the child and family are able to begin the emotional healing process necessary for moving forward from the accident.

Surgical Care

Some children require going to the operating room (OR) on the 6th floor for wound debridement. Debridement is the removal of dead tissue. Once the debridement is done, the surgeon will decide to cover the burn with either pigskin or with the child’s own skin (skin grafting).

- Pigskin may be applied on top of the wound. Pigskin is sterile, processed skin from a pig. It provides a barrier to infection and allows the skin to heal underneath. The pigskin is placed on in the operating room while your child is asleep and held on by staples. The pigskin and staples stay on for about one week. The burn may heal completely from using pigskin or it may reduce the amount of burn that will require skin grafting.
- Skin grafting is also done in the operating room while your child is asleep. The surgeon takes a very thin layer of the child’s own non-burned skin and places it over the wound. The area where the child’s skin is taken is called the **donor site**. A skin graft is also held on by staples or sutures. The skin graft is meant to permanently stay on the child, whereas the pigskin is temporary.

Burn Care

Call the doctor if your child:	Call 911 or go to the Emergency Department if your child:
<ul style="list-style-type: none">• Has a fever (a temperature greater than 100°F (37.8°C).• Has redness around the burn area.• Has increased pain.• Has a generalized rash.• Is not eating or drinking.	<ul style="list-style-type: none">• Is sleepier than normal or difficult to wake up.

General Instructions for Home

Activity

It is not necessary to limit your child's activities while they are bandaged, except to keep the burn area clean and dry. Returning to school is discussed on an individual basis.

Itching

Please discourage your child from scratching at the burn site as this will damage healing skin. An anti-itching medicine such as Benadryl® or Atarax® can be helpful decreasing the itching. Do not apply anti-itching cream on the injured tissue. Once the burn is healed, applying a non-perfumed moisturizing lotion such as Eucerin®, Lubriderm® or Cocoa Butter is also helpful.

Scar Management

It is natural to be concerned about the scarring that may occur with a burn injury. Each child heals differently so it is difficult to predict what the burn will look like long term. After the burn is healed, the skin will continue to change for almost 2 years. As the healing occurs, your child's skin coloring will begin to return. However, this may take several weeks to months and may not return to the exact skin color as before the injury. There are things you will be taught to do to help minimize any scarring.

- **Lotion massage-** We will have you apply a **non-perfumed** moisturizer at least 3 times a day on the healed burn. Lotion massage will help keep the skin moist and help keep the burn as flat as possible. Your child's burn team will show you the best way to do lotion massage.
- **Pressure garments-** Pressure over the burn helps keep the burn flat and prevents the burn from getting a thick, ropey feeling to the touch. **Tubigrip** is a common temporary pressure stocking that we use. A therapist will instruct you on the use. If your child suffered a very deep burn, he or she may require a pressure garment that is specifically measured to fit your child. Many children wear this garment for 1 to 2 years.
- **Avoiding Sunlight-** Whether your child has light or dark skin, the sunlight can irritate an old burn and make the scarring worse. Avoid bright sunlight for at least 9 months. Cover skin with a light shirt and use high SPF sunscreen (greater than 30 SPF) and reapply often. Hats are also important to keep the sun off the face and scalp.

Scar Management Clinic (Burn Clinic)

The children who are at the highest risk for scarring will be asked to follow-up in burn clinic once discharged from PAWS. In burn clinic, you will be seen by the Nurse Practitioner and Therapist who will continue to follow your child for months to years if needed for scarring. Burn clinic is located in Suite 2A.

Preventing Burns and Fires at Home A Home Safety Checklist

Bathroom

- Close the bathroom door to prevent access by unsupervised small children.
- Install grounded plugs. These are special plugs in areas near water that won't work if the plug gets wet.
- Ensure all electrical items are stored properly in the bathroom.
- Set the water heater temperature below 120 degrees Fahrenheit (F) on water heater.
- Prepare bath water by turning on the cold water first. Adjust the temperature of water with hot water. Turn off hot water first, then the cold. Bath water should be lukewarm (100-104 degrees F).
- Test water temperature by moving your hand in the water with fingers spread apart for several seconds. The water should not feel uncomfortable.

Kitchen

- Install grounded plugs near the sink area. These are special plugs that won't work if the plug gets wet.
- Keep appliance cords kept away from the edge of the counter and table tops.
- Unplug electrical items when not in use.
- Turn the handles on cooking pots and pans away from the front of the stove.
- Place pots and pans with hot liquids on the back burners of the stove while cooking to prevent splashing or spilling hot liquids on a small child near the stove.
- Avoid table cloths where small children are tempted to use them to pull up from the floor.
- Establish a "NO ZONE" directly in front of the stove. Identify the zone with yellow tape or a bright color carpet. Tape and bright color carpet can be removed. Scars from burns cannot be removed.

Smoke Detectors

- Install smoke detectors on each floor of your home.
- Smoke detectors should be tested and cleaned once a month.
- Change smoke detector batteries replaced twice a year.

Fire Extinguisher

- Keep a dry chemical fire extinguisher in the home.
- Teach all family members the operation of the fire extinguisher.

Home Evacuation Plan

- Create a plan that would allow each family member to escape your house safely if there is a fire. Practice this plan. You may want to post the plan somewhere in the house. Make sure the plan is workable in the middle of the night without lights and if the family members are half-asleep. Also include at least two escape routes from each room.
- Pick a meeting place outside the home for the entire family to meet in the event of a fire.
- Review the evacuation plan with the babysitters.

Home Safety Inspection

- Do a home safety check regularly. Check for safety hazards (loose or frayed electrical cords, overloaded electrical circuits, gas and oil leaks, combustible items stored too close to a heat source, etc.).
- Store household chemicals and flammable liquids properly out of reach of children. Flammable liquids should be disposed of or stored in metal cabinets.
- Install child locks on cabinets where hazardous materials are stored.

Glossary

Autograft- Also called a skin graft. A piece of skin from another part of the body placed over the burned area.

Blood culture- Blood that is drawn from the vein when your child is running a high fever. The blood is sent to the lab to check for infection.

Donor Site- An area where a thin layer of skin was taken from somewhere else on the body to be placed over a deep burn. This procedure is done in the operating room.

Face Soaks- Warm, wet gauze placed every four hours on to the facial burns to loosen burned tissue to promote faster healing.

Foley Catheter- Tube placed in the bladder to drain urine. Used when very accurate measurements are needed.

NG Tube- Tube placed in the nose to the stomach. This tube may be used to drain the stomach or to provide extra calories to be given.

NPO- Do not eat or drink anything. This includes gum and candy.

Nurse Practitioner- A nurse that has advanced training and who collaborates with the doctors to diagnose and manage care of the patient.

Sedation- Medicines given to help make the child sleepy and relaxed during the dressing change.

Splints- Devices from the therapist to keep a part of the body in a specific position.

Transfusion- Blood products that will be given to the child if their blood counts are low.

Wound Culture- A sterile Q-tip swab is rubbed over the burn and sent to the lab to check for infection.