



**Prisma Health Children's Hospital—Midlands
Pediatric Trauma Services**

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Resource guide for pediatric trauma patients, families and friends



 **Your Children's Miracle Network Hospital**

PrismaHealth.org



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A team effort for you

This handbook has been developed for you by Prisma Health Children’s Hospital–Midlands Pediatric Trauma Services in collaboration with the Trauma Survivor Network (TSN), a program of the American Trauma Society (ATS), Atrium Health Levine Children’s and Children’s Hospital of Philadelphia. A plain language review for health literacy was completed by the Institute for Healthcare Advancement (IHA), with the goal to make information easy to find, follow and relate to. We hope this information will help you and your child during your hospital stay and ongoing recovery.

A place to take notes

At the back of this handbook, there is room for you to take notes and write down questions for your medical team.

You can use this to make sure you get your questions answered before you leave the hospital.



What ATS is: The American Trauma Society (ATS) is a national leader for trauma care and injury prevention. We have been an advocate for trauma survivors for the past 50 years.

What we do: Our mission is: Saving Lives. Improving Care. Empowering Survivors.

For more information: Visit amtrauma.org

Connect with ATS: On Facebook, Instagram, Twitter and LinkedIn.



What TSN is: The Trauma Survivors Network (TSN) is a program of the American Trauma Society.

What we do: The TSN offers support services to survivors and their families together with local trauma centers. The TSN helps trauma survivors and families to: Survive. Connect. Rebuild.

For more information: Visit TraumaSurvivorsNetwork.org

Connect with TSN: On Facebook, Instagram and Twitter.

Developed for you

This handbook is provided as a public service by the American Trauma Society and Prisma Health Children’s Hospital–Midlands. The handbook is based on a trauma handbook developed by the Inova Trauma Center at the Inova Fairfax Medical Campus in Falls Church, Virginia.

Part I: Your arrival

We are here to help

Welcome to Prisma Health Children's Hospital–Midlands. Our trained and compassionate team members will do everything we can to help your child and your family as you recover from a traumatic event.

It is hard to see your child in pain – either physical or emotional.

Trauma is an event that we do not expect. A sudden injury, painful event, hospital stay and recovery can cause many different emotions. You may feel confused, overwhelmed and scared by all that is happening. You are not alone.

Feel free to ask questions and give us your thoughts.

At Children's Hospital, we want to provide care that meets the needs of our patients and their families – as well as what your providers feel that your child needs. As a caregiver, you can partner together with the healthcare team. This means you can be a part of decision-making throughout your child's hospital stay. Your input and questions are important because you know your child the best.

Use this booklet to guide you through your child's care and keep track of information.

The information in this book can help guide you during the different phases of your child's hospital stay, recovery and rehabilitation. We encourage you to write down things if it would help. This includes lists of providers' names, your child's injuries and procedures your child has. It also includes questions you may want to ask. There is a place in Part VII of this guide to keep track of information and questions. It is called "Your child's health journal." It also has a few activities to do if you decide to take a break.

Remember, your child's healthcare team is here to support you and your family.

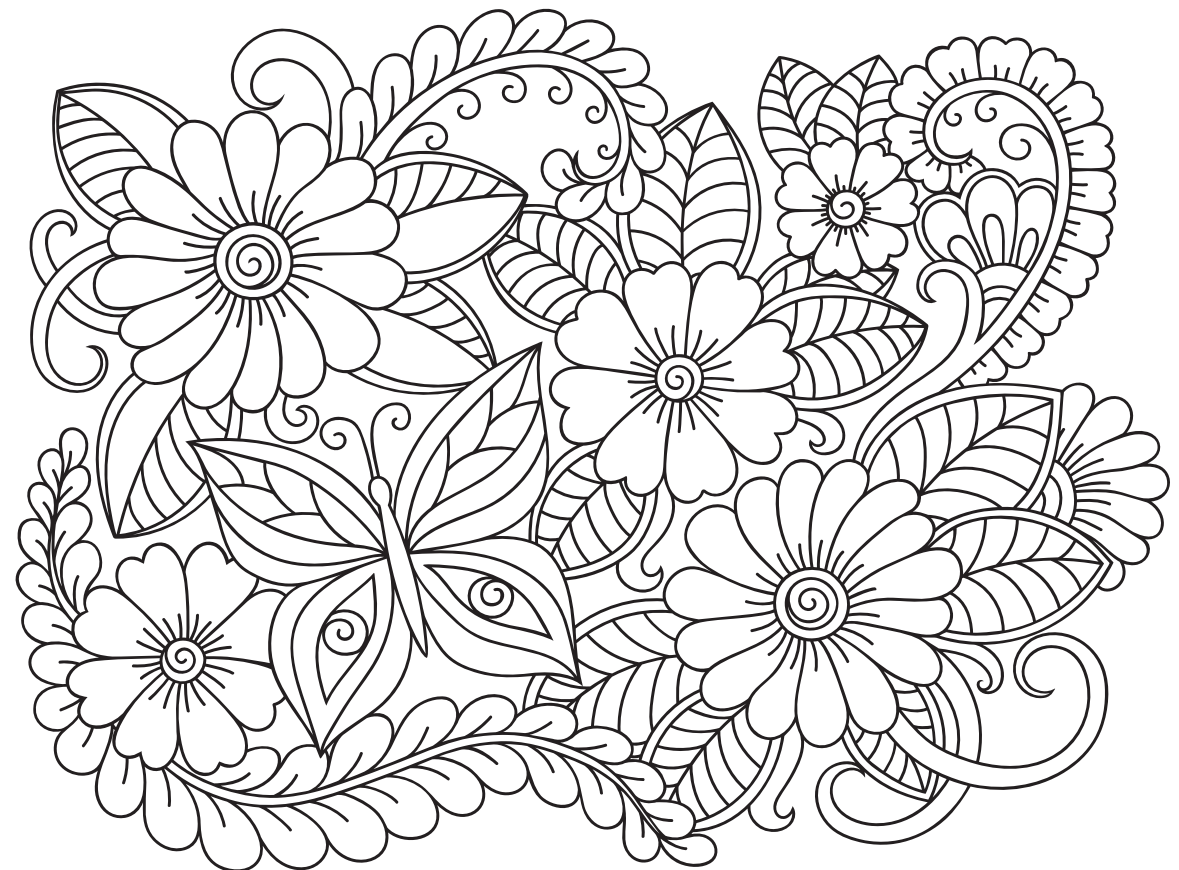
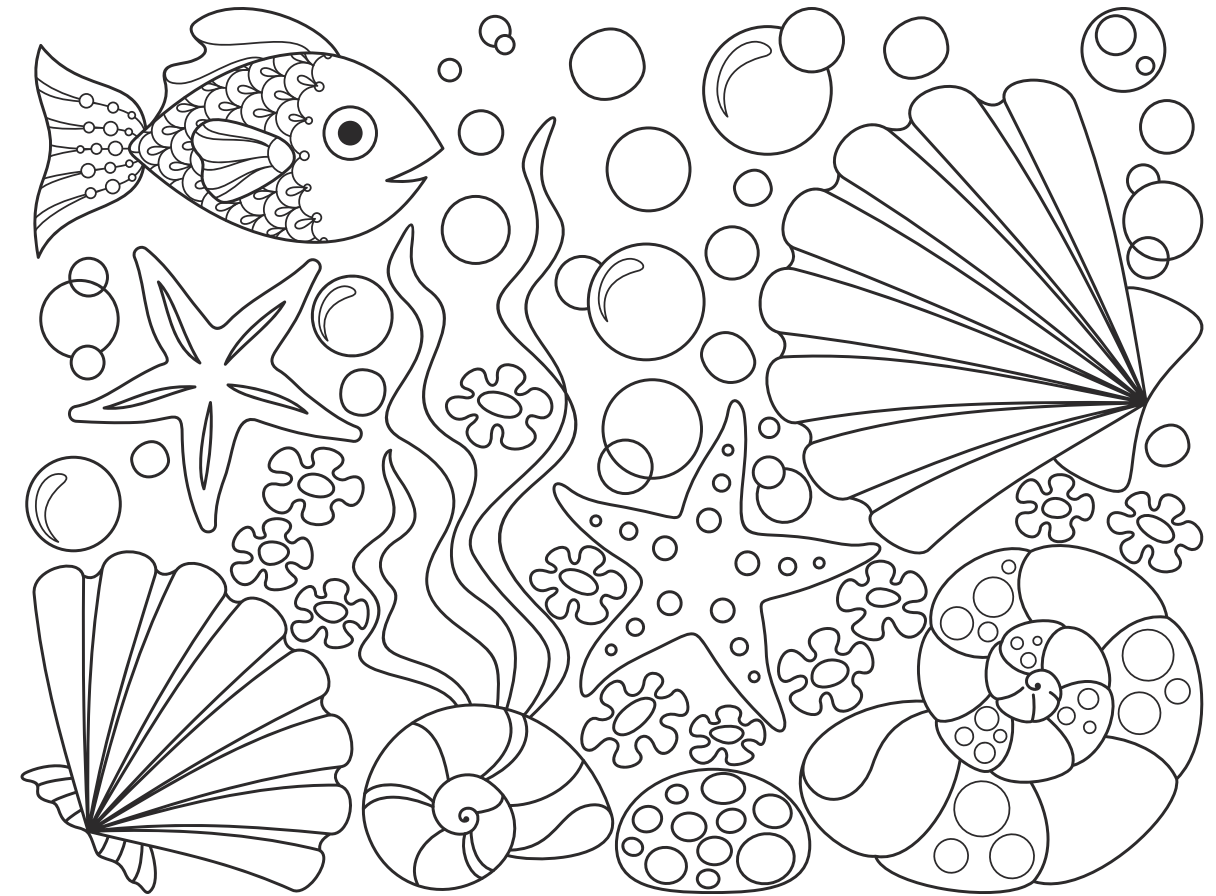
Prisma Health Children's Hospital–Midlands: Who we are and what we do

In 2016, Prisma Health Children's Hospital–Midlands was the first hospital in South Carolina to become an American College of Surgeons Verified Level II Pediatric Trauma Center. We treat over 6,500 injured children each year and admit more than 300 of them. Our dedicated multidisciplinary team, made up of over 15 subspecialties, serves injured children with high-quality care, from prevention to rehabilitation. The team has specific training and education related to the care of injured children.

Our freestanding hospital combines compassionate medical care with comfortable family-centered spaces, age-appropriate play areas and therapeutic diversions to help reduce stress and encourage healing.

Here, you'll find a skilled team of pediatric professionals all located under one roof and sharing one goal – to provide coordinated, compassionate care to South Carolina's children and their families.

All hospital team members and volunteers wear ID badges.



Take a break



Play a Tune



ACCORDION
BANJO
CELLO
CLARINET
DRUM
FLUTE
GUITAR

HARMONICA
HARP
MARIMBA
ORGAN
PIANO
RECORDER
SAXOPHONE

TRIANGLE
TRUMPET
TUBA
XYLOPHONE



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What to expect: In the Emergency Department (ED) or a special hospital unit

Arrival at the hospital

Here is what has happened so far: Your child may have been brought to the Emergency Department (ED) by an ambulance, helicopter or private vehicle.

Or your child may have been brought directly to another unit of the hospital.

The initial assessment: Finding out what is wrong and deciding what to do next

Trauma care at the hospital may begin in the ED. There is a dedicated team of doctors and other healthcare professionals in the ED. There are also doctors and nurses from other areas of the hospital who will come to assist in emergencies. Each team member has assigned roles to assess what is wrong and how best to address your child's specific needs.

Your child may need:

- An exam to find life-threatening injuries
- X-rays, ultrasound or a CT scan to better understand injuries
- Lab work, intravenous fluids, medications or blood products
- Transfer to the operating room (OR) for surgery
- Admission to the Pediatric Intensive Care Unit (PICU) or a regular hospital floor for closer monitoring

Daily rounding on each unit: Daily visiting and checking on your child

Every day, several teams may "round" on your child. This may include the trauma team, critical care team and other patient care teams. They should all introduce themselves, perform exams, check progress and plan your child's care. This time is valuable for everyone involved in the care of your child. We encourage you to ask questions and to take part in discussions of your child's medical care and goals.

In the Pediatric Intensive Care Unit (PICU)

The PICU provides specialized care for critically ill or injured children.

- After arrival to the PICU, your child will continue to be evaluated by a team of doctors, nurses and other professionals.
- Your child may be moved to other areas of the hospital for certain tests or may go to the operating room (OR).
- To give your child more privacy or more rest, a PICU team member may ask visitors to leave the room for a period of time.

A typical day in the PICU – How medical equipment helps

Most children in PICU are attached to equipment that gives the team important information. This allows them to make the best decisions for your child.

Medical equipment can:

- Monitor your child.
- Deliver medicine.
- Help your child breathe.

The medical team knows which medical equipment alarms to respond to immediately.

Please ask your nurse if you have questions.

Why your child may have a "trauma name or number"

The hospital may assign something called a "trauma name or number" to your child when he or she first arrives. This helps the emergency medical teams to act quickly. It also helps them to correctly match any labs or reports with your child. Keeping your child safe and providing the best emergency care are important to each member of your child's healthcare team.

List of major procedures:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Part II: Your child's stay

Pediatric trauma team members

Pediatric trauma surgeons are responsible for managing your child's care. If necessary, the pediatric trauma surgeon may consult with other specialists to provide the best care for your child.

Critical care attending doctors work with the trauma surgeon to ensure that your child receives the care he or she needs while in intensive care. They will order necessary tests and procedures while working closely with nurses and other healthcare professionals.

Advanced care practitioners (ACPs) are nurse practitioners and physician assistants. They are medical professionals with advanced training. They work with the trauma team to take care of your child. ACPs perform assessments. They order tests/medications. And they communicate any changes in a child's care management with other team members. ACPs often coordinate your follow-up care with doctors.

Nurses provide the day-to-day care, treatment and aid in the recovery of your child. They communicate with the doctors and ACPs to manage your child's care.

Physical therapists (PTs) help children to regain their strength and movement, under the direction of a doctor.

Occupational therapists (OTs) help children regain their ability to perform activities of daily living. This includes toileting, bathing, getting in and out of bed, eating, and dressing. OTs help children improve coordination and movement.

Respiratory therapists (RTs) provide breathing support and treatments.

Speech therapists and speech and language pathologists help your child regain the ability to speak or communicate if an illness or injury has impacted this ability.

Recreational therapists help your child regain and maintain functions. They select activities that are matched to your child's age. Then, they help children to engage in activities they were used to doing before their injury or illness.

Social workers and clinical care managers provide support and resources to families throughout their hospital stay. They can help address barriers to care. They provide resources. They also help prepare discharge plans and refer to community agencies.

Patient care technicians help the nurses and doctors by checking your child's vital signs like temperature, blood pressure and pulse. They also may perform blood draws or help with other procedures.

Radiology technicians may take an X-ray, CT scan or MRI of your child. They will send these pictures to the radiologist, who will notify your child's doctors of the results.

Physical medicine & rehabilitation doctor (PM&R doctor) is also known as a physiatrist. This doctor specializes in the diagnosis and treatment of children with spinal cord or brain injury, acute and chronic pain, and musculoskeletal injuries. He or she can help your child reduce pain, improve quality of life, and learn how to use an assistive device, such as a brace or wheelchair.

Chaplains and spiritual care providers are available to listen and to provide spiritual and emotional support to people of all faiths and spiritual backgrounds. Spirituality and faith may give you strength or comfort in coping with your child's illness, trauma or loss. Chaplains are on call 24 hours a day, 7 days a week. If you would like to request a chaplain visit, please speak with your nurse or call 4-7555.

Dietitians offer care and support to ensure that your child has the nutrition needed to heal and grow.

Child abuse pediatricians are responsible for the diagnosis and treatment of infants, children and adolescents who are suspected victims of any form of child maltreatment.

Child life specialists help children cope while being in the hospital. They are trained to provide social and emotional support for hospitalized children in ways they can understand. Child life specialists:

- Help children understand thoughts and feelings of safety during their hospital experiences by using medical play, child-friendly distractions, videos and activities.
- Prepare children for medical procedures using books, dolls, computers, etc.
- Provide emotional support to children, siblings and caregivers.
- Help children and their families discover ways to cope with illness, injury and/or the possibility of death.
- Help schoolteachers and classmates understand a child's illness and/or injury.

Child and adolescent psychiatrists are physicians who specialize in the diagnosis and treatment of disorders of thinking, feeling, and behaving affecting children, adolescents, and families.

Age-appropriate ways to help children cope

Talking with kids in words they understand

How you talk with your child about his or her inpatient stay should depend on your child's age. Ask what questions your child has. Seek to understand what he or she may be thinking about during the hospital stay. This can be helpful. You may have questions about how to talk to your child about his or her injury. If so, speak with the child life specialist on the healthcare team. This team member can help.

Ages 3 and younger

- What your child may be thinking: Your child's greatest concern is likely being away from you. Younger children, especially those under age 3, might think that going to the hospital is punishment for misbehavior.
- How you can help: Stay with your child as much as possible while he or she is in the hospital. Let your child know that he or she did nothing wrong. Explain why the hospital stay is necessary in understandable terms.

Ages 4 to 6

- What your child may be thinking: Children in this age group fear damage to their bodies. If your child will need anesthesia, and you tell your child the doctor will put him to sleep, he may think about what sometimes happens to a pet. And, he may think he is, therefore, going to die.
- How you can help: Be careful when explaining what will take place. While describing anesthesia, say the doctor will help your child take a "nap" for a few hours. If you are talking about surgery, use the word "opening" instead of "cut."

Injuries and procedures

List of major injuries:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Who are the child life specialists? _____

Who else in the hospital is helping in the care of your child?

Physical therapist _____

Occupational therapist _____

Speech pathologist _____

Recreational therapist _____

Respiratory therapist _____

Prosthetist or orthotist _____

Healthcare technicians _____

Social worker _____

Clinical care manager _____

Chaplain _____

Financial counselor _____

Other _____

Ages 6 to 12

- What your child may be thinking: Children older than 6 will worry about losing control as well as damage to their bodies. Your child also may worry about doing or saying embarrassing things while under anesthesia.
- How you can help: Be open. Don't deny that there will be pain after an operation. Explain that although it will hurt for a while, your child will be made to feel as comfortable as possible. Let your child know that you and the healthcare team will be kind if she happens to say or do something silly while under anesthesia.

Teenagers

- What your child may be thinking: Teenagers are often reluctant to ask questions. They may not find it easy to ask what's on their mind. You may believe that they understand more than they actually do.
- How you can help: Encourage your teenager to ask the doctors and nurses questions. Include your child in discussions about the care plan, so he or she will feel more in control.

Reference: chop.edu/patients-and-visitors/what-expect-during-your-childs-inpatient-visit/preparing-your-child-inpatient-visit

Talking with children with special needs

Some children have special needs. This means they may face certain challenges with their bodies, emotions and/or the way they can learn. They may need special kinds of help. As a concerned adult in a child's life, it is important to talk to children in a way that helps them feel safe. Here are some ideas to help.

What you should know

- In general, children with special needs may require more time, attention, support and guidance than other children to feel safe and secure. They may need extra time to understand and deal with the trauma. Try to be patient.
- Children who face physical, emotional, or learning challenges or who have medical conditions will base their reactions on what they have experienced in the past.
- They will also base their reactions on how they see their current situation.
- All children will respond to a situation according to many things: their own coping abilities, their past experiences, how much information they have been provided and how adults around them respond.

What you can do

- Simplify the language you use and repeat things very often.
- Tailor information to your child's strengths. For instance, a child with language disability may better understand information using visual materials.
- Most of all, you can help a child with special needs cope with trauma by first understanding his typical reactions to a stressful situation. This will help provide you with cues to help assess how he is coping and if he needs additional support and help coping with the event.

Reference: childmind.org/downloads/Guide-to-Helping-Children-Cope-After-a-Traumatic-Event-v1.pdf

Reference: dmh.mo.gov/docs/diroffice/disaster/faqhandbook.pdf

Ways to help kids after a traumatic event

Help your child feel safe. All children, from toddlers to teens, will benefit from your touch – extra cuddling, hugs or just a reassuring pat on the back. It gives them a feeling of security. This is so important in the aftermath of a frightening or disturbing event.

Stay or act calm. Children look to adults for reassurance after traumatic events have occurred. Do not discuss your anxieties with your children or when they are around. Be aware of the tone of your voice, as children quickly pick up on anxiety.

Maintain routines as much as possible. When there is chaos and change, routines reassure children that life will be OK again. Try to have regular mealtimes and bedtimes.

Help children enjoy themselves. Encourage kids to do activities and play with others. The distraction is good for them and gives them a sense of normalcy.

Share information about what happened. It's always best to learn the details of a traumatic event from a safe, trusted adult. Be brief and honest and allow children to ask questions. Don't presume kids are worrying about the same things as adults.

Pick good times to talk. Look for natural openings to have a discussion.

Prevent or limit exposure to news coverage. This is especially critical with toddlers and school-age children. Seeing disturbing events recounted on TV or in the newspaper or listening to them on the radio can make them seem like they may never end. Children who believe bad events can come to an end can more quickly recover from them.

Understand that children cope in different ways. Some might want to spend extra time with friends and relatives; some might want to spend more time alone. Let your child know it is normal to experience anger, guilt, and sadness, and to express things in different ways. For example, a person may feel sad but not cry.

Listen well. It is important to understand how your child views the situation, and what is confusing or troubling to him or her. Do not lecture. Just be understanding. Let kids know it is OK to tell you how they are really feeling at any time.

Acknowledge what your child is feeling. If a child admits to a concern, do not respond by saying "Oh, don't be worried." That may make a child feel embarrassed or criticized. Simply confirm what you are hearing: "Yes, I can see that you are worried."

Remember that it's okay to answer, "I don't know." What children need most is someone whom they trust to listen to their questions, accept their feelings, and be there for them. Don't worry about knowing exactly the right thing to say. After all, there is no answer that will make everything OK.

Realize the questions may persist. The aftermath of a trauma may include constantly changing situations. Children may have questions on more than one occasion. Let them know you are ready to talk at any time. Children need to process information on their own timetable. And questions might come out of nowhere.

Part VII: Your child's health journal

Names of your pediatric trauma team members

Many doctors, nurses and other professionals will be taking care of your child. They are all part of the pediatric trauma team, led by the pediatric trauma surgeon.

Who are the surgeons and the advanced care practitioners on the Pediatric Trauma Service?

Who are the physician consultants? These are pediatric doctors who help with the diagnosis and treatment of specific types of injuries or needs.

Orthopedic surgeon _____

Neurosurgeon _____

Plastic surgeon _____

Physical medicine & rehabilitation doctor _____

Psychiatrist _____

Other _____

Other _____

Other _____

Who are the nurses taking care of your child? _____

Parts of the respiratory system

Diaphragm: Dome-shaped skeletal muscle between the chest cavity and the abdomen that contracts when we breathe in and relaxes when we breathe out.

Epiglottis: A flap of cartilage behind the tongue that covers the windpipe during swallowing to keep food or liquids from getting into the airway.

Larynx (voice box): Part of the airway and place in the throat where the vocal cords are located.

Lung: One of two organs in the chest that delivers oxygen to the body and removes carbon dioxide from it.

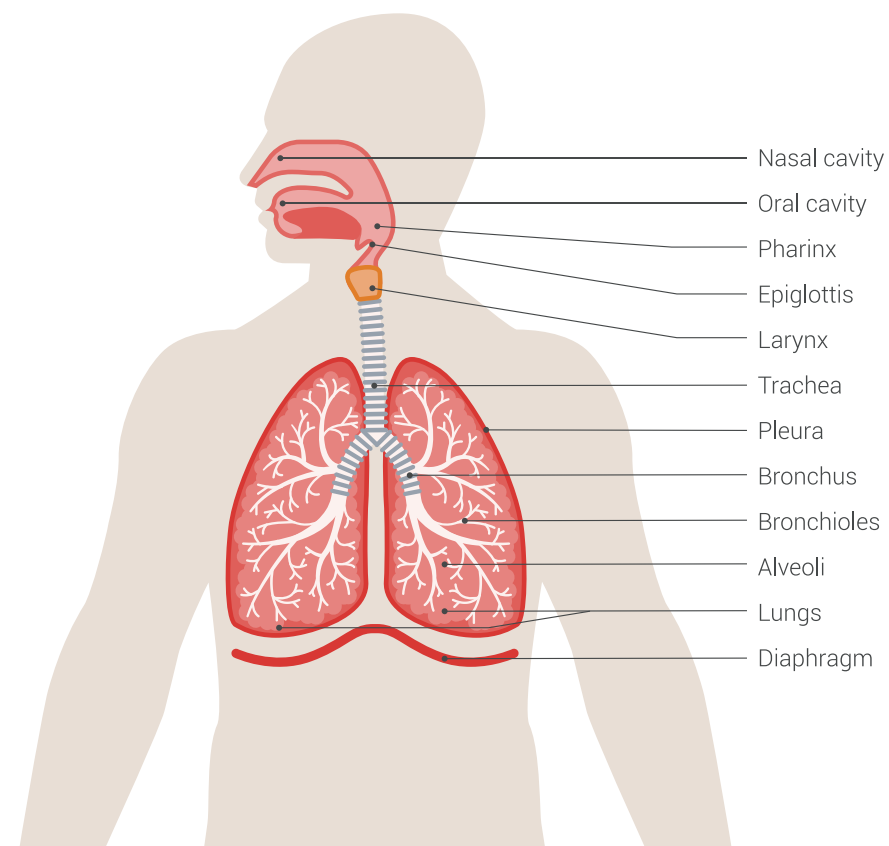
Mediastinum: The part of the body between the lungs that contains the heart, windpipe, esophagus, the large air passages that lead to the lungs (bronchi) and lymph nodes.

Nasal cavity: A large air-filled space in the middle of the face above and behind the nose where inhaled air is warmed and moistened.

Pharynx (throat): The passageway or tube for air from the nose to the windpipe and for food from the mouth to the esophagus.

Trachea (windpipe): The main airway that supplies air to both lungs.

Vocal cord: Either of two thin folds of tissue within the larynx that vibrate air passing between them to produce speech sounds.



Encourage family discussions about the death of a loved one. When families can talk and feel sad together, it's more likely that kids will share their feelings.

Do not give children too much responsibility. It is very important not to overburden kids with tasks or give them adult ones. This can be too stressful for them. Instead, for the near future, you should lower expectations for household duties and school demands. It is good to have kids do at least some easy chores – just not too many.

Help children relax with breathing or mindfulness exercises. Breathing becomes shallow when anxiety sets in. Deep belly breaths can help children calm down. You can hold a feather or a wad of cotton in front of your child's mouth and ask him to blow at it, exhaling slowly. Or you can say, "Let's breathe in slowly while I count to three, then breathe out while I count to three." Place a stuffed animal or pillow on your child's belly as he lies down and ask him to breathe in and out slowly and watch the stuffed animal or pillow rise and fall.

Watch for signs of emotional trauma. Within the first month, it is common for kids to seem OK. Or some may seem generally cranky or clingy. But, after the shock wears off, kids might experience more symptoms. This may especially happen with children who have witnessed injuries or death, lost immediate family members, or experienced previous trauma in their lives. Know when to seek help. Anxiety and other issues may last for months. But seek help from your family doctor or from a mental health professional right away if any of the following things happen: Anxiety or other issues do not decrease, or your child starts to hear voices, sees things that are not there, becomes excessively worried, has temper tantrums, or hurts self or others (e.g., head banging, punching or kicking).

Take care of yourself. You can best help your child when you help yourself. Talk about concerns with friends and relatives. It might be helpful to attend or get help from a TSN support group. If you belong to a church or community group, keep being a part of that group.

Try to eat right, drink enough water, stick to exercise routines and get enough sleep. Physical health helps protect against emotional overload. To reduce stress, do deep breathing exercises. If you suffer from severe anxiety that affects your ability to function, seek help from a doctor or mental health professional. If you don't have access to one, talk with a religious leader. Recognize your need for help and get it. Do it for your child's sake, if for no other reason.

Reference: childmind.org/downloads/Guide-to-Helping-Children-Cope-After-a-Traumatic-Event-v1.pdf



Age-appropriate ways to help siblings cope

Seeking to understand what your other kids may feel

It can be hard to explain injury and traumatic events to children. Sometimes, children have been present and witnessed their sibling's injury. Sometimes, children have not witnessed the injury, but they have heard small pieces of information and want to know what happened. Caregivers can take simple steps to try to understand what the child may be feeling and to help explain the current situation in age-appropriate words.

Consider your child's age, personality and relationship to the injured child. Children with a sibling in the hospital often express feelings of loneliness, jealousy and being ignored. Here are some examples of what siblings might be feeling and may have trouble expressing:

- **Toddler (1–2):** Wondering where their sibling is and missing him or her.
- **Preschool (3–4):** Missing their sibling and caregivers. Wondering when Mommy and Daddy will come home. Children at this age and through age 7 may have "magical thinking" that leads them to believe they caused the medical event to happen.
- **School age (5–7):** Not understanding why they can't see their sibling and feeling angry or sad that they cannot go to the hospital to visit, especially if they are too young.
- **School age (8–11):** May feel jealous or angry about the attention that their sibling is receiving.
- **Pre-adolescence (12–14):** Confused and worried about the well-being of their sibling, but unable to deal with other children asking questions.
- **Adolescence (15–18):** Feeling their needs are being ignored when other adults ask how their sibling is doing, but not how they are feeling or how they are coping with this challenging situation. Siblings also may experience feelings of guilt about being the "healthy one" and questioning "why not me?"

Listed below are some behaviors you may want to watch for. If these concerns go on for more than a few weeks or distress your child, reassure your child that he or she is not alone and seek help from a mental health professional.

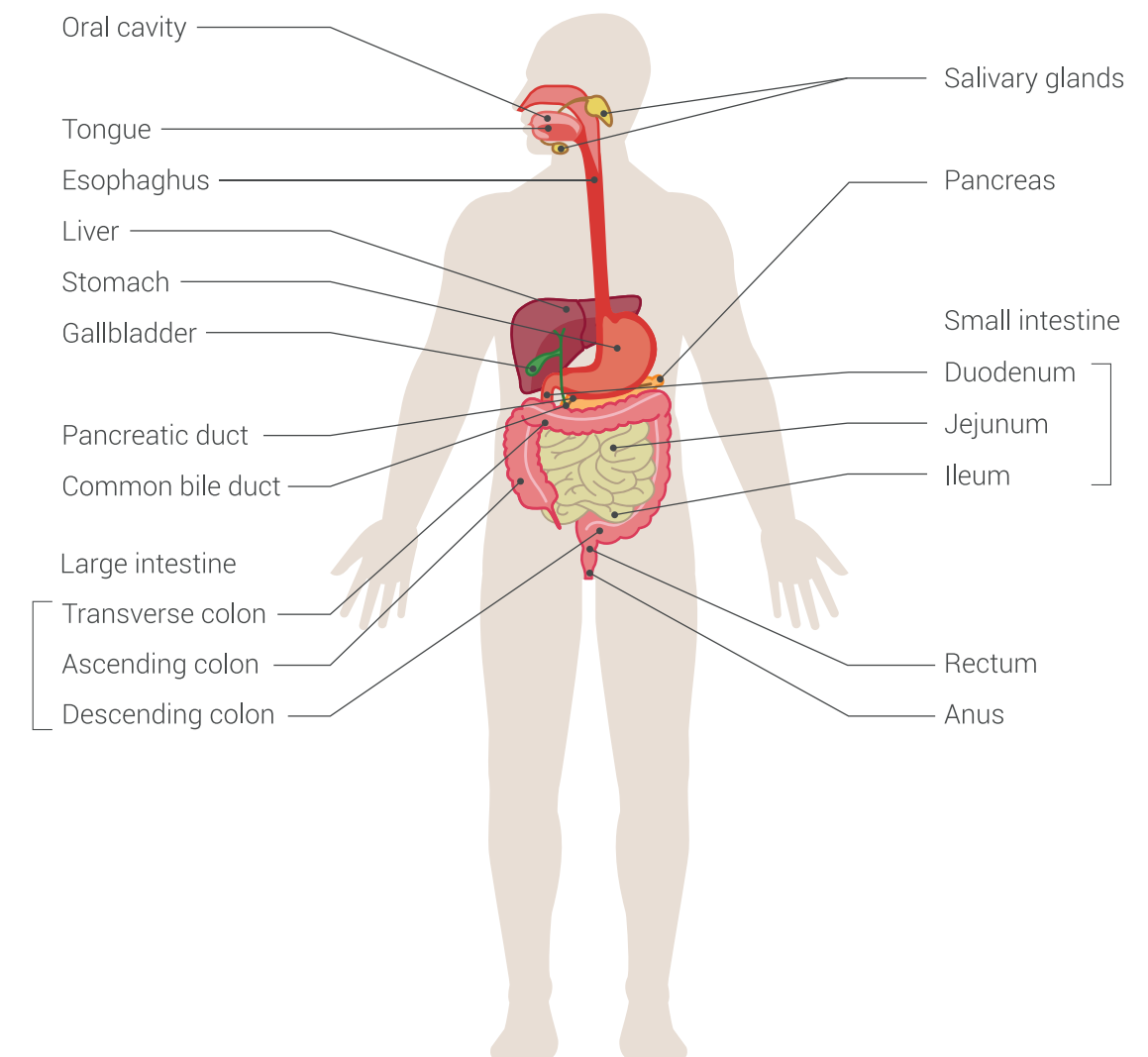
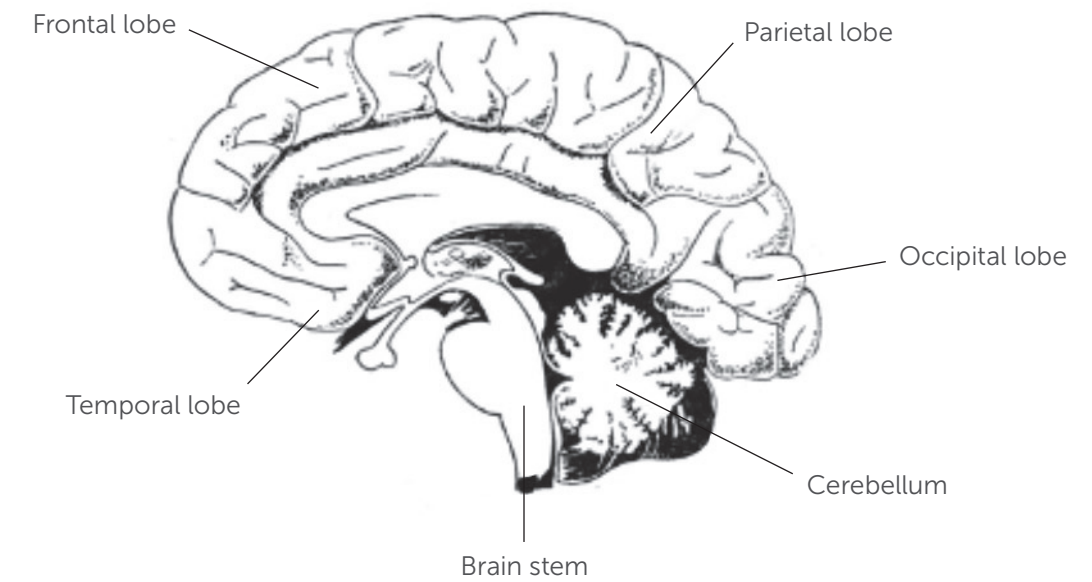
Behaviors you might see in younger children:

- Clinginess to caregivers
- Temper tantrums
- Doing things again that they had grown out of, like bed wetting
- Trouble sleeping, having nightmares or being afraid of the dark

Behaviors you might see in older children and teens:

- Wanting to be alone or with you all the time
- Being easily overwhelmed, jumpy or irritable
- Changes in behavior: more sensitive and quiet, or talking back, getting into fights
- Trouble sleeping or having nightmares
- Missing friends or feeling left out
- Problems in school
- Changes in eating or sleeping habits

Reference: cham.org/programs-centers/phoebe-h-stein-child-life-program/information-for-parents/helping-children-understand-when-a-sibling-is-in-the-hospital.



Parts of the brain

Brain stem: Part of the brain that connects to the spinal cord; it controls blood pressure, breathing and heartbeat.

Cerebellum: The second-largest part of the brain; it controls balance, coordination and walking.

Cerebrum: The largest part of the brain, with two halves known as hemispheres; the right half controls the body's left side and the left half controls the body's right side. Each hemisphere is divided into four lobes:

- **Frontal lobe:** Area behind the forehead that helps control body movement, speech, behavior, memory and thinking.
- **Occipital lobe:** Area at the back of the brain that controls eyesight.
- **Parietal lobe:** Top and center part of the brain, located above the ear; helps us understand things like pain, touch, pressure, body-part awareness, hearing, reasoning, memory and orientation in space.
- **Temporal lobe:** Part of the brain near the temples that controls emotion, memory, and the ability to speak and understand language.

Parts of the digestive system and abdomen

Colon: The final section of the large intestine; it mixes the intestinal contents and absorbs any remaining nutrients before the body expels them.

Duodenum: The first part of the small intestine; it receives secretions from the liver and pancreas through the common bile duct.

Esophagus: The muscular tube, just over nine inches long, that carries swallowed foods and liquids from the mouth to the stomach.

Gallbladder: A pear-shaped sac on the underside of the liver that stores bile received from the liver.

Ileum: The lower three-fifths of the small intestine.

Jejunum: The second part of the small intestine extending from the duodenum to the ileum.

Kidney: One of a pair of organs at the back of the abdominal cavity that filter waste products and excess water from the blood to produce urine.

Large intestine: The organ that absorbs nutrients and moves stool out of the body.

Liver: The organ that filters and stores blood, secretes bile to aid digestion and regulates glucose; because of its large size and location in the upper right portion of the abdomen, the liver is the organ most often injured.

Pancreas: Gland that produces insulin for energy and secretes digestive enzymes.

Pharynx (throat): The passageway or tube for air from the nose to the windpipe and for food from the mouth to the esophagus.

Rectum: The lower part of the large intestine between the sigmoid colon and the anus.

Sigmoid colon: The S-shaped part of the colon between the descending colon and the rectum.

Small intestine: The part of the digestive tract that breaks down and moves food into the large intestine and also absorbs nutrients.

Spleen: Organ in the upper left part of the abdomen that filters waste, stores blood cells and destroys old blood cells; it is not vital to survival, but without it there is a higher risk of infections.

Stomach: The large organ that digests food and then sends it to the small intestine.

Helping children after a sibling's traumatic event

While your child is in the hospital, there are several steps you and other caregivers can take to support your child's siblings. The child life specialist on your healthcare team can also be a great resource for both caregivers and siblings.

Talk to your children.

- **Children need to know that it is OK to talk about their feelings**, and that they will get support and comfort when they need it. Some children avoid telling their caregivers what they're worried about because they think that it will add to their caregivers' stress. Many children know or have overheard some of what's going on with their brother or sister. It is helpful to tell children to share their feelings and worries with you, and to ask you any questions they may have.
- **Answer questions honestly.** Answer your children's questions honestly, directly and simply. It's OK if you don't have an answer. You can always check with your healthcare team. Talk about what is happening by using words that your children can understand. Check to make sure that the meaning of the words you use is clear to your children, especially medical words.

Prepare your children for a visit to the hospital.

- **When, where, how:** Talk to them about visiting the hospital. Explain when you will visit, where the hospital is, and how you will get there. It is better to talk to them about things than to have them imagine what might be going on.
- **How long:** Explain how long you will be visiting at the hospital.
- **How things will look:** Talk to them about what they will see, such as medical equipment or how their brother or sister will look. Pictures can help.
- **Possible fears:** Tell them it's OK to feel nervous or scared.
- **Possible feelings:** Help them handle and express their feelings.
- **Possible questions:** Ask them if they have any questions or concerns about the visit.

Try to be patient and give everyone time to adjust. Members of the same family can have very different reactions and need time to adjust to the changes. Talk as a family about how the illness affects everyone.

Keep to everyday routines. Trying to keep to some everyday routines can help things feel more normal at home. Having regular routines (e.g., meals and bedtimes, chores) and activities give siblings things to expect and look forward to.

Set limits as usual. It can be tempting to relax family rules to help siblings feel special or to make up for hard times. However, it is often better to keep most of your family rules and expectations the same.

Help your other children understand what is happening. Serious illness or injury can be confusing and scary for a sibling. Children have active imaginations and they can get the wrong idea about what is happening. Ask questions to figure out what your child knows and give information in clear, age-appropriate ways.

Encourage your other children to share their feelings. There are many ways to share feelings (talking, drawing, storytelling, hugging). And there are different times (dinnertime, bedtime) and places (in the car, at home, in the hospital). Help siblings name their feelings, such as being sad, scared, angry, jealous or guilty. Share your own feelings. Be a good listener, even if what they have to say is hard to hear.

Spend time with your other children. It is important to care for your ill or injured child. But remember that your other children miss you. Try to make plans to spend one-on-one time with your other children. If you are away a lot, call regularly so you can keep in touch.

Help siblings feel involved. Allow them to be a part of their sibling's care. Plan a visit to the hospital and introduce them to the healthcare team. Let them choose which toys and games to take to the hospital. And make sure you let them know how much you appreciate the extra things they do to help out.

Help them keep in touch. If their ill or injured sibling is away, find ways to help your other children keep in touch. Make cards, write letters, draw pictures, make videos or arrange for video chats, and record a sibling reading a bedtime story. If possible, let them visit their brother or sister in the hospital.

Encourage siblings to have fun. Often siblings feel guilty about wanting to have fun. Remind them that it is OK for them to do the things they enjoy, like spending time with friends, hobbies and extra-curricular activities.

Seek help. If your other children seem to be struggling, talk to your child's doctor and seek help from a mental health professional.

Reference: aboutkidshealth.ca/En/HealthAZ/TestsAndTreatments/GoingtoHospital/Pages/Siblings-in-the-Hospital-Helping-Your-Children-Cope.aspx

Coping strategies for caregivers

Be kind to yourself.

It's important for caregivers to use their own coping skills while a child is in the hospital. You may be learning to adjust to a difficult experience. You may be extra busy. You may feel tired and overwhelmed. It is not always easy. But try your best to stay healthy for yourself, your family and your child. Here are some healthy coping behaviors for you to stay strong for yourself and your child.

- **Try to eat healthy foods.** Eat well. Drink plenty of water.
- **Try to exercise.** Take a walk outside of the hospital.
- **Try to get enough rest and sleep.** Know your limitations. Ask a friend or family member to stay with your child, so you can have a break, take a shower and get some rest.
- **Connect with TSN Services.** Read Stories from Survivors and Family/Friends at TraumaSurvivorsNetwork.org and connect with TSN on social media. For more information on Prisma Health Children's Hospital–Midlands resources, please email TSN@PrismaHealth.org.
- **Ask for help managing home life.** Ask a friend or family member to oversee having meals provided, babysitting, house cleaning, paying monthly bills or any other tasks that may need to be done while you're at the hospital.
- **Keep track of your child's progress.** Write down questions to ask the medical care team, learn about your child's injury and make a daily log of your child's progress. Focus on one day at a time. This can help you cope.
- **Ask for help with your child's care.** Choose a relative or friend to make calls and share updates about your child's progress in the hospital. An online page, such as CaringBridge.org, can be a helpful resource. Speak with the social worker or chaplain on your healthcare team.

Reference: lhsc.on.ca/Patients_Families_Visitors/Childrens_Hospital/Programs_and_services/PedsTraumaBooklet.pdf

Bones of the spine

Atlas: The first cervical vertebra.

Axis: The second cervical vertebra.

Cervical vertebrae (C1–C7): The first seven bones of the spinal column; injury to the spinal cord at the C1–C7 level may result in paralysis from the neck down (quadriplegia).

Coccyx: A small bone at the base of the spinal column, also known as the tailbone.

Intervertebral disk: The shock-absorbing spacers between the bones of the spine (vertebrae).

Lumbar vertebrae (L1–L5): The five vertebrae in the lower back; injury to the spinal cord at the lumbar level may affect bowel and bladder function and may or may not involve paralysis below the waist (paraplegia).

Sacral vertebrae: The vertebrae that form the sacrum.

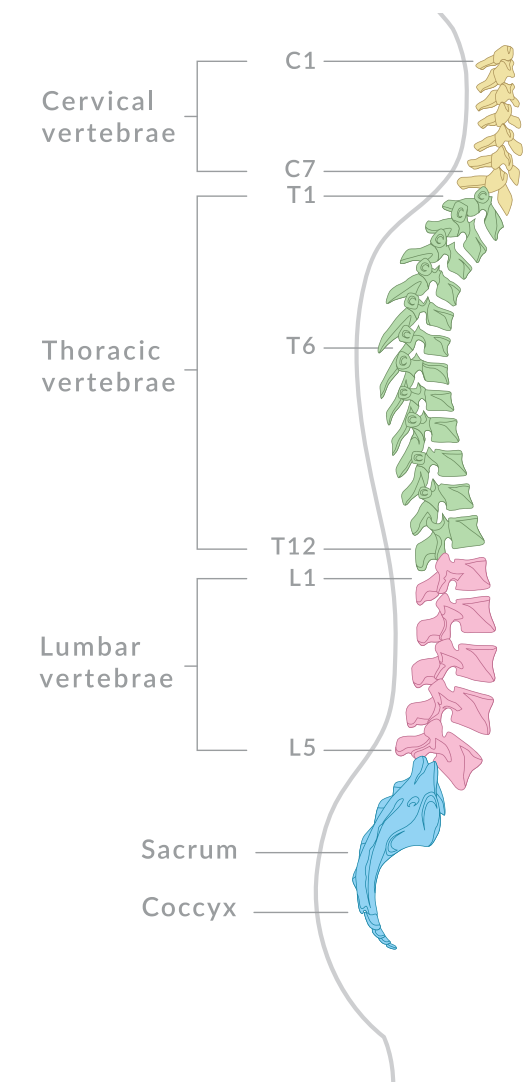
Sacrum: Five joined vertebrae at the base of the vertebral column (spine).

Sciatic nerve: The largest nerve in the body, passing through the pelvis and down the back of the thigh.

Spinous process: The small bone that protrudes at the back of each vertebra.

Thoracic vertebrae (T1–T12): The 12 vertebrae in the middle of the back that are connected to the ribs; injury to spinal cord at the thoracic level may result in paralysis from the waist down (paraplegia) and may affect other organs such as the liver, stomach and kidneys, and functions such as breathing.

Transverse process: The two small bones that protrude from either side of each vertebra.



Bones of the skull and face

Frontal bone: Forehead bone.

Mandible: The horseshoe-shaped bone forming the lower jaw.

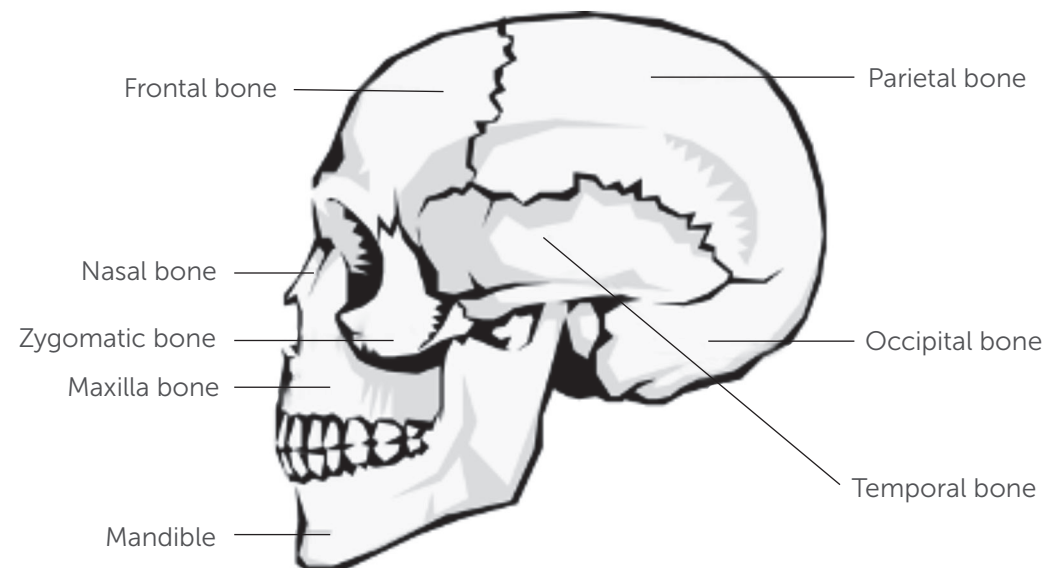
Maxilla: The jawbone; it is the base of most of the upper face, roof of the mouth, sides of the nasal cavity and floor of the eye socket.

Nasal bone: Either of the two small bones that form the arch of the nose.

Parietal bone: One of two bones that together form the roof and sides of the skull.

Temporal bone: A bone on both sides of the skull at its base.

Zygomatic bone: The bone on either side of the face below the eye.



Know that as you help your child, you also need to help yourself.

Mental health information and awareness

Emotional reactions to trauma

After a traumatic event or injury, it is common for children and adults to feel a range of stressful emotions. For some people, these feelings of distress resolve over time. For others, these reactions may hold steady or even increase. It's important to know the warning signs and seek help from a mental health professional to aid in the healing process.

If you or your child are experiencing any of these symptoms, you are not alone. There is hope after trauma. Talk with the social worker, child life specialist, nurse or physician on your healthcare team. They can lead you to local counseling resources, support groups, and peer-to-peer support for adults and kids.

What is acute stress disorder?

Acute stress disorder involves symptoms that last from three days to one month after one or more traumatic events. Symptoms may begin after someone experiences or sees an event involving a threat of or actual death, serious injury, or physical violation to the person or others. Symptoms fall into five categories: intrusion, negative mood, dissociation, avoidance and arousal.

- **Intrusion symptoms** (invasive, distressing memories of the trauma or recurrent bad dreams)
- **Negative mood** (ongoing inability to experience positive emotions such as happiness or love)
- **Dissociative symptoms** (time slowing, seeing oneself from an outsider's perspective, being in a daze)
- **Avoidance symptoms** (avoidance of memories, thoughts, feelings, people or places associated with the trauma)
- **Arousal symptoms** (difficulty falling or staying asleep, irritable behavior, problems with concentration or focus)

People with acute stress disorder also may experience a great deal of guilt about not being able to prevent the trauma. Or they may feel guilt for not being able to move on from the trauma more quickly. Panic attacks may occur in the month following a trauma. Children with acute stress disorder also may experience anxiety related to their separation from caregivers.

Only a mental health professional can diagnose acute stress disorder, but if you or a loved one notices any of these symptoms, it may be a sign that professional help is needed.

What is post-traumatic stress disorder (PTSD)?

PTSD is a type of anxiety that occurs in response to a traumatic event with symptoms that are present for at least one month or longer. PTSD was first described in combat veterans. After years of research, it is understood that PTSD may occur after experiencing or seeing traumatic events that can happen in everyday life.

After a traumatic event, people may have some PTSD symptoms. But that does not always mean they have a PTSD diagnosis. PTSD can be diagnosed and treated by a mental health professional who completes an assessment of a person's symptoms over a certain length of time. There are three types of PTSD symptoms:

Hypervigilance

- Having a hard time falling asleep or staying asleep
- Feeling irritable or having outbursts of anger
- Having a hard time concentrating
- Having an exaggerated startle response

Re-experiencing

- Having recurrent recollections of the event
- Having recurring dreams about the event
- Acting or feeling as if the event were happening again
- Flashbacks of the event
- Feeling distress when exposed to cues that resemble the event

Avoidance

- Avoiding thoughts, feelings, conversations or activities
- Avoiding places or people that are reminders of the event
- Less interest or participation in activities that used to be important
- Feeling detached: numb, not able to feel

Grief and loss

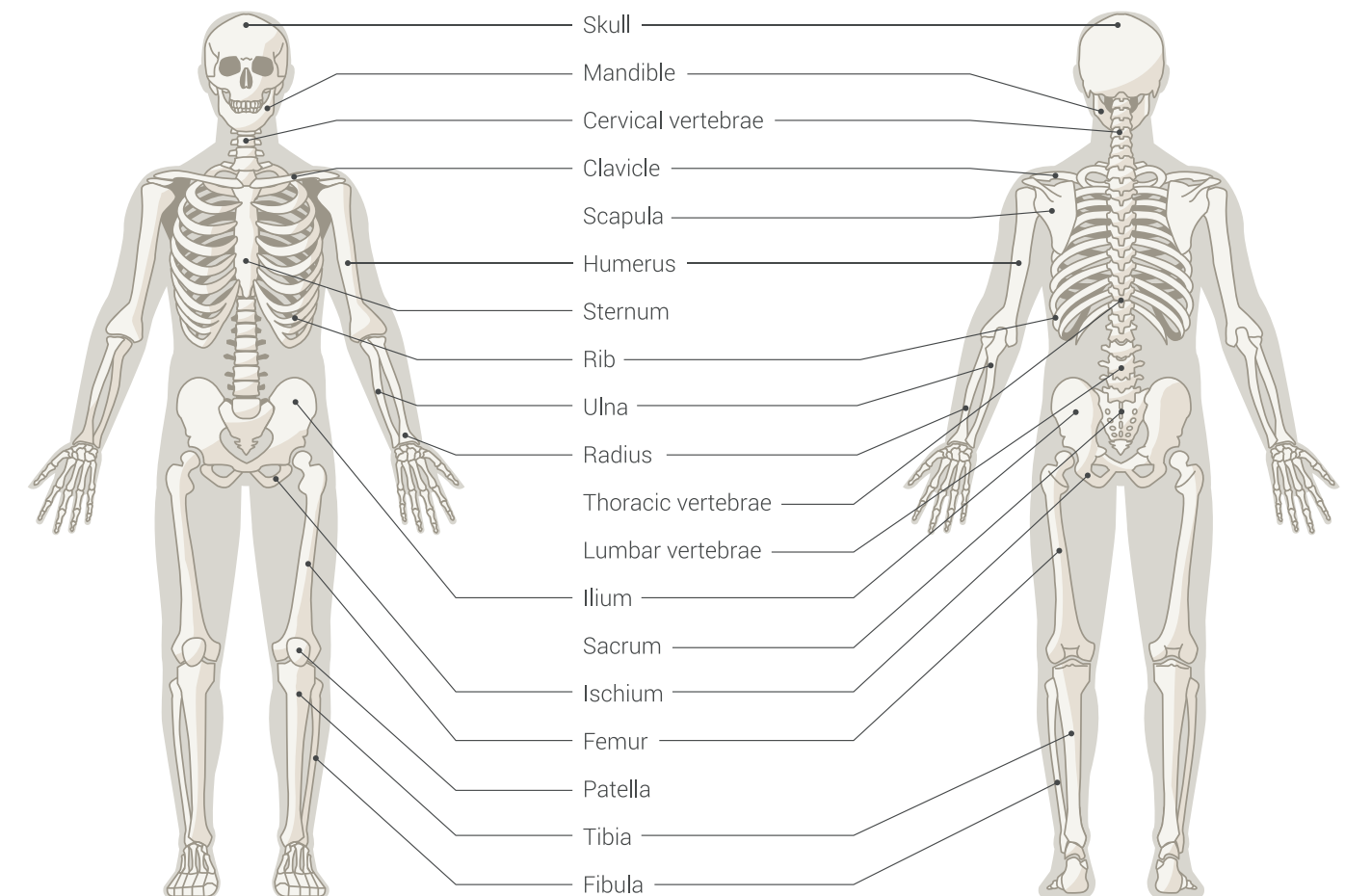
When a loved one dies, you and your child may react to the loss with different emotions at different times. Your child may be aware of death from stories, movies, or even a friend who lost a pet or a loved one. However, this loss may be a new experience for your child in losing someone close, and your child may have many questions.

At some point in your healing process, you and your child may experience grief and loss not related to the loss of a loved one but rather to the loss of activities your child once enjoyed. Your child may miss friends from school or a team, physical activities such as dance or sports, or simply the way life "used to be" before the traumatic injury occurred.

Grief or loss takes time to adjust and to transition to a new normal – to life after the loss of a loved one or life after a traumatic injury. Caregivers cannot take away their child's pain of grief and loss. But caregivers can help model and support healthy coping skills to work through the grieving process and adjust to a new normal moving forward.

When a loved one dies, you and your child may react to this loss with different emotions at different times.

If you or your child experience any of these symptoms, you are not alone. Contact a mental health professional for support.



Glossary of anatomy (parts of the body) terms

Bones of the skeleton

Acetabulum: The hip socket.

Carpals: The eight bones of the wrist joint.

Clavicle (collarbone): A bone curved like the letter F that moves with the breastbone (sternum) and the shoulder blade (scapula).

Femur: The thigh bone, which runs from the hip to the knee and is the longest and strongest bone in the skeleton.

Fibula: The outer and smaller bone of the leg from the ankle to the knee; it is one of the longest and thinnest bones of the body.

Humerus: The upper bone of the arm from the shoulder joint to the elbow.

Ileum: One of the bones of the pelvis; it is the upper and widest part and supports the flank (outer side of the thigh, hip and buttock).

Ischium: The lower and back part of the hip bone.

Metacarpals: The bones in the hand that make up the area known as the palm.

Metatarsals: The bones in the foot that make up the area known as the arch.

Patella: The lens-shaped bone in front of the knee.

Pelvis: Three bones (ilium, ischium and pubis) that form the girdle of the body and support the vertebral column (spine); the pelvis is connected by ligaments and includes the hip socket (the acetabulum).

Phalanges: Any one of the bones of the fingers or toes.

Pubis: The bone at the front of the pelvis.

Radius: The outer and shorter bone in the forearm; it extends from the elbow to the wrist.

Sacrum: Five joined vertebrae at the base of the vertebral column (spine).

Scapula (shoulder blade): The large, flat, triangular bone that forms the back part of the shoulder.

Sternum (breastbone): The narrow, flat bone in the middle line of the chest.

Tarsals: The seven bones of the ankle, heel and mid-foot.

Tibia: The inner and larger bone of the leg between the knee and ankle.

Ulna: The inner and larger bone of the forearm, between the wrist and the elbow, on the side opposite the thumb.

To help your child heal, remember:

- **Your child may grieve and cope differently than you do.** Changes in moods, from crying to playing, may be how your child is coping with feeling overwhelmed.
- **Your child may regress to younger behaviors.** Your child may start wetting the bed again or using “baby talk.”
- **Encourage your child to express feelings.** Your child may not be able to express his or her emotions through words. You can help express feelings by drawing pictures, building a scrapbook, looking at photo albums or telling stories.
- **Focus on answering your child’s questions with words and information he or she can understand.** Young children may not understand that death is permanent, and question when the loved one is coming back. Older children may understand death differently, and also have questions. Answer your child’s questions honestly with words that best fit for their age. Try not to overwhelm your child with too much information.
- **Be direct as you explain death to your child.** Children often hear each word literally. Hearing that someone “went to sleep” may cause them to be afraid of bedtime. Use words that are clear and direct. Provide honest answers to their questions with age-appropriate information.
- **Talking about heaven or an afterlife depends on your personal and religious beliefs.** If you have beliefs about an afterlife, sharing those beliefs with your child can help bring comfort. Even if your beliefs do not include an afterlife, you can still comfort your child in sharing that your loved one can live on in the hearts and minds of family and friends. You also can help your child draw or find a printed picture of your loved one.
- **Attending the funeral is a personal decision for you and your child.** While some children can feel more closure by attending the funeral, other children are not ready for such an intense experience. Do not force or pressure your child to attend. If you and your child both agree to attend, prepare your child with what he or she can expect to see and hear. Even if your child does not attend the funeral, you can help your child experience closure by planting a tree, sharing stories or releasing balloons to honor the loved one who died.
- **Your child may imitate how you are grieving.** It is important to show your emotions because it models how to express your feelings. However, explosive or uncontrolled reactions do not model healthy coping for your child.
- **Routines can bring comfort in a stressful time for your child.** You may need some time alone. If so, ask a friend or relative who can help keep your child’s daily routines as much as possible. It is important that your child can grieve the loss of the loved one. But it is also important for your child to understand that life does go on.
- **Finding professional support for you and your child can be helpful.** If you feel you or your child is unable to cope with this grief and loss, contact a mental health professional. It’s OK to ask for help.

Reference: childmind.org/article/helping-children-deal-grief/



Part III: Your child's discharge

Planning to leave the hospital

Dealing with feelings: As you prepare for hospital discharge, you and your child may feel many different feelings day to day. You may feel happy or hopeful, or you may feel nervous or exhausted. During this transition to a new phase of recovery, remember that you are not alone. Talk with your healthcare team to help you prepare for this next step in the healing process.

Arranging for specialized care: Many children need specialized care after they leave the hospital. This may include:

- Medical equipment
- Mobility devices
- Transportation needs
- Nursing care
- Physical therapy
- Occupational therapy
- Speech therapy
- Rehabilitation services

Who can help: The social worker or clinical care manager on your healthcare team will work with you to plan for a safe discharge from the hospital. This person may talk with your insurance company to see what benefits are available and can also help you arrange for services after discharge. If you do not have health insurance, a social worker or financial counselor can help you apply for assistance.



Foley catheter: A tube placed into the bladder to collect urine.

Halo: A device used to keep the neck from moving when there is a cervical spine injury. When used, a C-collar is not needed.

Intracranial pressure (ICP) monitor: A tube placed into the brain to measure pressure on the brain caused by excess fluid.

IV fluid: Fluid put into the vein to give the patient drugs and nutrition (food).

IV pump: A machine that gives a precise rate of fluids and/or drugs into the vein.

Nasogastric (NG) tube: A tube put into the patient's nose to give drugs and nutrition (food) directly into the stomach. It also can be used to get rid of excess fluids from the stomach.

Orthotic: A device, such as a splint or custom foot orthosis, that keeps a part of the body from moving around and restricts motion to promote healing or function.

Prosthetic: A device that replaces a missing body part, such as a leg, arm or eye.

Pulmonary artery catheter: A line placed into a shoulder or neck vein to measure heart pressure and to tell how well the heart is working.

Pulse oximeter: An electronic device placed on the finger, toe or earlobe to check oxygen levels.

Triple lumen catheter: A line placed into a shoulder or neck vein to give IV fluids and drugs.

Tube feeding pump: A machine to give fluids and nutrition (food) in the stomach or small intestine using a nasogastric (NG) tube.

Ventilator: A breathing machine, sometimes called a respirator, that helps patients breathe and gives oxygen to the lungs.

Glossary of medical tests

CT scan: A CT scan is like an X-ray because it takes pictures of the inside of the body. A CT scanner is circle shaped like a doughnut and takes pictures of the body from many different angles. Pictures are sent to a computer that records the images and can put them together to form 3-D images.

Labs: Labs may include blood tests and other tests to help doctors diagnose an illness and provide treatment for your child.

MRI: The MRI is another machine that shows the inside of the body. Using a large magnet and a computer, the MRI can see bones, organs and tissue inside the body.

Ultrasound: An ultrasound shows inside the body and produces a picture using sound waves. Ultrasound images are black-and-white images that can show what an organ looks like.

X-ray: An X-ray takes a picture of the inside of the body.

Glossary of equipment terms

Ambu bag: A device used to help patients breathe.

Blood pressure cuff: A wrap that goes around the arm or leg and is attached to the heart monitor. The cuff lightly squeezes the arm or leg to measure blood pressure.

Cervical collar (C-collar): A hard plastic collar placed around the neck to keep it from moving. Most patients have a C-collar until the doctor can be sure that there is no spine injury. If there is no injury, the doctor will remove the collar.

Continuous passive motion (CPM): A machine that gives constant movement to selected joints. It is often used in the hospital after surgery to reduce problems and help recovery.

ECG/EKG (electrocardiogram): A painless tracing of the electrical activity of the heart. The ECG gives important information about heart rhythms and heart damage.

Endotracheal tube: A tube that is put into the patient's mouth and down into the lungs to help with breathing. The patient cannot talk while it is in place because the tube passes through the vocal cords. When it is taken out, the patient can speak but may have a sore throat.

Planning for school: Working together

- **A meeting.** You can set up a meeting with your child's school professionals to determine your child's needs and help create a plan for your child to return to school. This could include your child's ability to safely return to physical activities while at school.
- **An IEP.** Your child's school professionals can help develop an Individualized Educational Plan (IEP) if your child's injuries could affect his or her academic performance.
- **A 504.** If your child does not qualify for an Individual Education Plan (IEP), your child's school can develop a "504." Section 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990 require that accommodations and modifications be implemented to level the playing field for students with disabilities. This plan grants specific accommodations, such as extra time for tests.
- **Homework.** Homework may be arranged before transition back into the classroom.
- **A therapist.** With your parent/guardian consent, your child's school professionals may approve therapists to help set up behavioral plans and implement certain techniques on your child's behalf. In some situations, the therapist may be able to observe the child in the classroom and exchange information with teachers.
- **Emergency medical information.** Know that some physical conditions or emotional conditions may worsen in stressful situations. You can update your child's emergency medical information forms on file with your child's school professionals. Discuss with school professionals what coping skills you feel are most calming to your child when he or she is upset.

Reference: dmh.mo.gov/docs/diroffice/disaster/faqhandbook.pdf

Preparing your child to return to school

- **Get back to routine as much as possible.** Help your child's transition by talking about what to expect. Returning to a school routine can help your child feel more in control of his or her daily life.
- **Maintain your expectations.** Things don't need to be perfect, but your child may be ready to do some homework and simple classroom tasks.
- **Be aware of signs that your child may need extra help.** Your child may be unable to function because of feelings of intense sadness, fear or anger. If so, contact a mental health professional. Your child may have distress that appears as physical ailments, such as headaches, stomachaches or extreme fatigue.
- **Help kids understand more about what happened.** You can talk to your child's school professionals to plan a "welcome back" celebration for your child and the classmates.
- **Consider a memorial.** If there was a death of a loved one, memorials are often helpful to commemorate people and things that were lost.
- **Reassure your child about safety.** Ask your child what worries he or she might have about returning to school. Share what trusted adults at home and school are doing to help.
- **Caregiver and teacher communication.** Ask teachers to use increased awareness about your child's experiences when discussing topics or news reports that may be unsettling to your child. Talk with your child's teacher about the school's programs and activities, so you can better prepare for discussions that may continue at home.

Reference: childmind.org/downloads/Guide-to-Helping-Children-Cope-After-a-Traumatic-Event-v1.pdf

Part IV: Your child's recovery

Supporting your child in recovery

- **Communication:** Try to recognize your child's feelings and the impact trauma may have had on your child. Stay away from phrases like "I don't believe you" or "It couldn't have happened that way" or "If only you hadn't ...". Use supportive words and thoughtful questions to help you and your child to better understand each other.
- **Safety:** Your child's need for safety and your support is important in healing from a traumatic experience, even if your child seems to "push you away."
- **Comfort:** Your child may temporarily regress after a trauma to seek comfort. He or she may thumb-suck or want to sleep in your bed. He or she also may start to wet the bed again.
- **Reassurance:** Your child may think about an event in a different way than you may expect. Ask your child open-ended questions, like "What do you think about ...?" or "What happened next?" Encourage your child with active listening. This means you would do the following things: You would pay close attention. You would refrain from making any judgment. You would say what you think you have heard to be sure you understand what your child has said. You would ask questions, if needed, to clarify anything you feel you missed. And you would summarize what you think you heard and ask your child to do the same.

Reference: starr.org/training/tlc/blog/what-parents-need-know-about-childhood-trauma)

Reference: ccl.org/multimedia/podcast/the-big-6-an-active-listening-skill-set/

Remember that healing is a process.

Supporting caregivers

Caregiver fatigue

Caregiver fatigue or caregiver burnout is a state of physical, emotional and mental exhaustion that may be accompanied by a change in attitude – from positive and caring to negative and unconcerned. Burnout can occur when caregivers don't get the help they need or if they try to do more than they are able – physically, mentally, financially, etc.

It is important for you to stay aware of how you are feeling. Many caregivers feel guilty if they spend time for themselves rather than with their ill or injured children.

Caregivers often are so busy caring for others that they tend to neglect their own emotional, physical and spiritual health. The demands on a caregiver's body, mind and emotions can easily seem overwhelming, leading to fatigue and hopelessness – and, ultimately, burnout.

Doctors also may say the patient has a complete or an incomplete injury:

- **A complete spinal cord injury:** This means that the patient cannot move and has no feeling. It does not always mean that the spinal cord has been cut in two.
- **An incomplete spinal cord injury:** This means that the patient has some movement or feeling. Incomplete injuries may be to the back, front or central part of the spinal cord. With injury to the back part of the spinal cord, the patient may have movement but still be unable to feel that movement. With injury to the front part of the cord, the patient may lose movement but may be able to feel touch and temperature. An incomplete injury may get better in time. It is hard to know when or if full function will return.

Glossary of medical procedures

Craniectomy: Removing part of the skull bone to give the brain more room to swell. This type of surgery also may be done when a clot is removed. The skull bone is replaced when the patient is better (usually several months later).

Craniotomy: Making a surgical incision through the cranium (the part of the skull that encloses the brain); usually performed to relieve pressure around the brain.

Gastrostomy: Surgery to make an opening into the stomach to place a feeding tube. It is often done at the bedside. The feeding tube is usually temporary. The doctor may remove it when the patient is able to eat food.

Jejunostomy: Surgery to make an opening in the small intestine to place a feeding tube. The feeding tube is often temporary. The doctor may remove it when the patient is able to eat food.

Laparotomy: Surgery that opens the abdomen so doctors can examine and treat organs, blood vessels or arteries.

Suction: A procedure to remove secretions from the mouth and lungs. Doctors also use suction to remove fluid during surgery.

Thoracotomy: Surgery to open the chest.

Tracheostomy: Surgery that makes an incision in the throat area just above the windpipe (trachea) to insert a breathing tube. When it is complete, the breathing tube in the mouth will be taken out. This surgery is often done at the bedside. The tracheostomy tube may be removed when the patient can breathe on his or her own and can cough up secretions.

Abdominal injuries

Blunt or penetrating trauma to the abdomen can injure such organs as the liver, spleen, kidney or stomach. The injuries may be:

- Lacerations (cuts)
- Contusions (bruises)
- Ruptures (severe tearing of the tissue)

Bone, ligament and joint injuries

Blunt and penetrating trauma can harm bones, ligaments and joints. Types of fractures or broken bones include:

- **Open or compound fracture:** A broken bone pushes through the skin; it is serious because the wound and the bone may get infected.
- **Closed fracture:** The broken bone does not pierce the skin.
- **Greenstick fracture:** A bone is partly bent and partly broken; occurs most often in children.
- **Spiral fracture:** A break that follows a line like a corkscrew.
- **Transverse fracture:** A break that is at right angles to the long axis of the bone.
- **Comminuted fracture:** A bone that is broken into many pieces.
- **Hairline fracture:** A break that shows on an X-ray as a very thin line that does not extend entirely through the bone; all parts of the bone still line up perfectly.

Amputation

Traumatic amputation is the accidental cutting off of some or all of a body part. Sometimes, a surgeon must discuss with the patient the possibility of amputating a portion of a limb during surgery because of severe damage to a limb that cannot be repaired. The goal of amputation is to remove any unhealthy tissue and create a remaining limb that is less painful and can be more useful to the patient.

- **Complete amputation:** Limb totally detaches from the rest of the body.
- **Partial amputation:** Some tissue still remains attached connecting the limb to the rest of the body.
- **Above knee amputation (AKA):** Procedure performed in surgery to remove the lower leg above the knee joint when that limb has been severely damaged (also called a trans-femoral amputation).
- **Below knee amputation (BKA):** An amputation often performed for severe injury to the foot and ankle (also called trans-tibial amputation).
- **Upper extremity amputation:** An amputation performed because of severe injury to the arm. Can be above elbow (trans-humeral) or below elbow (trans-radial amputation).

Spinal cord injury

Blunt or penetrating trauma can injure the spinal cord. Two main types of injury can occur:

- **Quadriplegia (also called tetraplegia):** Injury to the spinal cord from the first cervical vertebra (C1) to the first thoracic vertebra (T1) level (see section under Anatomy, P. 31). This means the patient has paralysis of (cannot move) the arms and legs. Injury at or above the C4 level affects breathing, and patients often need a ventilator (a breathing machine).
- **Paraplegia:** Injury to the spinal cord from the second thoracic vertebra (T2) to the 12th thoracic vertebra (T12), causing paralysis of both legs and possibly the chest and abdomen.

Symptoms of caregiver burnout are similar to the symptoms of stress and depression, and may include:

- Withdrawal from friends, family and other loved ones
- Loss of interest in activities previously enjoyed
- Feeling blue, irritable, hopeless and helpless
- Changes in appetite, weight or both
- Changes in sleep patterns
- Getting sick more often
- Emotional and physical exhaustion
- Irritability
- Feelings of wanting to hurt yourself or the person for whom you are caring

If you have thoughts of harming yourself or your child, contact a crisis line immediately. The National Suicide Prevention Lifeline has counselors available 24 hours a day, 7 days a week. Call 1-800-273-8255 (toll free).

Ways to avoid caregiver burnout

Here are some steps you can take to help prevent caregiver burnout:

- **Helping your child**
 - Educate yourself about your child's injury to be more effective in how to care for your child.
 - Be realistic about your child's injury and recovery. Recognize when your child needs professional help.
 - Set realistic goals for you and your child. Accept that you may need help with caregiving and ask others for help with some tasks.
- **Helping yourself**
 - Stay as healthy as you can. Try to eat right, exercise and get the sleep you need.
 - Allow other trusted family and friends to stay with your child. This will help to give you a break.
 - Set aside time for yourself, even if it's just an hour or two. Taking care of yourself is not a luxury. Self-care is necessary for caregivers to stay strong.
 - Develop new tools for coping. Remember to lighten up and highlight the positive. Use humor to laugh and help deal with everyday stresses.
 - Stay aware of your feelings. Having negative feelings – such as frustration or anger – about your responsibilities or the person for whom you are caring is normal. It does not mean you are a bad person or a bad caregiver. At the same time, it is important to stay aware of how those feelings can affect your mood and your actions.
 - Find someone you trust. It could be a family member, friend, co-worker or neighbor. Talk to him or her about your feelings and frustrations.
 - Know your limits and be honest with yourself. Recognize and accept your potential for caregiver burnout.
 - Talk to a mental health professional, if needed. This can give you needed support.
 - Join a caregiver support group. Share your feelings and experiences with others in a similar situation. This can help you manage stress, locate helpful resources, and reduce feelings of frustration and isolation.

Reference: my.clevelandclinic.org/health/diseases/9225-caregiving-recognizing-burnout

Part V: Trauma Survivors Network (TSN) and resources

The TSN program at Prisma Health Children’s Hospital–Midlands helps connect children and families to TSN services currently offered both in the hospital and after discharge. These services provide emotional support and resources for recovery and connect you with other trauma survivors or family members of survivors.

TSN services include opportunities to talk with another person who may have had a similar injury or trauma experience (also known as a “peer visitor” or “peer mentor”).

Learn more about the TSN program or access TSN online services at TraumaSurvivorsNetwork.org.

For more information on this and other services offered by Prisma Health’s Trauma Program, email TSN@PrismaHealth.org.



Part VI: Glossaries

Glossary of traumatic injury terms

In this section of the handbook, we describe some of the common types of injuries that people can have. The trauma team can give you specific details about your child’s injuries.

At the end of the book is a place for you to list these injuries.

Injuries may be due to blunt or penetrating forces.

- **Blunt injuries:** These occur when an outside force strikes the body. These injuries may occur as a result of a motor vehicle crash, a fall or an assault.
- **Penetrating injuries:** These occur when an object, such as a bullet or knife, pierces the body.
- **Dual injuries:** Sometimes, patients have both types of injuries.

Head injuries

A traumatic brain injury, sometimes called a TBI, is an injury to the brain because of a blunt or penetrating trauma. There are many types of brain injuries:

- **Cerebral concussion:** Brief loss of consciousness after a blow to the head. A head scan does not show this injury; a mild concussion may produce a brief period of confusion; it is also common to have some loss of memory about the events that caused the injury.
- **Cerebral contusion:** Contusion means bruising, so a cerebral contusion is bruising of the brain; this can occur under a skull fracture. It can also be due to a powerful blow to the head that causes the brain to shift and bounce against the skull.
- **Skull fracture:** Cracks in the bones of the skull caused by blunt or penetrating trauma; the brain or blood vessels also may be injured.
- **Hematomas:** Head injuries and skull fractures may cause tearing and cutting of the blood vessels carrying blood into the brain. This may cause a blood clot to form in or on top of the brain. A blood clot in the brain is referred to as a hematoma. There are several types of hematomas:
 - **Subdural hematoma:** Bleeding that occurs when a vein on the outside of the brain is damaged; a blood clot slowly forms and puts pressure on the outside of the brain.
 - **Epidural hematoma:** Bleeding that occurs when an artery on the outside of the brain is injured; a blood clot can occur quickly and put pressure on the outside of the brain.
 - **Intracerebral hematoma:** Bleeding inside the brain itself; it usually happens when blood vessels rupture deep within the brain.

Chest injuries

Chest injuries may be life-threatening if the lungs are bruised. The goal of early trauma care is to protect breathing and blood flow. Types of chest injuries include:

- **Rib fractures:** The most common type of chest injury; they can be very painful but will usually heal without surgery in three to six weeks.
- **Flail chest:** Two or more ribs are broken in more than two places and the chest wall is not working as it should during breathing.
- **Hemothorax:** Blood pools in the chest cavity, often because of rib fractures.
- **Pneumothorax:** Air collects in the chest cavity because of an injured lung.
- **Hemo-pneumothorax:** Both air and blood collect in the chest cavity.
- **Pulmonary contusion:** Bruising of the lung; if severe, it can be life-threatening because bruised lung tissue does not use oxygen well.