



## Sepsis and Children Fact Sheet

**Overview:** Sepsis is a leading cause of death for children in the U.S., taking more young lives than childhood cancers.<sup>1</sup> More than 18 children die from sepsis each day in the U.S.<sup>1</sup> and many of those lives could be saved with improved public awareness of sepsis symptoms and expanded health provider education.

**Prevention:** The risk of sepsis can be reduced by preventing infections: practicing good hygiene, staying current with vaccinations, using antibiotics as prescribed, and treating open skin wounds.

**Treatment:** Sepsis is a medical emergency that requires urgent attention and rapid treatment for survival. Sepsis can be treated, and in most instances, serious complications avoided and lives saved by using existing protocols.

**Symptoms:** Sepsis symptoms can be different for children compared with adults and include a combination of the following:

- Skin abnormally cold to touch
- Bluish or very pale skin
- Fever
- Rash that does not fade when pressed on
- Very fast or rapid breathing
- Seizures
- Lethargy or difficulty waking up
- Drop in or no urine output

Additionally, for infants, symptoms may include:

- Not drinking or feeding
- Repeated vomiting
- Dry diaper

If you **suspect sepsis** (you observe two or more of these symptoms), particularly if there has been a recent illness or injury, contact/see your medical professional immediately, CALL 911, or take your child to a hospital and say, "**I AM CONCERNED ABOUT SEPSIS.**"

### **Global Burden of Sepsis in Children**

- Sepsis affects more than 25 million children every year, representing over half of all sepsis cases worldwide.<sup>2</sup>
- More than 80% of all pediatric sepsis cases and 40% of all sepsis cases occur in children under age 5 years (20.3 million cases).<sup>2</sup>
- Globally, sepsis is the leading cause of death of children, taking nearly 3.4 million lives each year.<sup>2,3</sup> Approximately 85% of pediatric sepsis deaths occur in children under age 5.<sup>2</sup>

### **Critical Facts**

- Every day, more than 200 children are diagnosed with severe sepsis. This is more than 75,000 cases in the U.S. per year.<sup>1</sup>
- Mortality rates are high: each year, as many as 9% of children hospitalized with sepsis die (6,800 children or more than 18 on an average day).<sup>1</sup> That is more children than are lost to childhood cancers.<sup>4</sup>

- More than 68% of children admitted to the hospital for sepsis have one or more chronic illnesses.<sup>5</sup>
- As many as 8% of pediatric sepsis cases may be missed during emergency department visits.<sup>6</sup>

### **Life After Sepsis**

- Survival from sepsis can be very challenging, with many children requiring amputations.<sup>7</sup> Many more experience a decrease in cognitive and physical function, with 34% of pediatric sepsis survivors (more than 1 in 3) still showing a decline in their functional status at 28 days after hospital discharge.<sup>8</sup>
- Among pediatric sepsis survivors, almost one-third (31%) are discharged from the hospital with some disability, including cognitive or physical impairments, skin graft, amputation, or hearing loss.<sup>9</sup>
- More than 20% of child sepsis survivors are readmitted to the hospital within three months of the initial hospitalization.<sup>5</sup>
- More than half of the readmissions among children who were hospitalized for sepsis are related to recurring sepsis or infection.<sup>5</sup>
- Among children who survive hospitalization for sepsis, nearly one-quarter experience a decrease in health-related quality of life. More than half of children surviving septic shock fail to return to their previous quality of life.<sup>10</sup>
- Immunocompromised children and children who require longer hospital stays are less likely to return to their previous quality of life after hospitalization than other children hospitalized for sepsis.<sup>10</sup>

### **Economic Cost**

- Caring for children with sepsis in hospitals is expensive and is estimated at \$7.3 billion each year, accounting for 18% of all pediatric hospitalization costs.<sup>11</sup>
- The median cost of acute care per sepsis hospitalization (\$26,592) is nearly 12 times the median cost per hospitalization for other conditions in the U.S.<sup>11</sup>
- The cost of hospitalizing children for sepsis increased almost 25% between 2005 and 2016, after adjusting for inflation.<sup>11</sup>
- The average cost of a readmission after a sepsis hospitalization for a child is \$7,385, which is 27% more than a non-sepsis readmission.<sup>12</sup>
- The average length of stay for sepsis patients is 31.5 days,<sup>1</sup> which is nearly 8 times longer than the average stay for other childhood conditions.<sup>13</sup>

## Socioeconomic Impact

- Preterm infants who are black are more than twice as likely to develop sepsis and are more likely to die than non-black infants.<sup>14</sup>
- Infants from lower income families are 20% more likely to die from sepsis.<sup>15</sup>
- Infants from families without health insurance are 3 times more likely to die from sepsis.<sup>15</sup>
- Children with severe sepsis or septic shock with public insurance are more likely to die than children with private or other types of insurance.<sup>16</sup>
- Children with severe sepsis or septic shock who are black or Hispanic are more likely to die than non-Hispanic white children.<sup>16</sup>

To find out more please visit [sepsis.org/sepsisand/children](https://sepsis.org/sepsisand/children)

## Sources

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