Health Trends

September 2024

Sepsis Awareness Month

Since 2011 the Sepsis Alliance has designated **September** as Sepsis Awareness Month. The main message from the Sepsis Alliance is **Infection Prevention is Sepsis Prevention**![™] (5).

Sepsis Alliance Awareness Month Information https://www.sepsis.org/get-involved/sepsis-awareness-month/

What is Sepsis?

Sepsis is a life-threatening emergency response by the body due to infection entering the blood stream. Sepsis can cause damage to the major organs of the body and lead to death if not caught in time (5).

In the U.S. over 1.7 million people, or 350,000 adults, dye from sepsis each year. In U.S. hospitals sepsis is the leading cause of death (5).



Risk of Sepsis

Anyone with an infection is at risk for developing sepsis. Individuals with weakened immune systems, the very young, and older adults are at highest risk for sepsis (1).

Signs and Symptoms

An individual with sepsis might experience one or more of the following signs and symptoms:

- Clammy or sweaty skin.
- Confusion or disorientation.
- Extreme pain or discomfort.
- Fever, shivering or feeling very cold.
- High heart rate or weak pulse.
- Shortness of breath.

Causes of Sepsis

Any type of infection, especially untreated infections, can lead to sepsis. Bacterial infections are the most common types of infections associated with sepsis, but fungal infections and viral infections, such as influenza and COVID-19 can also develop into sepsis (1).

Why is TIME so Important?

80% of deaths from sepsis could be avoided with immediate diagnosis and treatment. The risk of death increases by 4% - 9% every hour treatment is prolonged (5).



Sepsis and Individuals with Intellectual and Developmental Disability (IDD)

- Sepsis has been identified as the three most common cause of death in the DD population (2).
- Due to reduced immune response individuals diagnosed with a genetically linked developmental disorders, such as Down's syndrome, DiGeorge syndrome and/or Trisomy 21, are at an increased risk for developing infections and sepsis (3).
- Individuals with IDD may need assistance to understand ways of preventing the spread of infection, such handwashing or practicing good overall hygiene (4).
- Caregivers should encourage regular daily hygiene practices, help individuals attend all physician appointments, report any physical or mental changes immediately, make sure individuals receive all recommended vaccinations, along with recognizing and diagnosing infection quickly to lower the in risk of developing sepsis (5).
- Communication limitations may prevent individuals from expressing early symptoms therefore they should be monitored closely for changes in their physical or mental health (1).

Please direct any questions or concerns regarding the Office of Integrated Health Supports Network "Health Trends" newsletter to <u>communitynursing@dbhds.virginia.gov</u>

References:

- 1. Centers for Disease Control and Prevention (CDC). (2024, March). About sepsis. National Center for Emerging and Zoonotic Infectious Diseases (NCEZID)
- 2. Grant, N., Hewitt, O., Ash, K., & Knott, F. (2022). The experiences of sepsis in people with a learning disability—a qualitative investigation. British Journal of Learning Disabilities, 50(4), 514–524
- Huggard, D., McGrane, F., Lagan, N., Roche, E., Balfe, J., Leahy, T.R., Franklin, O., Moreno, A., Melo, A.M., Doherty, D.G., & Molloy, E.J. (2018). Altered endotoxin responsiveness in healthy children with Down syndrome. BMC Immunology. 19(31). 1-10
 Mills, W. R., Sender, S., Lichtefeld, J., Romano, N., Reynolds, K., Price, M., Phipps, J., White, L., Howard, S., Poltavski, D. & Barnes, R. (2020, July). Supporting individuals with intellectual and developmental disability during the first 100 days of the COVID-19
- outbreak in the USA. Journal of Intellectual Disability Research, 64(7), 489–496. 5. Sepsis Alliance. (2024, August). Sepsis awareness month toolkit.

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ABA Snippets ...

Shaping up your Health: Part 2

In last month's ABA snippet, a fictional example demonstrated how shaping could be used to improve a person's fitness. Shaping is an empirically validated procedure that can help a person make gradual changes towards an achievable goal (1, 2). To give a clinical case example of shaping improving one's wellbeing, another fictional narrative is provided below.

<u>Lily Learns to Wear a Mask</u>

Lily is a 25-year-old female whose most cherished activity is shopping at favorite stores in the community. At the onset of the COVID-19 pandemic, there were limitations on the outings we all could participate in due to mandated health and safety guidelines. Lily was intolerant to wearing a mask, which limited her ability to enter certain community locations and negatively impacted her quality of life.

Lily met with her behaviorist to discuss a health and safety goal targeting mask wearing. A shaping procedure was agreed upon to gradually extend the time Lily could wear a mask, with the goal of being able to wear a mask throughout a typical shopping experience. A visual incorporating the "baby steps", or approximations, towards mask wearing for longer periods of time was implemented. Lily was motivated to go to preferred stores in the community, and diligently checked off each step she met on the visual as she practiced mask wearing at home and on shorter outings.

Figure 1 illustrates the beginning approximations of the intervention. As Lily made progress, the next step would be targeted (shown in shaded regions). Gradual changes to duration continued as previous steps were achieved. Like climbing a staircase, Lily was able to meet her goal of wearing a mask in the community during a longer shopping experience. The procedure helped Lily access places important to her in an ever-changing world.

changes to duration continues Wearing mask Wearing mask for 10 sec. for 10 sec. Holding mask Holding mask Holding mask to to mouth for 1 to mouth for 1 mouth for 1 sec sec. sec. Picking up Picking up Picking up Picking up mas mask mask mask irst day of training Tim Fig. 1 Table was adapted from Cooper, J.O., Heron, T.E., & Heward, W.L. (2020)

You may contact DBHDS about these efforts via the following: john.tolson@dbhds.virginia.gov

References:

Cooper, J.O., Heron, T.E., & Heward, W.L. (2020). Shaping. In Cooper, J.O. Heron, T.E., & Heward, W.L., (Eds.), Applied behavior analysis (3rd ed., pp. 540-555). Hoboken, New Jersey: Pearson.
 Martin, G. & Pear, J. J. (2007). Getting a new behavior to occur: An application of shaping. In Martin, G. & Pear, J.J., (Eds.), Behavior modification: What is and how to do it (8th ed., pp. 125-133). Upper Saddle River, New Jersey: Pearson Education, Inc..

September is National Food Safety Education Month

This month take an active role in preventing foodborne illness, also known as "food poisoning."

The Federal government estimates there are about 48 million cases of foodborne illness annually – that's about 1 in 6 Americans each year.

Following simple food safety tips can help lower your chance of getting sick.

Remember these 4 steps to handle food safely.

- 1. Clean
- 2. Separate
- 3. Cook
- 4. Chill your food!







Gradual