

Antibiotic Resistant Infections



Antibiotic-resistant infections are a growing public health concern. The CDC estimates 23,000 people die each year due to antibiotic resistant infections (4). Antibiotic-resistant infections occur due to bacteria, viruses, fungi and parasites, which develop the ability to resist the drugs designed to destroy them. When this occurs, antibiotics become less effective and infections become tougher to treat, which can lead to extended hospital stays, multiple clinician visits, severe illness and death (2) (5). The following are the most common antimicrobial resistant organisms (1).

Clostridium Difficile (C. difficile)

C. difficile is a microorganism, which infects the colon, and typically follows antibiotic treatment. Common bacteria living in the gut usually prevent C. difficile infections from occurring, but antibiotic treatment can change the environment of the gut, allowing the bacteria to grow. The spreading bacteria causes inflammation in the colon, which may lead to severe diarrhea and dehydration (1). Individuals with diarrhea, which lasts more than a few days should be checked for C. difficile infection.

Methicillin-Resistant Staphylococcus Aureus (MRSA)

MRSA is one of the most common hospital-acquired infections (1). MRSA can cause staph infections that are difficult to treat due to antibiotic resistance (3).

Vancomycin-Resistant Enterococci (VRE)

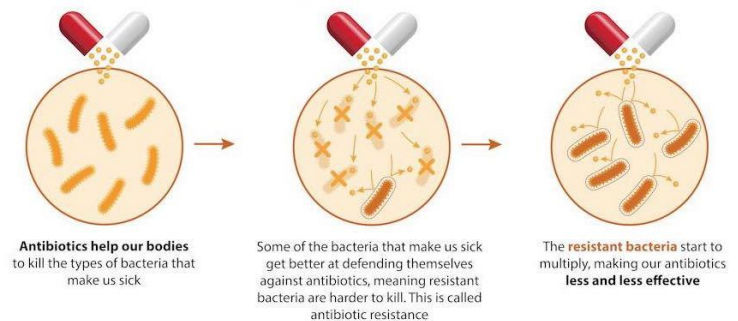
VRE infections occur most often in people who experience extended stays in health care facilities. Existing infections weaken the person's immune system and those who require the use of catheters or other medical devices, often become highly susceptible to acquiring the resistant organism (1).

App of the month



WHO Info-World Health Organization. Have the latest health information at your fingertips with the official World Health Organization Information App. This app displays the latest news, events, features and breaking updates on outbreaks. (App of the Month is not endorsed by DBHDS Office of Integrated Health. User accepts full responsibility for utilization of app).

How antibiotic resistance develops



Individuals at highest risk for an antibiotic resistant infection are those who...

- Reside in long-term healthcare settings.
- Have a history of a prolonged hospital stay in the Intensive Care Unit (ICU).
- Use medical devices (catheters, breathing machines, etc.) (3).
- Have a history of antibiotic resistant infections.
- Are 65 and older, medically frail, or have a weakened immune system (3).

Caregiver recommendations should be focused on general infection control measures:

- Wash hands with soap and water or use alcohol-based hand sanitizer, especially before and after caring for wounds or touching medical devices. Keeping hands clean prevents the spread of germs that can cause infections.
- Environmental cleaning (e.g., cleaning of the individual's rooms daily and shared bathrooms after each use). Clean high touch surface areas after each use in common areas.
- Wear appropriate PPE when cleaning the environment and providing direct care to the infected individual (e.g., disposable gloves and gowns) and dispose of PPE before exiting the individual's room.
- Medical equipment and personal items should not be shared.
- Individuals who have an infection should be placed in a private room to prevent exposure to others.

References

- 1) National Institutes of Health (NIH) (2018, January) National Library of Medicine, Leading Antimicrobial Drug-Resistant Diseases <https://magazine.medlineplus.gov/article/leading-antimicrobial-drug-resistant-diseases>
- 2) The Center for Disease Control and Prevention (CDC) (2020, March) Antibiotic / Antimicrobial Resistance (AR / AMR) About Antibiotic Resistance <https://www.cdc.gov/drugresistance/about.html>
- 3) The Center for Disease Control and Prevention (CDC) (2021, March) Antibiotic / Antimicrobial Resistance (AR / AMR) Biggest Threats and Data <https://www.cdc.gov/drugresistance/biggest-threats.html>
- 4) Thorpe, K. E., Joski, P., & Johnston, K. J. (2018). Antibiotic-resistant infection treatment costs have doubled since 2002, now exceeding \$2 billion annually. Health Affairs, 37(4), 662-669.
- 5) World Health Organization (WHO) (2020, October) Antimicrobial Resistance <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance>



ABA Snippets ...

Trauma Informed Care in Behavioral Services

A trauma informed care approach can be explained as a recognition among service providers of the possibility for symptoms caused by trauma within persons served, and as such, an overall commitment is taken by providers toward reducing the likelihood for the individual to experience another trauma during treatment (2). Although empirical literature on the effectiveness of trauma informed care practices in behavior analysis is lacking, the necessity of such an approach has been emphasized by, and should be logical to, the behavioral community. The Center on Positive Behavior Supports and Interventions (PBIS) has provided practice guidelines on integrating a trauma informed approach within a PBIS framework in educational settings, which can be applied on an individual behavior support plan (BSP) level in non-educational settings: predictable, safe, and positive environments promote healing and the achievement of new skills (1). Based on this framework, the following steps are recommended whenever possible:

- In the initial functional behavior assessment (FBA), behaviorists should pay close attention to details about a person's physical and psychiatric conditions, medication regimens, aspects of the individual's environment, and educational history.
- During assessment, behaviorists should consider trauma history, and when appropriate ask follow-up questions to learn more about experiences, which may affect the person's behavior.
- If such information is gathered during the FBA process, it should be added into the body of the BSP via individualized interventions designed for the needs of the individual.
- Persons supporting the individual should be made aware of traumatic experiences the individual has encountered. Such information should also be outlined in trainings presented as a part of ongoing psycho-education for primary caregivers.
- Possible proactive trauma informed approaches, which could be included within BSP's:
 - Build in as much opportunity for choice within BSP's.
 - Providing numerous opportunities to contact reinforcements on a non-contingent basis.
 - Incorporating teaching strategies for replacement behaviors.
 - Utilizing strategies, which do not duplicate a known traumatic experience (including in crises or within safety-related strategies).
 - Incorporating precursor modification tactics to reduce the presence of discriminative stimuli in the environment, which are associated with traumatic experiences.
 - Providing freedom to meet experiences, which are positive and valued to the person without strings, attached.
 - Train staff to work as a partner, and not an authority figure.
 - Train staff to be aware of the known "triggers" surround traumatic events and the known trauma history.
 - Provide information on how staff can build rapport with an individual.
 - Proactively plan for therapeutic safety and crisis interventions, which are as non-restrictive and non-aversive as possible.
 - Include information about the known traumatic experiences in the content of the plan.
 - Tailor interventions, which are mindful of previous traumatic experiences.
 - Treat individuals with the utmost respect and dignity.

References:

- (1) Eber, L, Barrett, S., Scheel, N., Flammini, A. & Pohlman, K. Integrating a trauma-informed approach within a PBIS framework. Center on PBIS. Retrieved from: <https://www.pbis.org/resource/integrating-a-trauma-informed-approach-within-a-pbis-framework>
- (2) Keesler, J.M. (2014). Trauma through the lens of service coordinators: exploring their awareness of adverse life events among adults with intellectual disabilities. *Advances in Mental Health and Intellectual Disabilities*, 8(3), 151-164.

What does a WC-19 Transport Safe Label on a Wheelchair Mean?

A WC-19 Transfer Safe label on a wheelchair means the manufacturer has designed the wheelchair to be: 1) "tied down" and used as a seat in a vehicle; and 2) it has passed a standardized crash or sled test with little or no structural damage. If you are unsure if your wheelchair meets this standard, check with the manufacturer of your wheelchair to see how it performed in testing. You can check to see if your wheelchair is safe to be used in a vehicle and is WC-19 compliant [here](#). A checklist of criteria for compliance with WC19 can be found [here](#).



Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) (2012). Checklist of criteria for compliance. RESNA WC-4:2012, Section 19 (WC19) https://docs.google.com/document/d/1E5mSUKFe7Ji_61Dm3IMbW7GxiSuGsk2Z4TGGOOeNaLQ/edit