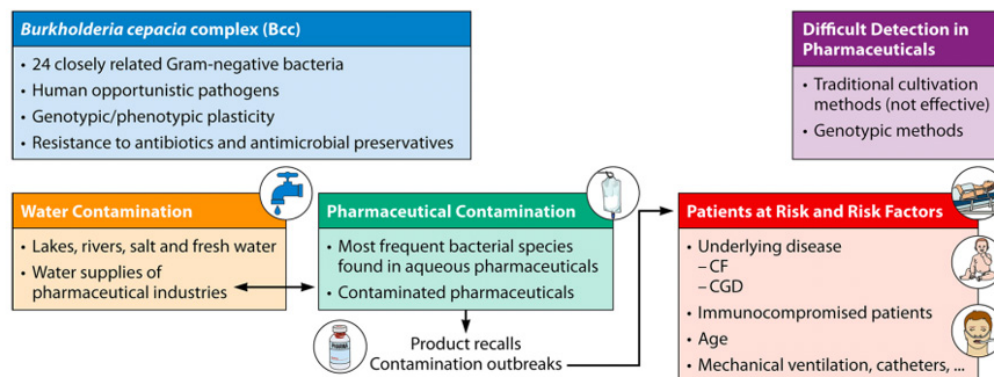


Burkholderia Cepacia Complex

Burkholderia cepacia complex (Bcc) is a group of 24 types of bacteria that have the capability to cause human infection. Within Bcc, Burkholderia multiformans (formerly Psuedomonas cepacia) has been associated with outbreaks of human infection. These Bcc bacteria are Gram-negative (similar to E. coli) and are commonly found in water and soil. They are able to live in these settings for several months and are very difficult to kill. Bcc bacteria rarely cause infections and the most common type of infection is pneumonia and lung infections although there are reports of other severe infections such as meningitis. Of note, Bcc bacterial infections are mostly in patients with cystic fibrosis and those with a weakened immune system.

Another unique aspect of Bcc bacteria is their resistance to many antibiotics and their ability to adapt its resistance quickly. Because of this quick adaption, Bcc bacteria have a wide variety of susceptibility to antibiotics so some may be sensitive to antibiotics that others are resistant to. In fact, these bacteria are resistant to most medications available in the outpatient setting and often require intravenous antibiotics. All of this makes Bcc bacteria very difficult to treat when they cause infection.

There have been many documented outbreaks of Bcc infections. Most have been associated with contaminated medical products (gloves, wipes, etc) and even medication solutions (nasal spray, mouthwash) although person-to-person outbreaks have occurred. Bcc bacteria are resistant to many of the preservatives and antiseptics in medical product preparations so if contaminated, they can be spread.



Treatment Options

Bactrim (sulfamethoxazole/trimethoprim)	Carbapenems* (meropenem and doripenem)
Tetracyclines** (doxycycline and minocycline)	Some cephalosporins* (ceftazidime)

*IV only. **Resistance variable

General Recommendations

- Assign someone in your facility to keep up with outbreak trends and product recalls
- Practice good hand hygiene and proper technique when handling patient catheters
- Pay special attention to those most susceptible to opportunistic infections
- Engage with infection control professionals at local and state levels

References

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