

How to prevent central line associated bacteraemia (CLAB)

Many patients with COVID-19 being treated in hospitals will need central lines (aka central venous catheters) inserted.

A central line is any bloodstream catheter that terminates in a great vessel (includes the subclavian vein). They may be either centrally or peripherally inserted.

Central lines are used to give intravenous fluids, blood and other medicines as well as for taking blood samples. Many intubated patients have routine indications for central venous and arterial access for monitoring and for vasoactive drug infusion.

Patients with COVID-19 who have central lines are at risk of developing a central line associated bacteraemia (CLAB). A CLAB is defined as a significant bloodstream infection that occurs in a patient who has a central line in place OR in a patient who has had a central line removed within 48 hours with no other apparent focus on infection.

Bundles for central lines

The majority of CLAB infections are preventable through the use of **evidence-based insertion and maintenance bundles**, interventions that, when implemented **together**, result in better outcomes than when implemented individually.

Insertion bundle

Always implement the following key components when **inserting** a central line:

- Optimal catheter site selection, avoiding the femoral vein
- Hand hygiene
- Maximal barrier precautions
- Chlorhexidine skin antisepsis

Maintenance bundle

Always implement the following key components when **maintaining** a central line:

- Daily review of the necessity for the line, with prompt removal of unnecessary lines
- Hand hygiene
- Daily site check
- Chlorhexidine prior to each access
- Dedicated port for TPN (feeding tube)

More information

See the Health Quality & Safety Commission website for:

- [CLAB project webpage](#)
- downloadable [poster](#) showing insertion and maintenance bundles.