Anesthesia
IV Consumables

Infusion technology designed to help provide safe and efficient delivery of anesthetic medications

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Helping to enhance the

Safety and Efficiency

of IV anesthetic administration

When it comes to anesthesia delivery, every detail matters. That's why we've designed specialty products to help reduce the risk of anesthesiology-related infections while helping address inefficiencies in intraoperative environments.

From the infection control properties of our clinically preferred Clave™ needlefree connectors to procedure-ready sets that let you streamline the delivery of care, we give you access to the clinically preferred products you need to help safely and efficiently deliver anesthesia medications to your patients.

Warning: Clave connectors may be incompatible with some male-luer connectors including prefilled glass syringes. To avoid damage to the Clave or syringes or male luers which may result in delays of medication administration and possible serious adverse events, users should confirm mating luers or syringes have an internal diameter range of 0.062" to 0.110". Check the internal diameter of the male-luer connector of the mating syringe prior to using it to access the Clave. Products outside of these dimensional tolerances should not be used.

Minimize Bacterial Transfer

Enhance Setup Efficiency

Standardize Supply Chain

High levels of contamination in the anesthesia work environment point to the need for enhanced infection control technology

The administration of intravenous (IV) fluids is essential in anesthesia, but your typical OR can be crowded and cluttered with equipment that may not be sterile.

Due to the necessity of frequent contact with sources of bacterial transfer, there's a high probability of patient contamination during anesthesia administration.

Contamination of the anesthesia work area can occur in as little as 4 minutes.[2]

- The horizontal transmission of bacterial organisms continues to maintain a high nosocomial infection rate in acute care settings, impacting 10% of patients admitted.

Anesthesia hand hygiene compliance failure rates are as high as 82%.[4,5]

- Inconsistent cleaning of IV medication ports, as well as manipulation of ports with contaminated gloves, represents significant transmission risk.
- Studies have shown that poor hand hygiene is commonly associated in intraoperative contamination of peripheral intravascular devices.

32% of open IV stopcock sets become contaminated in the OR.[2]

25% of patients with contaminated stopcocks develop infections.[2]

Four of the most contaminated surfaces in the OR are the anesthesia keyboard and mouse, the drawers to the anesthesia card, and the OR bed.[3,5]

"Hospitals standardized on Clave technology achieved 19% fewer CLABSIs than hospitals not using Clave"[1]

"**Closed catheter access systems** are associated with **fewer CRBSIs** than open systems and should be **used preferentially.**"[10]

Help minimize infection risks by incorporating closed, self-sealing components featuring clinically preferred Clave IV connector technology

While IV therapy is essential to patient care, accessing your patient's bloodstream may increase the risk of infection. As a result, the design of needlefree stopcocks and manifolds can be an important part in your efforts to help minimize contamination and the risk of bloodstream infection.

ICU Medical's full line of needlefree stopcocks and manifolds feature clinically preferred Clave infection control technology, designed to help minimize the risk of contamination by maintaining a closed system. These access ports are ideal for anesthesiology where simultaneous fluid delivery is critical.

NanoClave™ Manifolds

Optimize fluid delivery and eliminate integrated fluid flow with gravity-activated backcheck valve security.

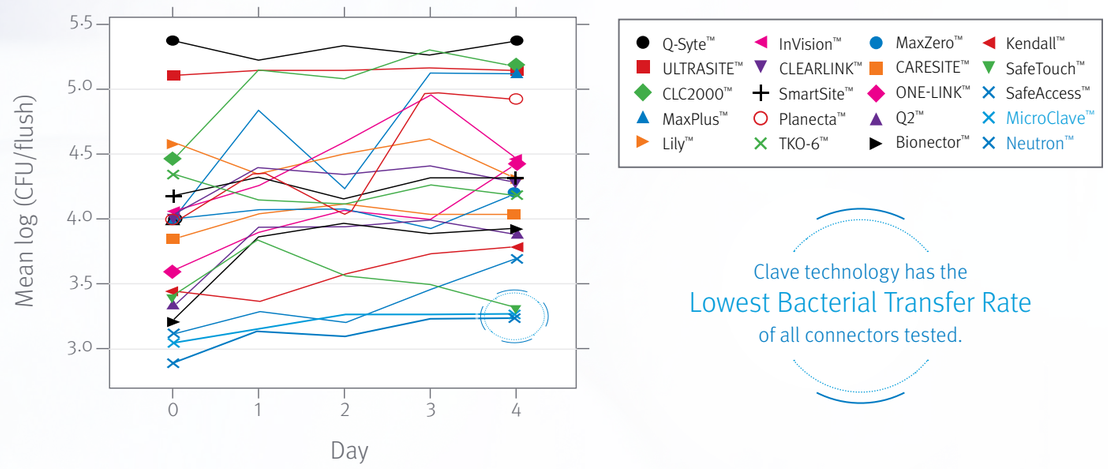
NanoClave™ Stopcocks

Maintain a needlefree, closed system with automatically self-sealing connector technology.

Clave technology has been proven to minimize bacterial transfer and colonization[6,7,8,9]

In a peer-reviewed comprehensive study comparing 20 different needlefree IV connectors, researchers reported ICU Medical's connectors featuring Clave technology were "shown to have a significantly lower bacterial transfer rate than any of the other connectors tested."[6]

Bacterial transfer rate comparison of needlefree connectors



Clave technology has the **Lowest Bacterial Transfer Rate** of all connectors tested.

Choose from a broad portfolio of anesthesia IV sets with integrated Clave technology

Access a wide selection of off-the-shelf sets with the adaptability to be customized to your unique facility protocols and procedures.

Extension Sets

Optimize fluid delivery with procedure-ready extension sets featuring a range of needlefree connector and component options.

Administration Sets

Help enhance safety and efficiency with IV sets tailored to your protocols, including needlefree connector stopcocks, manifolds, and pre-attached and breakaway extension sets.

Blood Sets

Maintain a closed system throughout the administration of blood products with sets that include hand pumps and add-on extension sets for blood warming.

Silicone Seal and Internal Cannula Minimize Point of Entry for Bacteria

Specifically designed to minimize contact between the connector's external surface and the internal fluid path upon luer activation, Clave needlefree IV connectors minimize entry points for bacteria. Several studies have attributed this feature to a significant reduction in bacterial contamination passed through the connector.[6,7,8,9]

Split Septum

Clave's normally closed, swabbable split-septum design is a preferred feature for needlefree connectors.[11]

Straight Fluid Path

Clave's straight fluid path allows for efficient cleaning of medications, blood, and blood residual with low flush volumes.[12,13]

Minimal Priming Volume

Clave connector's minimal priming volume allows for lower flush volumes.

Clear Housing

A clear housing lets you see whether you have completely flushed the connector after blood draws or administration.

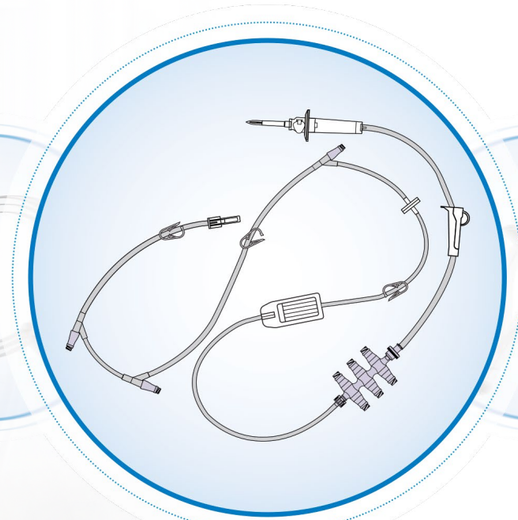
Help enhance quality of care by addressing inefficiencies in intraoperative IV fluid and drug administration

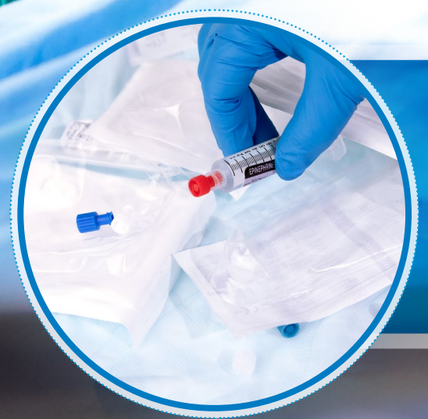
Assembling multiple IV sets and components for anesthesia delivery is not only complex—it requires extra manipulation, wastes time, and may lead to delays in care or an increased risk of contamination. ICU Medical's procedure-ready IV sets for anesthesia are designed to let you standardize processes and minimize setup time.

- Studies have shown anesthesiologists spend 22%–29% of their time manipulating IV components.[14]
- Traditional anesthesia delivery methods require the assembly of multiple IV sets and components, which may increase packaging waste and clutter.

Optimize your anesthesia IV sets

Avoid ordering multiple components by choosing from our broad portfolio of procedure-ready sets designed to meet your clinical need. When you consolidate inventory of different set SKUs, you free up shelf space, save valuable time spent searching for the set you need, avoid the burdensome assembly of multiple components at the bedside, and reduce packaging waste and clutter.





"Anesthesia workspaces were observed to become cluttered with unwanted sterile packaging, occasionally obscuring a clear view of more critical items like drug syringes or airway supplies."

– Fraind et al.[14]

Standardize on a single supplier for your infusion consumables

With ICU Medical, there's no need to settle for second best when it comes to IV consumables. We give you access to our full portfolio of components and broadest offering of off-the-shelf IV sets tailored to a range of clinical needs. And as a full-line IV therapy provider, we help further optimize your supply chain by standardizing on a single supplier across your dedicated and nondedicated IV sets.

Scan the QR code to learn more about IV Set Essentials

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14. Fraind D, Slagle J. Tubbesing V, Hughes S., Weinger M. Reengineering IV drug and fluid administration processes in the OR. Anesthesiology 2002;97: 139-147.

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