

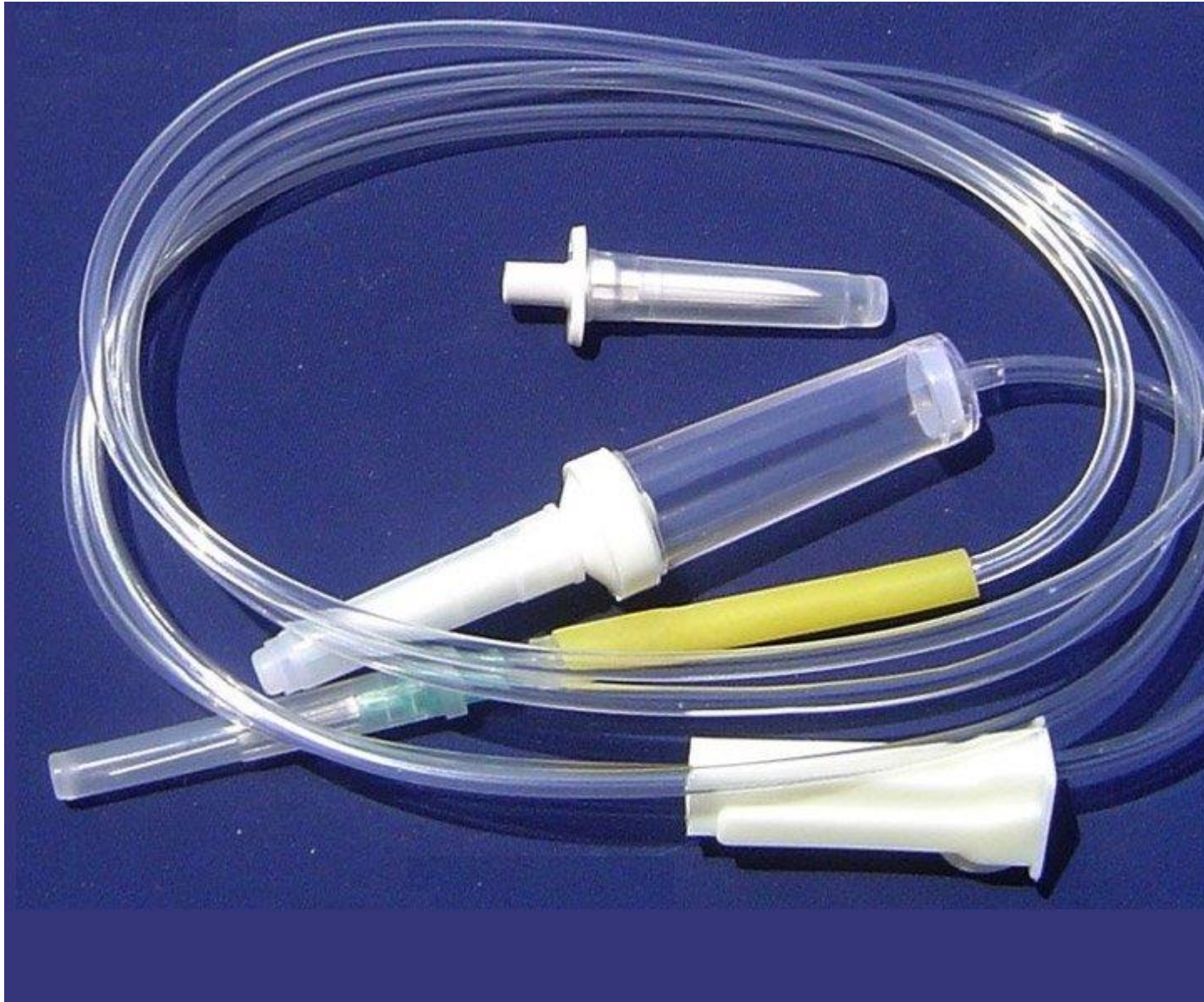
# Salient Features of an IV Infusion Set

BY [MEDIKABAZAAR](#) · PUBLISHED MAY 26, 2018 · UPDATED FEBRUARY 26, 2020

[Medical devices](#) play a significant role in the diagnosis, treatment, and monitoring of several medical conditions. [Hospital equipment](#) is meticulously designed to maintain rigorous safety standards to ensure the utmost well-being of patients. The equipment is divided into the following types, and each is designed for a specific purpose.

- Diagnostic
- Life-support
- Treatment
- Medical monitors
- Medical laboratory
- Therapeutic

Medical treatment equipment includes standard IV infusion sets, medical lasers, infusion pumps and Lasik surgical machines. However, the standard [IV infusion set](#) is the most commonly used equipment across most applications due to its cost-effectiveness and the ease of setting up.



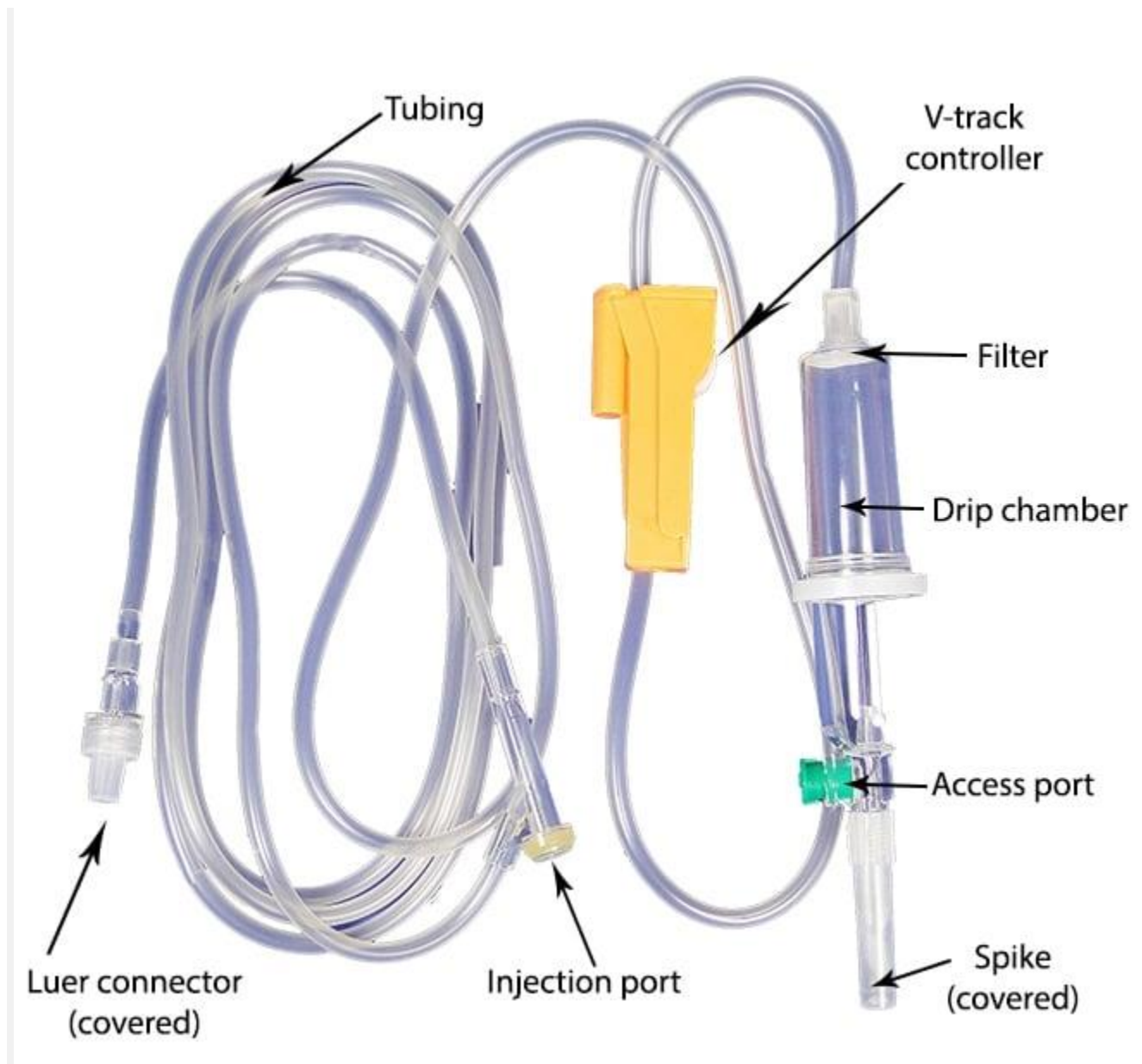
## What is an IV infusion set?

It is an infusion set that is used to administer intravenous therapy, wherein a liquid substance is delivered directly into the patients' vein. It provides medical personnel with a brisk and effective means to deliver fluids and medication during medical conditions such as dehydration, electrolyte imbalances, specialized medication delivery, or for blood transfusions. However, the type of administration depends upon the rate and type of infusion, and the kind of solution container used. An [IV infusion set](#) should always be tailored to the patient and the planned treatment procedure.

Most infusion sets are made up of PVC material to ensure high strength, ease of sealing, resistance to sterilization procedures, and are relatively more economical. Based on the purpose of usage, the IV infusion set is divided into two types:

- **Microdrip set:** This infusion set is used for pediatric patients and specific adult patients who require a small, closely-regulated dose of IV solution as it delivers a small quantity with each drop.
- **Macro drip set:** This set infuses large quantities of IV solution at rapid rates as it delivers a large quantity with each drop.

### **Basic Components of an IV infusion set:**



*Basic Components of an IV infusion set*

IV infusion sets are divided into two main categories based on the fluid type. One is for transferring blood and the other for giving non-blood products such as saline. There are multiple variations of these two core types. But, the basic components of an IV infusion set that remain constant across all its variations are:

- Long sterile tube
- Connector
- Drip chamber

- V-track controller
- Spike

The spike is punctured/ fitted into a sterile bottle containing a pre-filled IV solution. The drip chamber allows the fluid to flow one drop at a time and makes it easy to see the flow rate. The long sterile tube with a V-track controller helps control the flow rate. The IV set has a connector that can be attached to the access device. The Y-sets, T-sets, and V-sets are differently shaped three-way connectors that allow an additional infusion set to be connected onto the same line for delivery of antibiotics or other continuous fluid drips.

IV infusion sets are an integral part of intravenous therapy, which is one of the most commonly used treatment alternatives for various health conditions.