

Top 25 IV Therapy Complications & Adverse Reactions

A quick-reference guide for IV therapy clinics covering the most common complications, their signs and symptoms, risk factors, and recommended responses. Use this worksheet to train staff, build emergency protocols, and ensure patient safety during intravenous infusions.

RANK	CODE / DESCRIPTION
1	Infiltration IV fluid leaks into surrounding tissue causing swelling, coolness, and pain at the site
2	Extravasation Vesicant or irritant solution leaks into tissue, risking necrosis and permanent damage
3	Phlebitis Vein inflammation presenting as redness, warmth, tenderness, and a palpable cord
4	Thrombophlebitis Blood clot formation combined with vein inflammation, causing pain and swelling
5	Air Embolism Air enters the bloodstream via IV line, potentially causing chest pain and dyspnoea
6	Fluid Overload Excess IV fluid causes pulmonary oedema, hypertension, and respiratory distress
7	Catheter Embolism Fragment of catheter breaks off and enters the bloodstream requiring urgent retrieval
8	Speed Shock Rapid infusion causes systemic reaction including cardiac arrest and loss of consciousness
9	Allergic Reaction Hypersensitivity to infused solution causing urticaria, bronchospasm, or anaphylaxis
10	Anaphylaxis Severe systemic allergic response requiring immediate adrenaline and emergency care
11	Haematoma Blood collects outside the vein at the puncture site causing bruising and swelling

RANK	CODE / DESCRIPTION
13	Vasovagal Response Fainting or near-fainting triggered by needle insertion or anxiety during IV therapy
14	Local Infection Bacterial contamination at the insertion site causing redness, warmth, and purulent drainage
15	Bloodstream Infection Catheter-related bloodstream infection (CRBSI) presenting with fever and sepsis signs
16	Venous Spasm Sudden vein constriction causing pain and slowed infusion, often from cold solutions
17	Electrolyte Imbalance IV fluids alter sodium, potassium, or magnesium levels causing arrhythmias or confusion
18	Hypoglycaemia Abrupt discontinuation of dextrose-containing IV fluids causes dangerous blood sugar drop
19	Hypothermia Rapid infusion of cold IV fluids lowers core body temperature below safe levels
20	Pulmonary Oedema Fluid accumulates in the lungs due to excessive IV fluid administration
21	Tissue Necrosis Cell death from extravasated vesicant agents requiring surgical debridement
22	Compartment Syndrome Infiltrated fluid increases pressure in a fascial compartment, threatening limb viability
23	Sepsis Systemic inflammatory response to IV-related infection requiring immediate intervention
24	Catheter Occlusion IV catheter becomes blocked by fibrin, precipitate, or mechanical kinking

RANK

CODE / DESCRIPTION

25**Hypervolaemia**

Excessive intravascular volume from over-infusion causing cardiac strain and oedema