

PERIPHERAL INTRAVENOUS (P.I.V.) CATHETER MAINTENANCE

Peripheral Intravenous (P.I.V.) Catheter

Assess daily whether the P.I.V. is needed, replacing as clinically indicated based on assessment and need.



Hand hygiene **must** be performed prior to assessing insertion site, before handling I.V. tubing, insertion caps, etc., and after assessment is complete.

P.I.V. Insertion Site

Inspect the insertion site every 4 hours

- Pain: If P.I.V. is causing pain, stop infusion and report findings immediately
- Infiltration, Phlebitis, Extravasation? Stop infusion and report findings immediately

Finding	Infiltration	Phlebitis	Extravasation
Potential Cause	Leakage of solution or medication into the extravascular tissue	Inflammation of a vein	Infusion into tissues
Symptoms	Pain, skin blanched/tight, edema	Pain, edema, red streak along vein, drainage	Pain, skin blanched/tight

Injection Caps

- Clean injection hubs with 70% alcohol or alcohol-based chlorhexidine gluconate swab pads with every port access following manufacturer's instructions for use
 - Caps used as passive disinfection should be replaced every time a port is accessed
- Flush ports with 0.9% Sodium Chloride (NACL) or Heparin per protocol/order
- When P.I.V. is not used for continuous infusion, flush ports with 10 mLs of 0.9% NAACL before and after administration of medications and solutions
- When infusion is continuous, needleless connector tubing should be changed every 96 hours (4 days)
- Needleless connectors should be changed as soon as possible when soiled or compromised

• This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 1250W/HQI/QIN-QIO-0565-07/11/23

PERIPHERAL INTRAVENOUS (P.I.V.) CATHETER MAINTENANCE

Peripheral Intravenous (P.I.V.) Catheter

Assess daily whether the P.I.V. is needed, replacing as clinically indicated based on assessment and need.



Hand hygiene **must** be performed prior to assessing insertion site, before handling I.V. tubing, insertion caps, etc., and after assessment is complete.

P.I.V. Insertion Site

Inspect the insertion site every 4 hours

- Pain: If P.I.V. is causing pain, stop infusion and report findings immediately
- Infiltration, Phlebitis, Extravasation? Stop infusion and report findings immediately

Finding	Infiltration	Phlebitis	Extravasation
Potential Cause	Leakage of solution or medication into the extravascular tissue	Inflammation of a vein	Infusion into tissues
Symptoms	Pain, skin blanched/tight, edema	Pain, edema, red streak along vein, drainage	Pain, skin blanched/tight

Injection Caps

- Clean injection hubs with 70% alcohol or alcohol-based chlorhexidine gluconate swab pads with every port access following manufacturer's instructions for use
 - Caps used as passive disinfection should be replaced every time a port is accessed
- Flush ports with 0.9% Sodium Chloride (NAACL) or Heparin per protocol/order
- When P.I.V. is not used for continuous infusion, flush ports with 10 mLs of 0.9% NAACL before and after administration of medications and solutions
- When infusion is continuous, needleless connector tubing should be changed every 96 hours (4 days)
- Needleless connectors should be changed as soon as possible when soiled or compromised

• This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 1250W/HQI/QIN-QIO-0565-07/11/23

PERIPHERAL INTRAVENOUS (P.I.V.) CATHETER MAINTENANCE

Peripheral Intravenous (P.I.V.) Catheter

Assess daily whether the P.I.V. is needed, replacing as clinically indicated based on assessment and need.



Hand hygiene **must** be performed prior to assessing insertion site, before handling I.V. tubing, insertion caps, etc., and after assessment is complete.

P.I.V. Insertion Site

Inspect the insertion site every 4 hours

- Pain: If P.I.V. is causing pain, stop infusion and report findings immediately
- Infiltration, Phlebitis, Extravasation? Stop infusion and report findings immediately

Finding	Infiltration	Phlebitis	Extravasation
Potential Cause	Leakage of solution or medication into the extravascular tissue	Inflammation of a vein	Infusion into tissues
Symptoms	Pain, skin blanched/tight, edema	Pain, edema, red streak along vein, drainage	Pain, skin blanched/tight

Injection Caps

- Clean injection hubs with 70% alcohol or alcohol-based chlorhexidine gluconate swab pads with every port access following manufacturer's instructions for use
 - Caps used as passive disinfection should be replaced every time a port is accessed
- Flush ports with 0.9% Sodium Chloride (NAACL) or Heparin per protocol/order
- When P.I.V. is not used for continuous infusion, flush ports with 10 mLs of 0.9% NAACL before and after administration of medications and solutions
- When infusion is continuous, needleless connector tubing should be changed every 96 hours (4 days)
- Needleless connectors should be changed as soon as possible when soiled or compromised

• This material was prepared by Health Quality Innovators (HQI), a Quality Innovation Network-Quality Improvement Organization (QIN-QIO) under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS. 1250W/HQI/QIN-QIO-0565-07/11/23

P.I.V. Catheter Tubing

- Change I.V. tubing every 96 hours (4 days) when the I.V. catheter is continually in use
- Label tubing with the date, time and initials of staff replacing tubing as close to hanging bag as possible

P.I.V. Dressing

- ➔ Perform hand hygiene and put on (donn) clean gloves prior to inspection of dressing and/or dressing change
- Inspect that dressing is intact, meaning all edges are sealed
- Change transparent dressing every 7 days
 - If dressing is damp, loose, soiled or otherwise compromised, change as soon as possible
 - Change gauze dressings every 48 hours (2 days)
- Use alcohol-chlorhexidine gluconate (CHG) cleanser per manufacturer's instructions to cleanse the insertion site
 - If CHG is not tolerated, use povidone iodine or 70% alcohol per manufacturer's instructions
- Transparent dressing should be used for visualization of the I.V. site
 - If non-transparent dressing is used, dressing change should occur every 48 hours (2 days)
- Label dressing with time and date of dressing change, and initials of staff performing change

Documentation of Each Site Assessment

- | | |
|---|---|
| <ul style="list-style-type: none"> • Location of site • Condition of site • Dressing: type, securement • Dressing change date/time • Site care | <ul style="list-style-type: none"> • Assessment of comfort/discomfort • Changes related to site • Type of infusion(s) • Description of flush (product used, resistance, etc.) |
|---|---|



Intravascular Catheter-related Infection (BSI) | CDC

Infusion Nurses Society (INS) 2021 Guidelines Update: Q&A | PDIHC (Requires Free Registration)



P.I.V. Catheter Tubing

- Change I.V. tubing every 96 hours (4 days) when the I.V. catheter is continually in use
- Label tubing with the date, time and initials of staff replacing tubing as close to hanging bag as possible

P.I.V. Dressing

- ➔ Perform hand hygiene and put on (donn) clean gloves prior to inspection of dressing and/or dressing change
- Inspect that dressing is intact, meaning all edges are sealed
- Change transparent dressing every 7 days
 - If dressing is damp, loose, soiled or otherwise compromised, change as soon as possible
 - Change gauze dressings every 48 hours (2 days)
- Use alcohol-chlorhexidine gluconate (CHG) cleanser per manufacturer's instructions to cleanse the insertion site
 - If CHG is not tolerated, use povidone iodine or 70% alcohol per manufacturer's instructions
- Transparent dressing should be used for visualization of the I.V. site
 - If non-transparent dressing is used, dressing change should occur every 48 hours (2 days)
- Label dressing with time and date of dressing change, and initials of staff performing change

Documentation of Each Site Assessment

- | | |
|---|---|
| <ul style="list-style-type: none"> • Location of site • Condition of site • Dressing: type, securement • Dressing change date/time • Site care | <ul style="list-style-type: none"> • Assessment of comfort/discomfort • Changes related to site • Type of infusion(s) • Description of flush (product used, resistance, etc.) |
|---|---|



Intravascular Catheter-related Infection (BSI) | CDC

Infusion Nurses Society (INS) 2021 Guidelines Update: Q&A | PDIHC (Requires Free Registration)



P.I.V. Catheter Tubing

- Change I.V. tubing every 96 hours (4 days) when the I.V. catheter is continually in use
- Label tubing with the date, time and initials of staff replacing tubing as close to hanging bag as possible

P.I.V. Dressing

- ➔ Perform hand hygiene and put on (donn) clean gloves prior to inspection of dressing and/or dressing change
- Inspect that dressing is intact, meaning all edges are sealed
- Change transparent dressing every 7 days
 - If dressing is damp, loose, soiled or otherwise compromised, change as soon as possible
 - Change gauze dressings every 48 hours (2 days)
- Use alcohol-chlorhexidine gluconate (CHG) cleanser per manufacturer's instructions to cleanse the insertion site
 - If CHG is not tolerated, use povidone iodine or 70% alcohol per manufacturer's instructions
- Transparent dressing should be used for visualization of the I.V. site
 - If non-transparent dressing is used, dressing change should occur every 48 hours (2 days)
- Label dressing with time and date of dressing change, and initials of staff performing change

Documentation of Each Site Assessment

- | | |
|---|---|
| <ul style="list-style-type: none"> • Location of site • Condition of site • Dressing: type, securement • Dressing change date/time • Site care | <ul style="list-style-type: none"> • Assessment of comfort/discomfort • Changes related to site • Type of infusion(s) • Description of flush (product used, resistance, etc.) |
|---|---|



Intravascular Catheter-related Infection (BSI) | CDC



Infusion Nurses Society (INS) 2021 Guidelines Update: Q&A | PDIHC (Requires Free Registration)

