

PIVIE

Peripheral IV Infiltration & Extravasation

The importance of preventing PIVIEs

For many hospital patients, a small, flexible tube called an intravenous (or IV) catheter is placed in a vein on the hand, arm, leg or scalp for intravenous therapy such as medication and fluids.

It is important to monitor the IV catheter to make sure it is in the right place. Peripheral IV infiltrations and extravasations (or PIVIEs for short) are when a fluid leaks outside the vein into the surrounding tissue. Depending on the contents of the IV solution, the effects can range from swelling to blisters, severe tissue injury, or even necrosis.

What we are doing

In Alberta, best safety practices (such as checking IVs hourly) are part of routine care. The PIVIE planning team has developed additional resources and guidelines to further help prevent PIVIEs from occurring. Materials have been developed for patients and their families to be part of the PIVIE prevention effort. Additionally, staff will begin to track how successful we are in consistently following the best safety practices.

Prevention methods and detection strategies, either already in place or being introduced, include:

- hourly assessment of IV lines using TLC (Touch, Look and Compare)
- educating families on TLC
- highlighting high-risk fluids being given intravenously
- introducing a standardized assessment tool to measure PIVIEs

PIVIE resources

- [PIVIE information for families at ACH](#) (PDF)

Results

PIVIEs are categorized according to severity (moderate, severe or serious) based on the amount of swelling observed and harm caused. We are in the process of measuring our baseline rate of PIVIEs, measured in terms of incidents per 1,000 patient days. Once we have established our baseline, we will be tracking the rates on a monthly basis.

Our current goal is 100% compliance to reach our goal of zero harm.

For more information about PIVIEs and the levels of harm, you can visit the [Solutions for Patient Safety](#) website.

▶ To learn more, visit ahs.ca/SafestTogether

Last updated November 2018