The Show Must Go On - Dialysis Contingency Planning for Water Crises

Lauren Kearns, MSN, RN-BC, AVP-Ops; Sharon Wesner, MA, BSN, RN, Acute Dialysis Manager; Elizabeth Schroeder, BS, BSN, RN, NHDP-BC, CEN, TCRN, Emergency Preparedness Coordinator; Michael Chudy, ATOM; Ryshawn Harrell, Dialysis Tech; Roberto Balan, Dialysis Tech; Jennifer Flythe, MD, MPH, Dialysis Medical Director; Lisa Teal, RN, Associate Director Hospital Epidemiology; Dalton Sawyer, Director EM & EHS; Ben Smith, MD, Emergency Medicine; Randy Hoffman, Health Preparedness Coordinator; Pat Boone, Assistant Director Environ H&S; Gary Hampton, Safety Off, Plant Eng; Chuck Scott, Mgr, Plant Eng; Chris Wong, Manager, JCI; Lt. James Glover, Hospital Police; Maggie Cannon, CSSBB, Senior Quality Leader

This Acute Dialysis Unit experienced 2 water crises in the 18 month period between 2017 – 2018. These experiences helped solidify the importance of developing a disaster plan for quick, well-coordinated responses to these incidents. Initially tested in a tabletop exercise, the plan was revised and retested in a functional exercise. We believe this plan could demonstrate best practice for other acute dialysis facilities.

The unit, located on the 3rd floor of an academic medical center, lacks direct access for external water connections, making it difficult to obtain alternate water supply in the event of loss of water pressure or contamination of the water supply.

After many planning meetings, a multidisciplinary team executed a functional exercise to test the feasibility of bringing in a 6,000 gallon potable water tanker, running hoses into an Observation Unit on the first floor of the hospital, with outside egress, and relocating the hemodialysis machines.

Four portable hemodialysis machines were staged in 2 patient rooms. A commercial water company was contracted to park a tanker truck of water just outside the unit’s emergency entry doors. Water hoses were run through the doors and into the 2 patient rooms. The machines were connected to the water source and ran without incident. All pressure readings remained between 55 and 65 PSI (normal). Water cultures were obtained and came back negative post-exercise.

Some of the important issues brought to light included how to ensure the safety and security of the unit with an open door, managing contact precautions, and managing a Code Blue or rapid response under these unusual circumstances.

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