

2022 Electrical - Electronic

Permission to print:	Yes
Category	Electrical / electronic
Incident type	Good Catch Near Miss
Duration of incident:	minutes
Description:	<p>Spectrum Medtronic Level Sensor - During the priming stage of the circuit, the level sensor failed its safety check. Priming is done in our pump room adjacent to the cardiac theatres. Here we complete our first checklist. There are 2 level sensors placed at varying heights one the reservoir. The first sensor is called 'safe flow' and is identified as yellow. This sensor is placed on the reservoir above the second sensor by approx. 50-100ml. The second sensor is called 'protected flow' and is identified as red. If level drops below the first sensor, but above the second sensor, flows reduce but do not stop. If the level drops below the second sensor then the pump stops. The level sensor (first or second sensor), if activated has the following alarms:</p> <ol style="list-style-type: none">1) Audible alarm2) Visual alert on the workstation, indicating if it's safe flow (yellow first level sensor) or protected flow (red second level sensor)3) 1 of the 2 red lights on the actual physical sensor turns off indicating that it has recognised there is no volume at sensor level. <p>So, regarding this situation, during the priming stage, when volume was deliberately reduced below the level sensor to test it, none of the 3 alarms came up, indicating that the level sensor did not even recognise that volume had fallen below the sensor. The faulty sensor was removed and replaced with a spare. The spare sensor passed the safety check.</p>
GOOD CATCH - what went well	That the level sensor was checked during the priming stage, and not whilst in theatre connected to the patient. That we had a spare level sensor available on hand. We had a second perfusionist on hand to double check the fault and ensure there was nothing else missing.
What could we do better	It is routine for staff to test the level sensor during the priming stage. However we can reword the priming checklist to include 'Level sensor on and tested' v 'Level sensor on' Faulty sensor sent to manufacturers for investigation.
Type of incident:	Equipment
Hospital incident filed:	Yes
Ext Authority Advised	No
Discussed with team:	No
Rule issue	No
Skill issue	No
Knowledge issue	No
Protocol issue	No
Patient outcome variance	nil