

2025 Gas Supply (Vaporiser)

Permission to print:	Yes
Category	Gas Supply
Category 2	Vaporizer
Severity	Good Catch No Harm Incident
Duration of incident:	seconds
Description:	MV Repair on a 86kg man with standard bypass. About one hour into the bypass using a Terumo System 1 HLM, the arterial blood began to darken and PO2 began to drop. Called for backup. By this time PO2 was below 100. Noticed no gas flow through rotameter so was hooked up to the O2 emergency backup cylinder that is attached to our trolley. Immediately the arterial blood colour improved and the PO2 began to rise. Trouble shooting found the inlet to the vaporiser detached. Reconnected the dislodge attachment and gas was seen in the flow rotameter. Reconnected gas to the HLM electronic blender system with no more incident. The whole incident lasted about one minute. The monitoring screen when swung beside the pump sits adjacent to the vaporiser inlet. It is possible that the fitting is sometimes bumped by the screen which may have caused it to become loose and then disconnect
GOOD CATCH - what went well	The case was during office hours and back up was in the adjacent room and immediately available. This meant only a couple of seconds passed before help arrived. The flow meter is close to the oxygenator so that any issues just before the oxygenator are easy to spot. CDI550 gave immediate feedback. We also have a flow chart for trouble shooting that can be followed beside the oxygen cylinder.
What could we do better	Checking the tightness of [vaporiser] connection prior to the case may have detected a loose connection.
Preventive actions	The connections both inlet and outlet are now cable tied on. - photos attached
Type of incident:	Management
Timing of incident:	CPBnormothermic
Hospital incident filed	No
Discussed with team:	No
Knowledge issue	No
Protocol issue	No
Rule issue	Yes
Skill issue	No
Team Issue	No
Management culture	No
Violation	No
Patient outcome variance	Nil
Commentary	This first published report for 2025 was the most frequently reported category for 2024 and gas leaks from the vaporiser continue to feature in reports. The contingencies employed here are important in mitigating harm. PIRS2 Ed.

