

Watch Out *for...*

Blocked expiratory filter on ventilator circuit

Watch Out Notice: 07

Date: 14 July 2014

Produced By: Critical Care Governance Group

Authors: N Tarmey, P McQuillan

What Happened?

A patient developed unexplained ventilation problems, with very slow exhalation and rising peak airway pressures.

At worst, peak airway pressures were over 35 cmH₂O, causing significant cardiovascular compromise.

The problem was traced to a partially blocked expiratory HME filter, which had not been changed for 4 days.

When this was replaced, ventilation improved immediately.



The Facts:

- HME filters for Servo i ventilators should be changed every 24 hours.
- If left in place too long, filters become clogged, causing an obstruction to exhalation.

Protect Your Patients:

- **Change HME filters on the Servo i Ventilator at least once per 24 hours.**
Use the CIS prompts and label new HMEs with the date and time of changing.
- **When a patient becomes difficult to ventilate, remember it could be an equipment fault.**
Systematically check every part of the circuit, from the ET tube back to the machine.