



Japan Council for Quality Health Care

Project to Collect Medical Near-Miss/
Adverse Event Information

Medical Safety Information

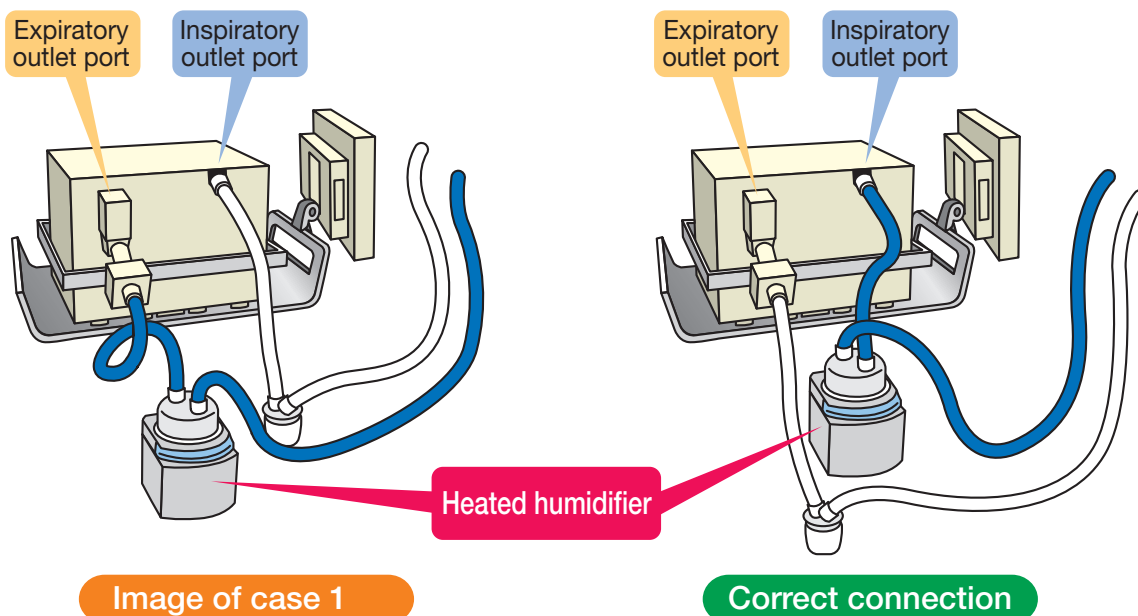
Tubing misconnection of ventilator circuit

No.24, November 2008

Six cases of the tubing misconnection of ventilator circuit have been reported (information collection period, from January 1, 2006 to September 30, 2008; the information is partly included in "Medical Adverse Event Information to Be Shared" in the 12th Quarterly Report).

Cases of tubing misconnection of ventilator circuit have been reported.

Descriptions of misconnection	The number of report
The inspiratory line of the circuit was to be connected to the humidifier, however, expiratory line was incorrectly connected to it.	2
The circuit was to be connected to the inspiratory outlet port of the ventilator, however, it was connected to the expiratory tube of the patient.	1
The airway pressure monitor was to be connected to the inspiratory outlet port of the ventilator, however, it was connected to the heat and moisture exchanger.	1
The flow monitor was to be connected to the expiratory outlet port, however, it was connected between the expiratory outlet port and the circuit.	1
The circuit was to be connected to the humidifier, however, it was connected to the heat and moisture exchanger.	1



Tubing misconnection of ventilator circuit

Case 1

The nurse was to connect the humidifier to the inspiration line of the circuit when setting up the ventilator, however, connected it to the expiratory line of the circuit. As a result, ventilator was applied to the patient with inspiratory air not being humidified.

Case 2

When the nurse changed body position of a patient, the circuit connecting the inspiratory outlet port of the ventilator was accidentally disconnected. The nurse incorrectly re-connected the disconnected circuit to the expiratory outlet port.

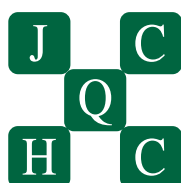
Preventive measures taken at the medical institutions in which the events occurred.

- When applying a ventilator, confirm that the circuit was correctly connected, according to the summarized version of instruction manual and other relevant instructions.
- When connecting the circuit of ventilator to inspiratory outlet port, expiratory outlet port, and heated humidifier, etc., staff shall take care to avoid incorrect connection considering that those tubings and outlet ports are compatible in size.

* As part of the Project to Collect Medical Near-Miss/Adverse Event Information (a Ministry of Health, Labour and Welfare grant project), this medical safety information was prepared based on the cases collected in the Project as well as on opinions of "Comprehensive Evaluation Panel" to prevent occurrence and recurrence of medical adverse events. See quarterly reports and annual reports posted on the Japan Council for Quality Health Care website for details of the Project.
<http://www.med-safe.jp/>

* Accuracy of information was ensured at the time of preparation but can not be guaranteed in the future.

* This information is neither for limiting the discretion of healthcare providers nor for imposing certain obligations or responsibilities on them.



Division of Adverse Event Prevention
Japan Council for Quality Health Care

1-4-17 Misakicho, Chiyoda-ku, Tokyo 101-0061 JAPAN
Direct Tel:+81-3-5217-0252 Direct Fax:+81-3-5217-0253
<http://www.jcqhc.or.jp/html/index.htm>