



Japan Council for Quality Health Care

Project to Collect Medical Near-Miss/  
Adverse Event Information

# Medical Safety Information

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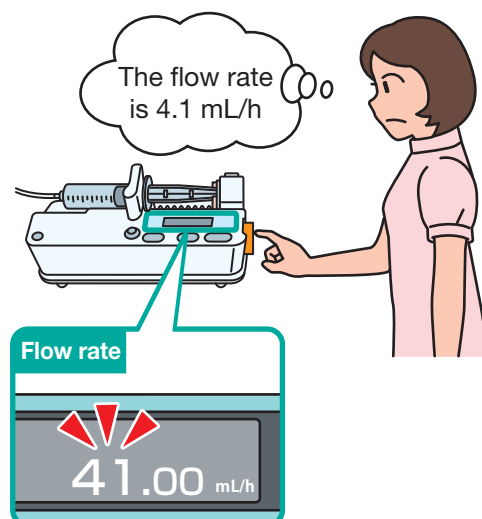
## Tenfold Error in Flow Rate of Infusion Pump, etc.

Eleven cases have been reported in which the flow rate for an infusion pump or syringe pump was entered incorrectly, resulting in the administration of a drug at a speed ten times the rate ordered (information collection period: from January 1, 2016 to February 28, 2021). This information was compiled on the basis of the content featured in the Analysis Themes section of the 61st Quarterly Report.

**Cases have been reported in which the flow rate for an infusion pump or syringe pump was entered incorrectly, resulting in the administration of a drug at ten times the intended rate.**

Type	Drug Name	Correct Flow Rate (mL/h)	Incorrect Flow Rate (mL/h)
Infusion pump	Elneopa-NF No.2 Injection	83	830
	Soldem 3A + heparin 10,000 units	8.3	83
Syringe pump	Midazolam Injection 20 mg + glucose injection	5	50
	Shinbit inj. 200 mg + normal saline	4.1	41

Image of case



## Tenfold Error in Flow Rate of Infusion Pump, etc.

### Case 1

Elneopa-NF No.2 Injection was being administered to the patient. When replacing the infusion, Nurse A set the infusion pump flow rate to 830 mL/h instead of 83 mL/h. When visiting the patient's room an hour later, Nurse B noticed that the drug was being administered at a flow rate 10 times higher than had been ordered.

### Case 2

The patient was due to be administered Shinbit inj. 200 mg + normal saline. Primary Nurse A set the syringe pump flow rate to 41 mL/h instead of 4.1 mL/h. Nurse B, who was asked to carry out the double-check, looked at the LCD screen from the corridor, rather than going to stand in front of the syringe pump. Nurse B saw the digits 4 and 1, but did not check the decimal point. When visiting the patient's room 30 minutes later, Nurse A noticed that the drug was being administered at a flow rate 10 times higher than had been ordered.

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

- When setting infusion pumps, etc., carry out a check using the point-and-call method, referring to the flow rate on both the display screen and the order.

The measure above is an example. Please consider initiatives suitable for your own facility.

#### Key Preventive Measures

- Decide on a flow rate check procedure and ensure that all staff at the medical institution comply with it.

(Comprehensive Evaluation Panel)

\* 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 the "Comprehensive Evaluation Panel" to prevent the occurrence and recurrence of medical adverse events. See the Project website for details.

<http://www.med-safe.jp/>

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

\* This information is intended neither to limit the discretion of healthcare providers nor to impose certain obligations or responsibilities on them.

