



Japan Council for Quality Health Care

Project to Collect Medical Near-Miss/
Adverse Event Information

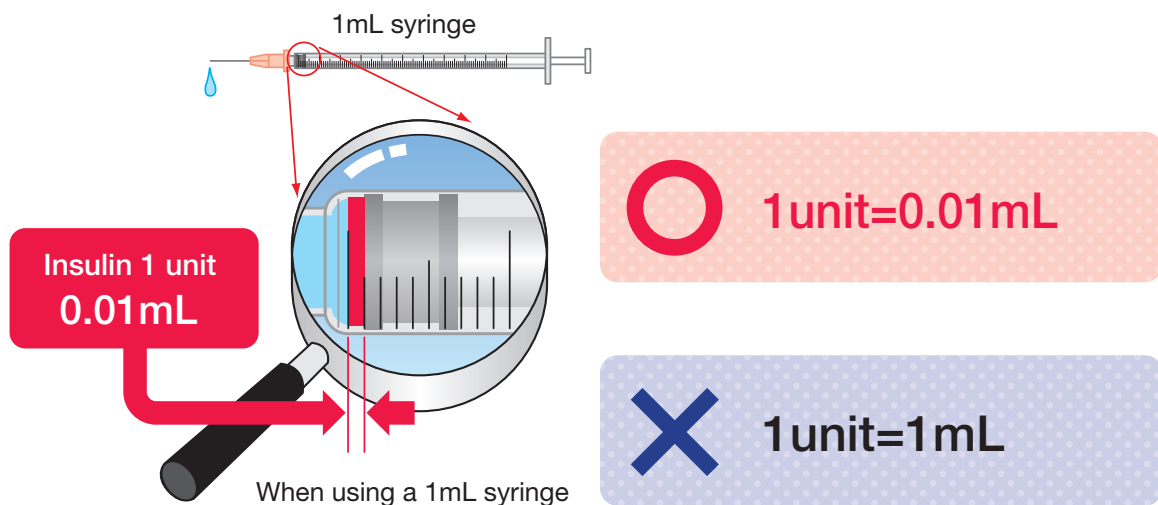
Medical Safety Information

No.6, May 2007

Misconception of insulin unit

Six cases of hypoglycemia due to insulin overdose were reported. (information collection period, from October 1, 2004 to December 31, 2006; the information is partly included in "Medical Adverse Event Information to Be Shared" in the 4th and 6th Quarterly Report). Among these, cases where "unit" was misunderstood as "mL" were reported.

1 unit of insulin is 0.01mL.



- ◆ Generally, either an insulin syringe making in insulin "units" or a 1mL syringe are used when injecting insulin.
- ◆ Five out of six reported cases were carried out by doctors or nurses who have had practical experience of less than 1 year.

Misconception of insulin unit

Case

When preparing a drip infusion, the nurse read the order form and confirmed an insulin amount of 8 units. However, the nurse mistook 8 units of insulin for 8mL, and mixed 8mL of insulin with 500mL transfusion solution with a 10mL syringe. Approximately 2 hours after administration, an insulin overdose resulting in hypoglycemic symptom, such as a diminished level of consciousness, were noticed.

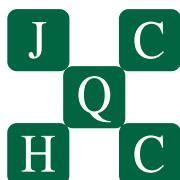
Preventive measures taken at the medical institution in which the event occurred.

**Notify all the staff that "Unit" does not equal to "mL".
Insulin 1 unit equals to 0.01mL.**

* 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.



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