

**DATE:** March 25, 2013

**TO:** Acute and Long Term Care Facilities, Local Health Departments, and NYSDOH Regional Epidemiologists

**FROM:** NYSDOH Bureau of Healthcare Associated Infections

**Health Advisory:**  
**Safe Use of Insulin Pens**  
**Please distribute immediately to: Infection Prevention, Medical Director, Pharmacy, Purchasing, Diabetes Educators, and Nursing Administration**

The purpose of this advisory is to call your attention to important guidelines for the safe use of insulin pens. Recently, two facilities in NYS discovered that insulin pens, designed for use on a single patient, had been used or might have been used for multiple patients. These findings resulted in large patient notifications with recommendations for bloodborne pathogen testing.

**Insulin pens (and the cartridges within) are single-patient use devices and must never be used for more than one patient, even if the needle is changed between patients.** Insulin pens were designed for use by patients in the home to deliver insulin more conveniently than using a standard syringe, needle, and medication vial. Contamination of these devices can occur externally (even in the absence of visible blood) and internally (by reflux of microscopic amounts of blood into the insulin cartridge when the needle is removed), resulting in the potential for transmission of bloodborne pathogens when used for multiple patients.

NYS Department of Health recommends that all healthcare facilities review their policies and procedures for the use and handling of insulin pens. Specifically:

- **Acute and long term care facilities that routinely use insulin pens should re-evaluate that use in light of recent events demonstrating the potential for misuse in those settings.** Insulin pen use may be appropriate in certain situations, such as for diabetes education, when dispensed directly to a patient as an outpatient prescription, in settings where patients administer their own medications, when unusually small doses that can be delivered more accurately with a pen are required, or when no alternative is available.
- If your facility uses insulin pens, ensure that a reliable system is in place to prevent their use for multiple persons. **The recent examples of improper use in NYS hospitals occurred despite the use of automated dispensing systems (e.g. Pyxis®) and despite facility policies requiring that insulin pens be labeled for individual patients.**
- Ensure that all staff, including temporary and contracted staff, are trained on institutional policies related to injection safety during diabetes care including the use of glucose monitors, fingerstick devices, and insulin pens.
- Periodically review and observe the actual practices of direct care providers to ensure that safe injection practices are used, including dedicating insulin pens to a single patient.

Below is a list of references and resources you may wish to use when reviewing your facility's policies and procedures.

Thank you for your attention to this important matter.

Centers for Disease Control and Prevention (CDC): Infection Prevention during Blood Glucose Monitoring and Insulin Administration

<http://www.cdc.gov/injectionsafety/blood-glucose-monitoring.html#InsulinAdmin>

FDA Alert (3/19/2009)

<http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/DrugSafetyInformationforHeathcareProfessionals/ucm133352.htm>

Floch JPL, Lange F, Herbreteau C, Perlemuter L: Biologic material in needles and cartridges after insulin injection with a pen in diabetic patients. *Diabetes Care*. 1998; 21:1502–1504.

New York State Health Advisory: Preventing Exposure to Bloodborne Pathogens during Diabetes Care Procedures and Techniques (2011)

[http://www.health.ny.gov/professionals/diseases/reporting/communicable/infection/2011-02-11\\_diabetes\\_care\\_advisory.htm](http://www.health.ny.gov/professionals/diseases/reporting/communicable/infection/2011-02-11_diabetes_care_advisory.htm)

One and Only Campaign: Insulin Pen Safety

<http://www.oneandonlycampaign.org/content/insulin-pen-safety>

Rathod M, Saravolatz L, Pohlod D, Whitehouse FJ, Goldman H: Evaluation of the sterility and stability of insulin from multidose vials used for prolonged periods. *Infect Control*. 1985; 6:491–494.

Schade DS, Eaton RP. Bactericidal properties of commercial U.S.P. formulated insulin. *Diabetes* 1982; 31:36–39.

Sonoki, K., et al. Regurgitation of blood into insulin cartridges in the pen-like injectors. *Diabetes Care*. 2001; 24:603-604.

**For more information please call your NYSDOH Regional Healthcare Epidemiology and Infection Control Program Office:**

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