FluMist: Refrigerated, never frozen

We wish to correct a minor error in the recent article, “Update on vaccine-preventable diseases: Are adults in your community adequately protected?” by William Schaffner, MD, which appeared in a supplement to the April issue of The Journal of Family Practice. The article inaccurately states that “the live attenuated influenza vaccine [FluMist] and herpes zoster vaccine must be frozen” and cites the Centers for Disease Control and Prevention (CDC) booklet Vaccine Management: Recommendations for Storage and Handling of Selected Biologicals, published in January 2007.

However, both the FluMist (influenza virus vaccine live, intranasal) prescribing information published September 2007 and the revised CDC vaccine management booklet that was published in November 2007 recommend that FluMist be stored in a refrigerator at 35° to 46°F (2°–8°C) upon receipt and until use before the expiration date on the sprayer label. This latest information is critical.

FluMist should not be stored frozen or exposed to freezing temperatures, and if inadvertently frozen, it should be moved immediately to the refrigerator. The refrigerated formulation was licensed in September 2007 and replaced the previously marketed frozen formulation (which was discontinued at that time). Subsequently, the CDC updated their vaccine management booklet.

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References

Editor’s note
This article was prepared prior to the publication of the new vaccine management brochure from the CDC.
A better staging system for pressure ulcers

The Photo Rounds article (“A disfigured foot with ulcer,” May 2008) depicting an ulcer on a rocker bottom foot of a woman with diabetes caught my attention. As a wound care physician, I would suggest the better staging system for diabetic leg and foot conditions would be the Wagner grading system, with the following categories:

- **Grade 0:** Pre-ulcerative lesions; healed ulcers; presence of bony deformity
- **Grade 1:** Superficial ulcer without subcutaneous tissue involvement
- **Grade 2:** Penetration through the subcutaneous tissue: may expose bone, tendon, ligament, or joint capsule
- **Grade 3:** Osteitis, abscess, osteomyelitis
- **Grade 4:** Gangrene of digit
- **Grade 5:** Gangrene of the foot requiring disarticulation.

Using the Wagner system, the stage of the pictured pressure ulcer would be a Grade 2 diabetic ulceration.

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**Reference**

**Dr. Stulberg responds**
My thanks to Dr. Stewart for the input. Pressure ulcers—and this article was intended to be an aid for the treatment of pressure ulcers in general—are most commonly “staged.” Podiatrists commonly utilize the Wagner grading system for diabetic foot ulcers. As outlined by Dr. Stewart, the Wagner system is more useful for the surgical foot.

Other diabetic foot classifications are available, including the University of Texas San Antonio wound classification and the Infectious Diseases Society of America’s diabetic foot infection classification system. I double-checked with one of our wound care specialists, who noted that they do not typically use the Wagner classification, but find a descriptive assessment to be more useful for diabetic ulcers.

Using the Wagner grading system (reportedly derived from Meggitt’s work) would be useful in the locales and fields that utilize that system as their option among other systems of nomenclature.

In hospital and long-term care settings where I have worked, and in terms of pressure ulcer management, the staging system developed by the National Pressure Ulcer Advisory Panel is what we have used for pressure ulcers in general.

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**References**