

## IMMUNIZATION PROTOCOL FOR PHARMACISTS

### Recommended Sites for Simultaneous Vaccine Administration

- I. **ORDER:** Pharmacists should use the appropriate gauge and length of the needles in the administration of different vaccines. The selection of a site is important in determining how well the patient may tolerate the vaccine and how well the vaccine is absorbed.

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Pharmacist Signature

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Date

Visit our website at  
<http://www.healthoregon.org/imm/provider/pharmpro.cfm>.  
To request this material in an alternate format (e.g., Braille),  
please call (503) 731-4020.

**II. RECOMMENDED SITES FOR SIMULTANEOUS VACCINE ADMINISTRATION  
(INTRAMUSCULAR = IM AND SUBCUTANEOUS = SC):**

**A. Age: 18 and older<sup>1</sup>**

| <u>Vaccine</u> | <u>Route<sup>4</sup></u> | <u>Site of Injection</u>                 |
|----------------|--------------------------|--|
| Td             | IM                       | Deltoid or vastus lateralis <sup>2</sup> |
| Hep B          | IM                       | Deltoid or vastus lateralis <sup>2</sup> |
| Hep A          | IM                       | Deltoid or vastus lateralis              |
| IG             | IM                       | Deltoid, thigh or buttock <sup>3</sup>   |
| Influenza      | IM                       | Deltoid or vastus lateralis              |
| MMR            | SC                       | Fat of upper arm or thigh                |
| Pneumococcal   | IM / SC                  | Deltoid or fat of upper arm              |
| Meningococcal  | SC                       | Fat of upper arm                         |

<sup>1</sup> In general, the injection of vaccine should occur at a site that would allow for administration with little likelihood of local neural, vascular or other tissue injury. The buttock should **not** be used as a vaccination site for active immunization. Injection into the buttock has been associated with decreased immunogenicity of the Hepatitis B and Rabies vaccines. An individual decision must be made for each patient for IM administration based on the volume of the material to be administered and, the size of the muscle into which it is to be injected.

<sup>2</sup> Vaccine containing adjuvants (Td, Hep B) should be injected deep into the muscle mass to avoid local irritation.

<sup>3</sup> Intramuscular administration of large amounts of immune globulin or other passive immunization products should be performed with care to avoid injury to the patient. Select a site that is well into the upper, outer gluteal muscle mass. The central area of the buttocks should be avoided to ensure that the sciatic nerve is avoided.

<sup>4</sup> In patients with bleeding disorders, the risk of bleeding after an IM injection can be minimized by vaccine administration immediately after receipt of replacement factor, use of a 23 gauge (or smaller) needle, and immediate application of direct pressure to the immunization site for at least 2 minutes.

**III. RECOMMENDED NEEDLE SIZE:**

| <b>A. Intramuscular Injections:</b> |                     |                      |
|-------------------------------------|---------------------|----------------------|
| <u>Age Group</u>                    | <u>Needle Gauge</u> | <u>Needle Length</u> |
| 18 years                            | 22-25 gauge         | 1-1½ inch            |
| ≥19 years                           | 22-25 gauge         | 1-1½ inch            |
| <b>B. Subcutaneous Injections:</b>  |                     |                      |
| <u>Age Group</u>                    | <u>Needle Gauge</u> | <u>Needle Length</u> |
| ≥18 years                           | 23-25 gauge         | 5/8-1 inch           |

**IV. ADVERSE EVENT REPORTING:**

Adverse events following immunization must be reported to the Vaccine Adverse events Reporting System (VAERS) at 1-800-822-7967. Forms and procedures can be found at the VAERS website: [www.vaers.org](http://www.vaers.org). In addition, a copy of the completed VAERS form should be reported to the patient's primary provider, per ORS 855-041-0510.

**V. REFERENCES:**

1. Beyea, S.C. & Nicoll. L.H. (1995). Administration of medications via the intramuscular route: An integrative review of the literature and research-based protocol for the procedure. *Applied Nursing Research*, 8 (1), 23-33.
2. CDC "General Recommendations on Immunization," *MMWR*, February 8, 2002/Vol. 51/No. RR-2.
3. Vaccine Administration. In: *Epidemiology and Prevention of Vaccine-Preventable Diseases* ("Pink Book"). Atkinson W, Hamborsky J, Wolfe S, eds. 8<sup>th</sup> ed. Washington, DC: Public Health Foundation, 2004: Appendix G.
4. *Immunization Techniques* Video; presented by the California Department of Health Services Immunization Branch (June, 2001).

For more information or to clarify any part of the above order, consult with the vaccine recipient's primary health care provider, vaccine package inserts, or contact Health Services, Immunization Program at (503) 731-4020.