# Oregon Public Health Division
# Immunization Program
# April 2019

| Guidance for Vaccine Serology Testing | |
|---|---|
| Last Reviewed | 11 April 2019 |
| Last Revised | 01 June 2017 |
| This order expires | 31 July 2021 |

We and CDC do not think that titering is necessarily the best course of action when a vaccine antigen has been found to be out of a safe temperature range in the refrigerator or the freezer. Exceptions include vaccines for which a series is indicated, and there's doubt of the vaccine's potency for all doses received. For instance, if an adolescent or adult received three Hepatitis B vaccines during poor storage times, it might be indicated to give a first potent dose and draw serum at the same time. The additional two doses might be waived depending on the test results.

**If you choose to titer your revaccination patients instead of repeating the sub-potent dose (s) we recommend that you check with the lab you choose to run any vaccine antibody titers to make sure the lab is CLIA certified.** (E.g. test is FDA approved and validated by the lab) Furthermore, be aware of some of these caveats:

1) No level of circulating diphtheria or tetanus antibodies confers absolute protection. Diphtheria has been reported in persons with high antibody levels.

2) At no time do we believe that an adequate immune response from one antigen in a combination vaccine can be suggestive of potency for the other antigen components.

3) No data available on obtaining post-vaccine antibody titers for PCV13, MCV4, HPV or Rotavirus vaccines.

Serology testing exists for some of these vaccines (many are available through clinical labs, but not all)

## Table 1. Post-Vaccine Antibody Titers

| Vaccine | Results Guidance |
|---|---|
| Rubeola | Generally available in clinical laboratories |
| Rubella | Generally available in clinical laboratories |
| Mumps | Generally available in clinical laboratories |
| Hepatitis A | Generally available in clinical laboratories |
| Hepatitis B | Generally available in clinical laboratories |
| Polio | Generally available in clinical laboratories |
| Hib | Generally available in clinical laboratories |
| Diphtheria | Generally available in clinical laboratories; protection is not absolute |
| Tetanus | Generally available in clinical laboratories |
| Rabies | Generally available in clinical laboratories |
| HPV | No reliable titer available |
| Zoster | Generally available in clinical laboratories |
| PCV13 | No reliable titer available |
| PPV23 | No reliable titer available |
| Pertussis | No appropriate test available in US |
| Meningococcal | No reliable titer available |
| Varicella | Generally available in clinical laboratories |
| Rotavirus | No reliable titer available |