

OREGON HEALTH AUTHORITY  
IMMUNIZATION PROGRAM

Immunization Spacing Intervals and Tuberculin Skin Test (TST)	
Last Reviewed	10 April 2019
Last Revised	01 June 2018
This order expires	31 July 2021

Addition of oral cholera.

Inactivated vaccines can be given on the same day or at any time after a TB skin test is done.<sup>1, 2</sup>

Oral live vaccines can be given on the same day or at any time after a TB skin test is done.<sup>1, 2</sup>

An injected live vaccine can be given simultaneously with a TB skin test **BUT**, if an injected live vaccine (MMR, varicella, MMRV, yellow fever, zoster) has been given  $\geq 1$  day ago and a TB skin test is now indicated, you must wait 4 to 6 weeks before placing the skin test. This is because these vaccines can cause a false-negative skin test in a person who has TB infection.<sup>1</sup>

**Table 1.**

Vaccine	Route	Same Day TST	$\geq 1$ day and $\leq 28$ days TST?
MMR	Injection	Yes	No
MMRV	Injection	Yes	No
Varicella	Injection	Yes	No
Yellow Fever	Injection	Yes	No
Zoster	Injection	Yes	No
Vaccinia (Smallpox)	Scarification	No	No
LAIV	Nasal	Yes	No

Polio	Oral	Yes	Yes
Rotovirus	Oral	Yes	Yes
Typhoid	Oral	Yes	Yes
Cholera	Oral	Yes	Yes

No information on the effect of varicella containing vaccine or LAIV on a TST is available. Until such information is available, it is prudent to apply rules for spacing measles vaccine and TST to varicella vaccine and LAIV.<sup>2</sup>

There is a new type of tuberculosis test known as an interferon-gamma release assay (IGRA). Even though this test improves upon the TST because it is less affected by previous doses of BCG vaccine and less affected by previous doses of tuberculosis diagnostic testing, it still may be affected by previous doses of other live vaccines so it is prudent to apply the same spacing rules as for TST.<sup>2</sup>

Smallpox vaccine should be administered  $\geq 4$  weeks apart from other vaccines in order to avoid confusion in ascertaining which vaccine might have caused post-vaccination skin lesions or other adverse events. To minimize potential risk for interference, vaccination with other live vaccines (e.g., LAIV, MMR, Varicella) should not be undertaken on the same day but should be separated from smallpox vaccination by  $\geq 4$  weeks. Other live vaccines administered within 4 weeks of smallpox vaccination should be considered invalid and repeated. The repeat dose should be administered  $\geq 4$  weeks after the last invalid dose.<sup>3</sup>

Persons should not receive a tuberculin skin test for 1 month after smallpox vaccination, to prevent a possible false-negative reaction.<sup>3</sup>

Adapted from:

1. CDC. Immunization, You call the shots. (2017) Available at <http://www2.cdc.gov/nip/isd/ycts/mod1/courses/genrec/10635.asp> Accessed 10 April 2019.

2. Kroger AT, Duchin J, Vázquez M. General Best Practice Guidelines for Immunization. Best Practices Guidance of the Advisory Committee on Immunization Practices (ACIP).  
<https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html>  
Accessed on 10 April 2019.
3. Oregon Health Authority. 2017. Immunization Program. Smallpox in: Oregon Model Immunization Protocols, available at  
<http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/ImmunizationProviderResources/Documents/SOSmallpox.pdf> .  
Accessed 10 April 2019.

Electronic copy of this immunization protocol is available at: [immunization protocols](#)