

NORMAL PRIMARY VACCINATION

A normal primary vaccination appears as a papule in 3-4 days, and rapidly progresses to a vesicle with the surrounding erythema by the 5th-6th day. The vesicle center becomes depressed and progresses to a well-formed pustule by the 8th-9th day. By the twelfth day, or soon thereafter, the pustule crusts over forming a brown scab, which progresses from the center of the pustule to the periphery. After 2.5 to 3 weeks, the scab detaches and a well-formed scar remains.

Normal Reaction Time

Day	Description
0	Vaccination
3-4	Papule
5-6	Vesicle with surrounding erythema, progressing to vesicle with depressed center
8-9	Well formed pustule
12+	Pustule crusts over, then scabs
17-21	Scab detaches revealing scar

Rarely, in some previously unvaccinated individuals, seemingly appropriate vaccination techniques may result in no reaction. One should assume that the individual is **not immune** and repeat attempts should be made to achieve a primary take. At least three attempts should be made, switching skin sites after the second unsuccessful attempt.

Systemic symptoms : Systemic symptoms are expected and usually occur about a week after vaccination. These include:

- Soreness at the vaccination site
- Intense erythema encircling the vaccination site
- Malaise
- Lymphadenopathy (local)
- Myalgia, headache, chills, nausea, fatigue
- Fever

The occurrence of these normal reactions varies considerably from study to study. The following table lists the symptoms covered by the studies and provides an indication of the range:

Lymphadenopathy	25.0 – 50.0%
Myalgia, headache, chills, nausea, fatigue	0.3 – 37.0%
Fever > 37.7 degrees Celsius	2.0 – 16.0%