



**Smallpox (Variola virus)  
Information for Health Care Providers**

Cause	Variola virus <ul style="list-style-type: none"> <li>▪ Large DNA Orthopox virus             <ul style="list-style-type: none"> <li>○ variola major-most common and severe</li> <li>○ variola minor-less common</li> </ul> </li> </ul>	
Systems Affected	<ul style="list-style-type: none"> <li>▪ Respiratory tract</li> <li>▪ Dermatological</li> </ul>	
Transmission	<ul style="list-style-type: none"> <li>▪ Inhalation of droplets</li> <li>▪ Direct contact with rash/scab</li> <li>▪ Contact with body fluids</li> <li>▪ Contact with fomite (e.g., clothing, bedding)</li> </ul>	
Reporting	<ul style="list-style-type: none"> <li>▪ Immediately report any suspected or confirmed case of smallpox to your local and state health departments</li> </ul>	
Incubation Period	<ul style="list-style-type: none"> <li>▪ 7-19 days (average is 12-14 days) before onset of symptoms</li> </ul>	
Typical Signs/Symptoms	Prodrome (early symptoms, 2-4 days in duration) <ul style="list-style-type: none"> <li>▪ Malaise</li> <li>▪ Fever</li> <li>▪ Rigors</li> <li>▪ Headache</li> <li>▪ Backache</li> <li>▪ Cough</li> </ul>	Late Symptoms <ul style="list-style-type: none"> <li>▪ Erythema from face/arms to legs and trunk, similar stages at given area             <ul style="list-style-type: none"> <li>○ Macules</li> <li>○ Papules</li> <li>○ Vesicles</li> <li>○ Pustules</li> </ul> </li> <li>▪ Pustules scab (2-3 weeks post- onset)</li> <li>▪ Scabs abate (3-4 weeks post- onset)</li> </ul>
Differential Diagnosis	<ul style="list-style-type: none"> <li>▪ Varicella (chickenpox)</li> <li>▪ Disseminated herpes</li> <li>▪ Contact dermatitis</li> <li>▪ Scabies</li> <li>▪ Erythema multiforme</li> <li>▪ Disseminated musculosolium contagiosum</li> </ul>	
Laboratory	Specimens <ul style="list-style-type: none"> <li>▪ Throat swab</li> <li>▪ Vesicular fluid</li> <li>▪ Scab</li> <li>▪ Biopsy specimen</li> </ul>	Clues to diagnosis <ul style="list-style-type: none"> <li>▪ Vesicles all at same stage</li> <li>▪ Palm and sole vesicles</li> <li>▪ Negative results for differential diagnosis</li> <li>▪ Electron microscopy detected orthopox</li> <li>▪ Culture or PCR of vesicle for confirmation</li> </ul>
Treatment	<ul style="list-style-type: none"> <li>▪ Supportive therapy</li> <li>▪ Vaccination 0.6ml/kg intradermally, (effective within 4 days post exposure)</li> <li>▪ Vaccinia Immune Globulin (VIG), 0.6 ml/kg. IM for treatment of complications from vaccine</li> </ul>	
Precautions	<ul style="list-style-type: none"> <li>▪ Standard precautions, plus</li> <li>▪ Airborne precautions, plus</li> <li>▪ Contact precautions</li> </ul>	