



Smallpox: We're Still Vulnerable


Appendix B



Chickenpox (varicella)



IMAGES OF CHICKENPOX (VARICELLA)



DIFFERENTIATING CHICKENPOX FROM SMALLPOX
Chickenpox (varicella) is the most likely condition to be confused with smallpox.

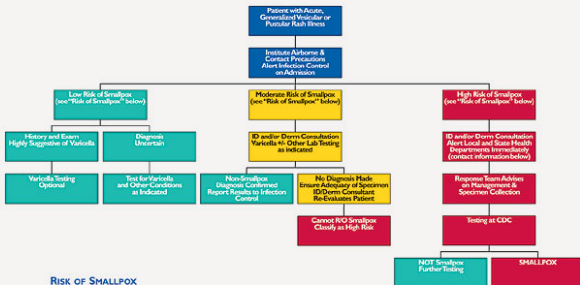
In chickenpox:

- No or mild prodrome
- Lesions are superficial vesicles "dewdrop on a rose petal" (see photos on top)
- Lesions appear in crops on any one part of the body; there are lesions in different stages (papules, vesicles, crusts)
- Centrifugal distribution: greatest concentration of lesions on the trunk, fewest lesions on distal extremities. May involve the face/feet. Occasionally entire body equally affected.
- First lesions appear on the face or trunk
- Patients rarely sick or non-febrile
- Rapid evolution: lesions evolve from macules → papules → vesicles → crusts quickly (<24 hours)
- Palms and soles rarely involved
- Patient lacks reliable history of varicella or varicella vaccination
- 50-80% recall an exposure to chickenpox or shingles 10-21 days before rash onset

Photo Credits: Dr. Thomas P. Hill, Dr. Barbara Wilson, Dr. Scott A. Norton, Dr. Felisa Aguirre, World Health Organization, American Academy of Pediatrics, American Academy of Dermatology

EVALUATING PATIENTS FOR SMALLPOX

ACUTE, GENERALIZED VESICULAR OR PUSTULAR, RASH ILLNESS PROTOCOL



RISK OF SMALLPOX

Urgent Risk of Smallpox → Urgent Evaluation

1. Febrile prodrome (defined below) AND
2. Classic smallpox lesions (defined below & photo at top right) AND
3. Lesions in same stage of development (defined below)


Moderate Risk of Smallpox → Urgent Evaluation

1. Febrile prodrome (defined below) AND
2. One other HINCR smallpox criteria (defined below)


Low Risk of Smallpox → Manage as Clinically Indicated

1. No febrile prodrome
2. <4 HINCR smallpox criteria (defined below)

Smallpox (variola)



IMAGES OF SMALLPOX



COMMON CONDITIONS THAT MIGHT BE CONFUSED WITH SMALLPOX

CONDITION	CLINICAL CLUES
Varicella (chickenpox)	Most common in children <10 years; children usually do not have a febrile prodrome.
Disseminated herpes zoster	Immunocompromised or elderly persons; rash looks like varicella usually begins in dermatomal distribution
Impetigo (Streptococcus pyogenes, Staphylococcus aureus)	Honey-colored crusted plaques with bullae are classic but may begin in vesicles; regional not disseminated rash; persons generally not ill
Drug eruptions	Exposure to medications; rash often generalized
Contact dermatitis	History consistent with possible allergen; rash often localized to pattern suggesting external contact
Rhlythma multiforme minor	High "bull eye" or "iris" lesions often followed by grouped herpes simplex virus infections; may involve hands & feet (including palms & soles)
Rhlythma multiforme (incl. Stevens-Johnson Syndrome)	Major form involves mucous membranes & conjunctivae; may be target lesions or erosions
Herpesvirus infections: varicella, Herpes and Mouth disease	Lesions a full fever & mild prodrome 1-2 days before rash onset; lesions initially maculopapular but evolve into which may involve distal and vesicles prolonged distribution (hands, feet, mouth, or elsewhere)
Disseminated herpes simplex	Lesions indistinguishable from varicella; immunocompromised host
Scarlet fever	Itching is a major symptom; pain to neck/torso & is other- than well
Molluscum contagiosum	May disseminate in immunosuppressed persons

For more information, please go to the CDC website: <http://www.cdc.gov/smallpox> and <http://www.cdc.gov/ncidod/diseases/zoonotic/dp/>

DEPARTMENT OF HEALTH AND HUMAN SERVICES
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