# Clinical Pathway: Vesicular or Pustular Rash Illness

**Patient with acute pustular or vesicular rash illness**

- Institute Airborne and Contact Precautions
- Alert IC on admission

**Illness suggestive of smallpox**

High-risk (meets all three *major criteria*):
> Febrile prodrome lasting 1-4 days with at least 1 of the following: prostration, headache, backache, chills, vomiting, severe abdominal pain ***and***
> Classic smallpox lesions (deep-seated, firm, well-circumscribed, round, may be umbilicated) ***and***
> Lesions in same stage of development

Moderate risk:
> Febrile prodrome ***and***
> At least one other major criteria (see above) ***OR***
> Febrile prodrome and ≥4 *minor criteria*:
--Centrifugal distribution (greater concentraion of lesions on face, distal extremities)
--First lesions on oral mucosa/ palate, face, forearms
--Patient appears toxic or moribund
--Slow pregression of lesions from macules to papules to pustules over days
--Lesions on palms and soles

***Note:*** Sudden appearance of multiple patients with acute onset of characteristic illness suggests common source exposure such as would be seen with a bioterrorist attack.

> Immediate ID and derm consults
> Alert IC

Contact local or state health department immediately

Response team advises on management and specimen collection

Testing at CDC

**Illness suggestive of chickenpox**

> No or minimal prodrome
> Lesions occur in crops (ie, are at different stages on any one area of body)
> Lesions are superficial (ie, "dew drop on rose petal" appearance)
> Lesions are usually not present on palms and soles
> Rash pattern is centripetal (ie, greater concentration on trunk)
> Lesions may be pruritic and usually are not painful
> Lesions progress quickly (>24 hr) from macules to papules, then to crusted lesions
> Patient does not appear toxic

Test for VZV if diagnosis is in question

**History and PE suggest diagnosis other than smallpox or chickenpox**

> Disseminated herpes zoster
> Impetigo
> Drug eruption
> Contact dermatitis
> Erythema multiforme
> Disseminated herpes simplex
> Hand, foot, and mouth disease
> Molluscum contagiosum
> Secondary syphilis
> Scabies
> Insect bites
> Bullous pemphigoid

ID and/or derm consults

Evaluate as appropriate

Other diagnosis confirmed

Re-evaluate patient if no diagnosis confirmed

Contact local or state health department if smallpox is still under consideration

**Abbreviations**

CDC, Centers for Disease Control and Prevention
IC, infection control
ID, infectious disease
VZV, varicella-zoster virus

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