Legend
Morbidity and Mortality Risk based on clinical presentation.

- Low
- Moderate
- High

Clinical Evaluation Tool for Smallpox Vaccine Adverse Reactions
Ophthalmologic Reactions / Eye Splash or Other Potential Exposure to Vaccinia Virus

Tool 5

www.bt.cdc.gov/agent/smallpox/vaccination/clineval (03-25-2003 Version)

History of potential inadvertent exposure to vaccinia virus in or near the eye(s).
No lesions or inflammation present.

History of known risk factors for smallpox vaccine adverse reactions?

Yes →

Consult with state/local health department and CDC to obtain clinical guidance and to report inadvertent exposure to vaccinia virus contained in smallpox vaccine. Management of the adverse reactions discussed in this Tool may be different when risk factor(s) are present. See Consultation and Reporting Information.

Vaccine recipients or close contacts with risk factor(s) should be reported, whether or not an adverse event develops.

Risk Factor	Adverse Reaction (Potential/ Reported Historically)
Atopic Dermatitis/Eczema (including severe atopic blepharitis	Eczema Vaccinatum
Acute Exfoliative Dermatitis	Inadvertent Inoculation
Immunocompromised including/HIV+	Progressive Vaccinia/Generalized Vaccinia (Severe form)
Pregnancy	Fetal Vaccinia and potential unknown risks to fetus
Topical Ocular Steroid Use	Autoinoculation to the eye

No ↓

Report incident of possible inadvertent inoculation in or near eye from laboratory setting or direct splash from smallpox vaccine.

Less than 7-10 days since exposure?

No → **Close observation. No immediate treatment indicated. Obtain ophthalmology consultation if symptoms develop.**

Yes ↓

See Consultation and Reporting Information

Consider immediate gentle irrigation of affected eye with sterile water or saline if exposure occurred within a few hours of presentation. Avoid irrigation under high pressure to prevent iatrogenic corneal abrasions.

Possible inadvertent inoculation in or near eye from high-risk vaccinia strain in laboratory setting (e.g. splash to eye). Laboratory vaccinia strains may be of higher concentration and greater virulence.

Request VIG consultation (see Consultation and Reporting box to obtain). Begin topical antiviral prophylaxis [1]. Close observation. Obtain immediate baseline ophthalmology consultation to assist in evaluation, management and follow-up.

Possible inadvertent inoculation in or near eye from vaccinia in smallpox vaccine (e.g. splash to eye). Vaccinia in smallpox vaccine is in lower concentration and less virulent than lab strains.

VIG not indicated. Recommend topical antiviral prophylaxis up to 5 days **[1]**. Close observation. Obtain immediate baseline ophthalmology consultation to assist in evaluation, management and follow-up.

Possible inadvertent inoculation in or near eye from vaccinia lesion in vaccine recipient or close contact. (e.g., contact with vaccine site followed by rubbing in or near eye). Obtain history of exposure to assess potential risk.

Does clinician feel there is significant risk of inadvertent inoculation?

Yes → VIG not indicated. Consider topical antiviral prophylaxis **[1]**. Close observation. Obtain baseline ophthalmology consultation to assist in evaluation, management and follow-up.

No → **Close observation. No immediate treatment indicated. Obtain ophthalmology consultation if signs/symptoms develop.**

Footnote:
1. **Topical antiviral prophylaxis:** Trifluridine eye drops - 5 times/day up to 5 days. Discontinue if no evidence of vaccinial infection is present after 5 days. Trifluridine may cause some eye redness/irritation with use. Close follow-up by ophthalmology indicated while on trifluridine to evaluate treatment.

Consultation and Reporting Information

Civilian health care providers who need clinical consultation with or without release of vaccinia immune globulin (VIG) (first line agent) or cidofovir (second line agent) for potential smallpox vaccine adverse reactions should contact their state/ local health department or the CDC Clinician Information Line at (877) 554-4625. Military health care providers (or civilian providers treating a DoD healthcare beneficiary) requesting clinical consultation should call (866) 210-6469, and if requesting VIG release should call (888) USA-RIID or (301) 619-2257. Health care providers should report smallpox vaccine adverse events to their state/ local health department and to the Vaccine Adverse Event Reporting System (VAERS) at http://www.vaers.org/ or (800) 822-7967.

Please call (888) 246-2675 (Español (888) 246-2857, TTY (866) 874-2646) or visit http://www.bt.cdc.gov/agent/smallpox/index.asp for general public information about smallpox vaccination. Persons experiencing urgent or life-threatening medical events should seek immediate medical assistance.