

# Smallpox Vaccine Work Group

ACIP Meeting

February 20, 2013



# Background

- Smallpox vaccine provides cross-protection against all orthopoxviruses (smallpox, monkeypox, vaccinia, and cowpox)
- Smallpox vaccine used to protect clinical and research laboratory workers against these viruses



# Background

- ACIP recommendations for smallpox vaccination of laboratory workers not updated since 2003
- New smallpox vaccine , ACAM2000™, licensed in 2007 and has replaced previously used smallpox vaccine, Dryvax



# Terms of Reference

1. Review recommendations for smallpox vaccination for lab workers in 2001 statement (and supplements from 2003)
  - a. Review Biosafety in Microbiological and Biomedical Laboratories (BMBL) requirements for work with orthopoxviruses
  - b. Review orthopoxvirus laboratory exposure cases and reports



# Terms of Reference

2. Review data on smallpox vaccine:
  - a. ACAM2000™
    - Safety and immunogenicity data
    - Adverse event rates with current stringent prescreening program
  - b. Dryvax: Publications on 2002–2004 pre-event smallpox vaccination program

# Terms of Reference

3. Review human safety and animal model efficacy data for attenuated smallpox vaccine IMVAMUNE® stored in Strategic National Stockpile and potential role in smallpox vaccination for lab workers (unlicensed product and therefore informational)



# Terms of Reference

4. Review data on recombinant vaccinia viruses in development or under investigation in clinical trials to provide guidance on need for smallpox vaccination in healthcare and/or laboratory personnel working with these viruses



# Ocular vaccinia infection in laboratory worker treated with VIG and with full recovery



**Primary lesion: Inner canthus**

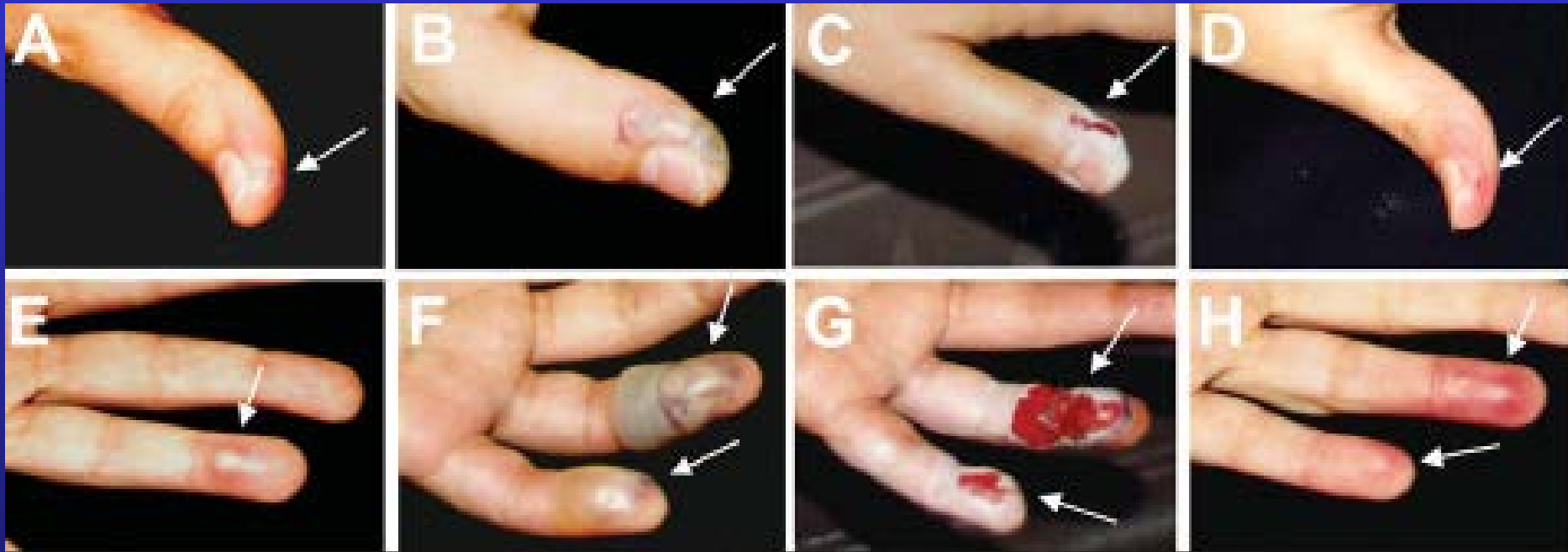


**Satellite lesion: Lower conjunctiva**

Lewis FMT et al. Emerg Infect Dis 2006;12:134



# Needlestick inoculation of vaccinia virus in laboratory worker



Moussatché N et al. *Emerg Infect Dis* 2003;9:724



# Left eye and right ear of man with laboratory-acquired vaccinia infection



# Terms of Reference

5. Revise existing statement and supplements for smallpox vaccination of laboratory workers into single ACIP Policy Note document



# Work Group Members

## ACIP Members

Lee Harrison, Chair  
Sara Rosenbaum

## Liaisons

Greg Poland (ACP)  
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## FDA

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## CDC

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Mike McNeil (ISO)  
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Jesse Geibe  
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**Thank you**

