

# Options for Preventing Anthrax After Exposure: Summary for Clinicians & Public Health Officials

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Options for Preventive Treatment for Persons at Risk  
for Inhalational Anthrax," broadcast December 21,  
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## Fact:

To date, no cases of inhalational anthrax have occurred among 10,000 persons for whom post exposure antimicrobial treatment was recommended or made available. -

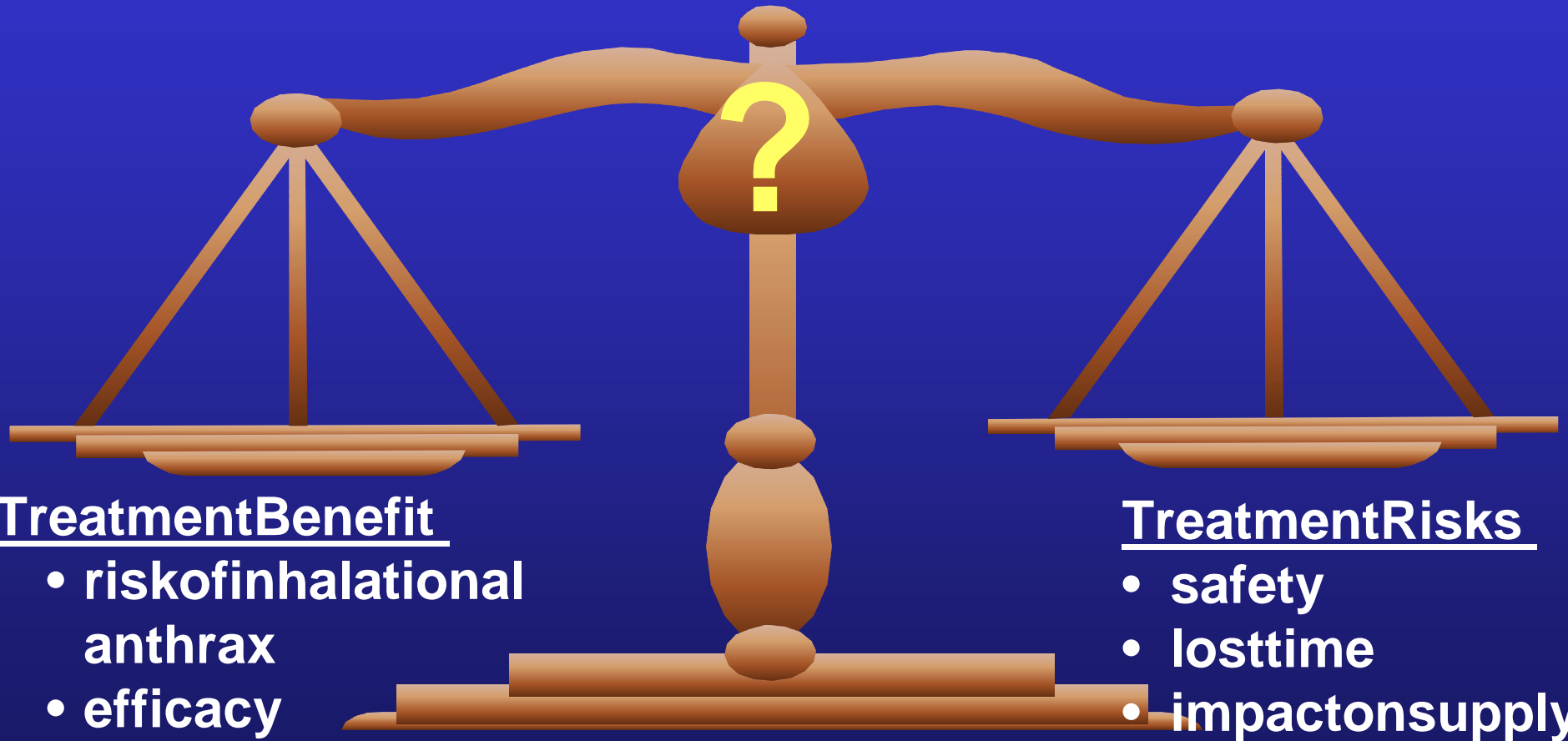
# Key Questions

- Do spores persist after antimicrobial therapy, and if so, is there a risk of inhalational anthrax?
- Does adding vaccination/additional antimicrobial therapy further decrease the risk of inhalational disease
  - among exposed persons who have completed 60 days of antimicrobials?
  - among exposed persons who have not adhered to the 60-day antimicrobial regimen?

# Post-exposure Prophylaxis Options

- Initial recommendation:  
antimicrobial therapy for 60 days
- New Option 1:  
antimicrobial therapy for 100 days
- New Option 2:  
40 more days antimicrobial therapy plus  
vaccine (3 doses over 4 weeks)

# Post-exposure Treatment Dilemmas



# Facts about Exposure Risk

- Efficient *B.anthraxis* aerosolization can occur
- Exposure dose varies with:
  - Proximity to aerosolizable source
  - Duration of time exposed to aerosol
- Individual **exposure** cannot be accurately quantified
- Individual **risk** cannot be accurately quantified

## Assessing Individual Risk: Tips for Clinicians

### Patient characteristics that may indicate higher risk

#### Exposure History

- Direct exposure to *B. anthracis* powder
- Presence in the immediate area where *B. anthracis*-containing envelope was opened
- Presence in an area with widespread environmental contamination
- Presence in a site where someone acquired inhalational anthrax

## Assessing Individual Risk: Tips for Clinicians

### Patient characteristics that may indicate higher risk

#### Exposure History

- Working in an area where a *B. anthracis* – containing envelope was processed using mechanical postal equipment:
  - Automated mail cancellation machinery
  - Automated mail sorting machinery
- Working in an area where a *B. anthracis* – containing envelope was manually agitated



## Assessing Individual Risk: Tips for Clinicians

### Patient characteristics that may indicate higher risk

#### Antimicrobial Adherence

- Persons who were unable to complete the full 60 days of antimicrobial therapy
- Persons who missed many doses of antimicrobial therapy

## Assessing Individual Risk: Tips for Clinicians

### Patient characteristics that may indicate lower risk

#### Exposure History

- No known direct exposure to *B.anthraxis* powder
- Presence in an environment with only focal contamination
- Short duration of time in contaminated environment
- Member of a group with:
  - no inhalational disease
  - delayed antimicrobial prophylaxis but no inhalational disease
  - with low adherence but no inhalational disease

# Facts about Chemoprophylaxis

- To date, no cases of inhalation anthrax have occurred among 10,000 persons for whom antimicrobial treatment was recommended or made available
- Adherence to antimicrobial treatment varies (40% - 100%)
  - Adherence may correlate with perceived risk
  - Achieving complete adherence is difficult

# Facts about Chemoprophylaxis

- Antimicrobial adverse events requiring hospitalization or an emergency visit are uncommon:
  - none at 10 -14 days
  - none identified after 30 days of prophylaxis so far
- Evaluation of short - and long -term antimicrobial safety and effectiveness is essential

# Facts about Anthrax Vaccine

- Experience is based on vaccination of healthy military personnel
- Vaccine is effective, though not 100%
- Vaccine has short -term side effects
  - Most are local and self -limited
  - Serious reactions have been rare
- Long-term vaccine evaluation is incomplete

# Facts about Anthrax Vaccine

- Use of all available vaccine is investigational and requires informed consent
- Available vaccine lot is not licensed but is licensable
- The nation's vaccine supply is limited

# Post-exposure Prophylaxis Options

- Initial recommendation:  
antimicrobial therapy for total of 60 days
- New Option 1:  
antimicrobial therapy for 100 days
- New Option 2:  
40 more days antimicrobial prophylaxis plus  
vaccine (3 doses over 4 weeks)

# Post-exposure Prophylaxis Options

All options will require:

- Antimicrobial adherence support
- Side effect management
- Careful short - and long - term monitoring for safety and efficacy
- Learning as we go
- Empathy and equity for those affected