

Global burden of anthrax: A systematic review

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Key messages

- Urgent efforts are needed to fill in the missing data in developing countries, specifically focusing on the duration of the post-acute phase and underreporting.
- An integrated approach to disease surveillance involving human health and veterinary services would allow for a better understanding of disease dynamics.

Background:

Anthrax is transmitted to humans through contact with infected animal product. There is currently no global estimate of its disease burden.

Aim:

To identify incidence and clinical data to contribute towards calculating a Disability-Adjusted Life Years estimate for anthrax.

Methods

- Systematic literature review
- Standardized reporting framework for extracting all the parameters of interested
- Additional searches on national surveillance website
- Disease model for cutaneous and gastrointestinal was based on previous literature
- We derived appropriate disability weights for anthrax from the Global Burden of Disease study

Results

- Data from 37 countries
- 95% cutaneous and 5% gastrointestinal
- Duration two to eight weeks
- incidence between 0.03 in Ghana and 1.4 in Georgia per 100,000 inhabitants
- No differences in sex
- Mean age distribution (30-50)

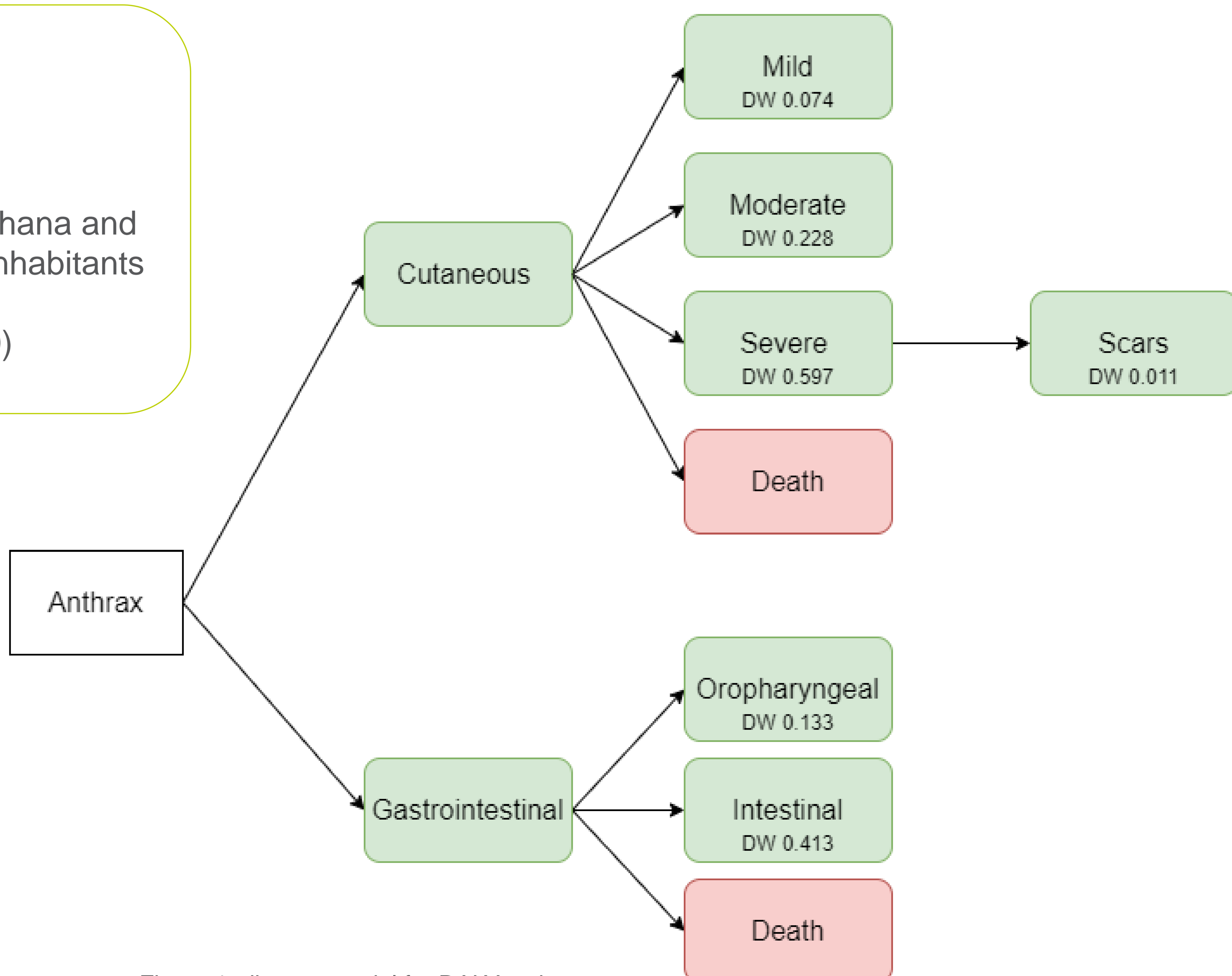


Figure 1: disease model for DALY estimates