An Investigation of an Outbreak of Cutaneous Anthrax Attributed to Butchering a Sick Cow, Jiangsu Province, China, 2012

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Background
- Approximately 300 cutaneous anthrax cases are reported in China annually: herders and butchers are at high risk.
- Two cutaneous anthrax outbreaks were reported in Jiangsu province during the last 50 years; six cases in 1991 and four cases in 1998, all in Shouguang county after a heavy flood.
- On 2 August 2012, a local hospital in Lianyungang city, Jiangsu province, received a report of cutaneous anthrax from Banlu Village with 3 skin lesions as black eschar and vesicle on his hands.

Objectives
- To identify the pathogens, mode of transmission, risk factors and give recommendations for control and prevention.

Methods
- Case definition: Suspected case: Banlu villagers exposed to a sick cow with skin lesion as black eschar or vesicle, between 27 July and 2 August 2012. Confirmed case: probable case with one of three laboratory tests positive: blood-smear anthrax bacillus positive, sputum or vesicle fluid anthrax bacillus positive by reverse transcription–polymerase chain reaction (RT-PCR), sera anthrax bacillus antibody positive by colloid-gold method (CGM).
- Case searching: All villagers exposed to sick cow interviewed face-to-face.

Results
- Lianzhou county, Jul 23-24, 2012
  - No 745 cases, 28 were sick cow
  - 92 cases were cow farmers

Banlu Village, Jul 25, 2012
- A sick cow
- Butchering
- Flagstaff

Epidemiology
- Skin with cut (RH=2.8, 95% CI: 1.4-5.7) and exposed to bloodletting, skinning, excision and butchering were risk factors.

Recommendations
- Enforcing the livestock quarantine between the cities and provinces, especially in endemic areas of China.
- Fostering cooperation between heath, veterinary, department of agriculture and department of industrial and commercial.
- Educating butchers on safely slaughter and avoiding privately deal.

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More Information
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