

Occupational Anthrax in Germany in 1936

The statistics published by the German Health Department¹ indicate that 74 cases of anthrax, of which 12 (16.2 per cent.) were fatal, were reported to the Department in 1936.

According to the sex of the patient, the cases were distributed as follows: men, 67 (of which 12 were fatal); women, 7.

According to age, the cases show the following distribution: under 40 in 50 cases (4 fatal); over 40 in 24 cases (8 fatal).

There were 4 cases of internal anthrax, all fatal, and 70 cases of cutaneous anthrax (8 fatal).

Bacteriological diagnosis was positive in 49 cases (66 per cent.), of which 20 (out of 38) occurred in agricultural work and 29 (out of 36) occurred in industrial work or were of non-occupational origin.

In 22 cases (approximately 30 per cent.) it was possible to ascertain the path of entry—namely, skin contusions.

CLASSIFICATION BY ORIGIN

A general classification of cases is as follows: agricultural anthrax, 38 cases, 3 fatal; industrial anthrax, 32 cases, 7 fatal; non-occupational, 4 cases, 2 fatal.

The 38 cases of agricultural anthrax were due to the following causes: tending animals, 2 cases, affecting the arms; contact with infected animals, 36 cases, 3 fatal.

The 32 cases of industrial anthrax occurred in the transport, marketing and handling of hides (18 cases, 4 fatal), handling of animal hair (8 cases, 2 fatal), and miscellaneous processes (6 cases, 1 fatal).

Contact with Infected Animals

Urgent slaughtering caused 35 cases of anthrax, of which 3 were fatal; manipulation of slaughtered animals 1 case only, not fatal.

These were all cases of cutaneous anthrax, localised as follows: head, 2; neck, 1; arms, 33.

Infection was due in all cases to cattle.

Transport, Marketing and Handling of Hides

The 18 cases (4 fatal) due to handling hides were distributed as follows: workers in the transport industry and in warehouses, 7 cases,

¹ "Ergebnis der Statistik über Milzbrandfälle beim Menschen im Deutschen Reich für das Jahr 1936", in *Reichs-Gesundheitsblatt*, Vol. XIII, No. 20, 18 May 1938, pp. 390-393.

For statistics for the year 1935, see *International Labour Review*, Vol. XXXVII, No. 5, May 1938, pp. 661-663.

3 fatal ; workers in tanneries, 9 cases, 1 fatal ; workers in boot factories, 2 cases.

In 2 fatal cases (1 in the transport industry and 1 in a tannery) the anthrax was internal ; in the 16 remaining cases (2 fatal) it was external, localised as follows : head, 8 cases (1 fatal) ; neck, 7 cases (1 fatal), arm, 1 case.

Analysed according to the material handled, the cases originated as follows : hides of cattle, 8 cases ; unshorn goat hides, 1 ; sheepskins, 2 ; sheep and goat skins, 2 ; dried skins, 2 ; fresh hare skin (native), 1 ; leather (boot manufacture), 2.

The raw materials were of native origin in one case (fresh hare skin), of unspecified origin in one case, and of foreign origin in 14 cases : Africa, 1 (Nigeria) ; South America, 4 (Argentina, 2, Colombia, 1, Brazil, 1) ; Australia, 1 ; India, 1 ; Balkans, 2 ; country not stated, 5. In 2 further cases (those derived from leather) no indication of the origin was given.

Of the 8 skins of cattle, 6 were dried skins : 1 from Africa (Nigeria) ; 3 from South America (Argentina and Colombia) ; and 2 of unspecified foreign origin. In two other cases the state of the skin was not specified.

In the case derived from unshorn goatskins, the origin was unknown ; the sheepskins came from Australia in one case, and from India in the other ; the bale of goat and sheep skins came from the Balkans.

Transport, Marketing and Handling of Animal Hair

The 8 cases (2 fatal) due to handling hair were distributed as follows : spinning and weaving of hair, 3 ; brush making, 1 ; carpet making, 1, wool combing, 3, of which 2 were fatal (1 case of internal anthrax and 1 affecting the skin).

The 7 cases of cutaneous anthrax were localised as follows : head and neck, 5 cases ; arms, 1 ; elsewhere, 1.

Infection was caused by goat hair from Asia Minor and sheep's wool (1 case each) and by animal hair (4 cases, from Iran in one case). In two cases the nature of the material was not stated.

Miscellaneous

The other 6 cases of occupational anthrax affected workers engaged in making glue (3 cases, 1 fatal, due to bones of native and foreign origin), a rag sorter, an agricultural worker, and a locksmith.

Localisation was as follows : head, 2 cases ; neck, 2 ; arms, 2.

The 4 non-occupational cases (2 fatal) affected a worker in a gas-works (fatal case of internal anthrax), a slater, a well sinker (fatal case of cutaneous anthrax), and a woman (no details).

Localisation was as follows : head, 1 ; neck, 1 ; arms, 1.

Comparison with the statistics for the previous year shows a reduction in the number of cases of anthrax due to urgent slaughtering, but little variation in cases occurring in other ways.