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Instruktsii o meropriyatiyakh protiv sibirskoi iazvy

/Instructions on anti-anthrax measures/

In his Sbornik rukovodiashchikh materialov po veterinarii

/Collection of leading material on veterinary medicine/

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(In Russian)

INSTRUCTIONS ON ANTI-ANTHRAX MEASURES

(Approved by the USSR Ministry of Agriculture on February 28, 1953)

General Veterinary-Sanitary Measures

1. All species of domestic animals are susceptible to anthrax.
2. The veterinary-sanitary measures for the prevention of anthrax
 - maintenance of the required sanitary conditions on the territory of pastures, corrals and populated points;
 - organization of installations for the utilization and disposition of animal cadavers; construction of biothermical pits and animal cemeteries on each sovkhos, kolkhoz, populated point or in a group of populated points and a proper organization of the disposal of animal cadavers, as it is required in the "Veterinary-sanitary regulations for the utilization, removal and disposal of animal cadavers", approved by the USSR Ministry of Agriculture on April 6, 1951;
 - 3) - the detection of "stationary" /endemic/ points affected with anthrax.

3. "Stationary" /endemic/ anthracis points are those single points or separated portions of pastures and drives where cases of anthrax were once (regardless of how long ago) registered.

4. Establishment of the epizootic conditions of the affected raions; this must be accomplished by studying the direction of the spread of the disease in past years, regardless of how long ago it has occurred, and also by investigating the present epizootic conditions of the point.

For this purpose the following must be established, either by the Veterinary Administration of Agriculture of the Republic, or by the Veterinary Department of the Krai or Oblast' Agricultural Administrations, but in cooperation with the specialists of the Oblast's Veterinary Laboratory, or with the veterinary surgeons of the Raion Agricultural Zootechnical Departments or Veterinary Districts of each point:

- the date and rate of anthrax cases which have occurred in animals, and the species of the latter; all based on statistical and other data;

- the presence of animal cemeteries and separate anthrax burial places; their present location must be indicated and their conditions described;

- the separate (with anthrax) infected portions of pastures, drives, bases and barnyards, and of water bodies;

- the soil, topographical and local particularities of the affected points and of places where animals are sick with anthrax; the way to water cattle during the period of pasture maintenance, and the direction of the walking line of cattle on pastures;

- the localization and the veterinary-sanitary conditions of the meat combines, slaughter bases, utilization installations, of store houses for the preservation and storage of animal raw material, slaughter yards and of roads leading to the bases and assigned for cattle drives.

5. The veterinary surgeon of the district or the farm, in cooperation with the main veterinary surgeon of the Raion Agricultural Department and after consultations of the veterinary bacteriological laboratory or veterinary experimental station must compile a detailed epizootiological history of each point.

6. In order to have an accurate account of the affected points, the following measures must be carried out:

- the veterinary surgeon of the district or farm must acquire a special ledger with numbered pages and strings. For the records of each affected point several pages must be allowed; all important data concerning the affected point (farm) must be registered there in accordance with point 4. New cases of anthrax and the work on the eradication of the disease (vaccinations, disposal of cadavers, disinfections and the like) must also be recorded.

Remark. This journal should be the basic document for the annual plans concerning anti-anthrax measures, and also assist in controlling the carrying out of the prophylactic measures; the journal must be registered in the inventory book and preserved for future use and reference;

- the Main Veterinary Surgeon of the Raion Agricultural Department must draw the chart of the affected raion by indicating the points infected with anthrax, the dates, number and rate of anthrax cases and animal losses.

7. It is absolutely necessary to conduct complex meliorative, veterinary-sanitary measures and immunization of the animals on the affected points.

8. Meliorative measures of the affected points must be included into the general plan of soil management on kolkhozes and sovkhoses; it depends on the local conditions and epizootic factors; its realization must be achieved by draining and drying the swamps and stagnant water on pastures and meadow lands; also by organizing water drinking places and wells, according to the veterinary-sanitary requirements.

Veterinary-sanitary measures. The cleaning and disinfection of the yards and premises, the disinfection of the objects of care, the supervision and maintenance of animal cemeteries, of old anthracic burial places, of the tracts for animal transports, cattle bases, preservation and processing plants of raw material of animal origin also of /Begin. p.7/ utilisation installations and of other objects mentioned in the instructions, directions and regulations of the USSR Ministry of Agriculture.

The immunisation of animals for prophylactic purposes must be conducted on "stationary" /endemic/ anthracic points and on those which are in danger of becoming infected.

Remark. The Main Veterinary Surgeon of the Raion Agricultural Department is in charge of the preparation of the plans for the carrying out of prophylactic vaccinations; they must be based on the characteristic data of each point separately. These plans must be approved by the Veterinary Administration (Veterinary Department) of the Republic, Krai or Oblast' Ministry of Agriculture.

8. The veterinary workers, leaders of agricultural organs, the presidents of kolkhozes and directors of sovkhoses are obliged to inform the "kolkhozniki" /workers on kolkhozes/ and the workers on sovkhoses with the basic symptoms of the disease in animals, with the prophylactic and control measures of the disease, to be carried out in accordance with the present instructions.

Measures to prevent infection with anthrax in animals

9. The leaders of animal husbandry farms (kolkhozes, sovkhoses, farms), and persons who are in charge of the animals must immediately inform the nearest veterinary surgeon or fel'dsher about the following cases: a sudden death of an animal without any visible cause; an animal disease characterized by the development of a hot and fast growing swelling; colics in animals accompanied by hemorrhagic excretions (intestinal disease).

10. Immediately after the information about the emergence of the disease, even prior to the arrival of the veterinary surgeon or veterinary fel'dsher, the farm leader or the owner of the animal must take measures to prevent the spread of the disease. In case anthrax is detected during

the period of stall maintenance, and only single cases occur, the sick animals must be isolated immediately and kept in separate quarters; the stands of the sick animals must be closed and not used before the disinfection. In case several animals have become sick, the healthy ones must be isolated and kept separately; contact with the sick animals is prohibited.

The premises where the sick animals were kept, also the objects of their care, must be cleaned and subjected to a thorough disinfection.

Remark. In those cases when in the stalls the animals are kept loose, the transfer of the healthy animals is mandatory, regardless to the number of the sick.

2. In case an animal has died, its cadaver must be removed to the burial place, and for preventing the access of flies it must be kept covered until the arrival of the veterinary workers; it is recommended to dust the cadavers with hexachlorane and calcium hypochlorite. /Begin. p.8/

11. After receiving the message concerning the emergence of anthrax, or sick animals and losses among them caused or suspected to be caused by anthrax, the veterinary surgeon or the veterinary feldsher must arrive immediately and examine the sick animals or their cadavers. Autopsy is permitted in those cases only when the disease cannot be diagnosed, either by examination or by microscopy of the blood.

In that case, all activities connected with the autopsys must be conducted at the place of the cadaver's incineration.

12. If anthrax is established, the temperature of the whole cattle

(flock, herd, barnyard etc.) must be taken, the sick animals and also those which are suspected to become sick must be isolated and kept in separated groups.

13. If the diagnosis is anthrax, the veterinary surgeon or veterinary fieldster, in cooperation with the farm leader, must organize the cleaning and disinfection of the territory and premises where the sick animals were kept or their carcasses found; simultaneously, the cause and source of the disease must be found and measures for their eradication taken; for cattle among which anthrax has occurred, pastures must be changed.

After the spraying of disinfectional solutions, the premises must be cleaned mechanically.

Disinfection must be conducted three times with one-hour intervals; a solution of calcium chlorite containing not less than 5% active chlorine, or a 4% solution of formaldehyde, or a hot 10% solution of a sulfophenol mixture or of sodium hydroxide at the rate of 1 liter disinfectional liquid per 1 m² surface area at each spraying must be used. After the last spraying, the quarters have to be closed for 3 hours and ventilated thereafter.

Metallic objects must be disinfected by flame; those of canvas, tarpaulin, felt, and cotton. - by boiling in water or in 1% sodium solution for 90 minutes; leather things must be thoroughly rubbed with a sublimate-carbolic solution and later dried thoroughly and coated with tar or fat.

14. During stall maintenance, the separated yards, stables and the

like, where anthrax cases have occurred, are considered being the "affected points".

In case anthrax was detected on several farms (barnyards), the whole populated point must be considered being affected.

During pasture maintenance, these portions of the pastures (grazing places, stubble fields) where sick or dead animals were found, are considered affected.

During stall-pasture maintenance (when the animals are tended and occasionally kept in sheds) the whole populated point, (of the herd, flock, drove), where anthrax has occurred among the animals must be considered being affected. In case on pastures the animals of several points (farms) were tended together, all mentioned points must be considered affected.

15. All populated points (barnyards, droves, herds, flocks etc.) infected with anthrax must be subjected to quarantine.

/Begin. p.9/ The quarantine must be imposed according to the regulations stated in the USSR Veterinary Statute.

16. The veterinary surgeon (or veterinary fel'dsher) sets the border and for the territory to be quarantined, of that which is in danger of being infected; he also sets up the necessary restrictions and informs immediately the main veterinary surgeon of the Raion Agricultural Department, also the neighboring district veterinary surgeons and local organs of the health protection. Upon the outbreak of anthrax, the main veterinary surgeon of the Raion Agricultural Department must also inform the Executive Committee of

the Raion Council of the Working People's Deputies, the Veterinary Administration of the Ministry of Agriculture of the Republic, the Veterinary Department of the Oblast' (Krai) Agricultural Administration, also the commanding military authorities, if the latter are located on the territory of the raion.

Remark. Endangered points are those farms or settlements which have a territorial connection with the affected point.

Measures on the Quarantined Points

17. After the establishment of the quarantine, the Executive Committee of the local Council of Working People's Deputies announces the outbreak of anthrax; it orders the hanging out of signs on roads leading to the territory of the affected points; the signs tell about the quarantine and indicate the detours; the Council also assigns guards (outposts, cordons) on the roads.

18. According to quarantine regulations it is prohibited:

- a) to transport and move animals on the quarantined territory, to transport and move the animals from and into the mentioned territory;
- b) to use for animals common drinking places, such as wells, ponds and other water bodies;
- c) to regroup, exchange or sell animals;
- d) to carry out from the quarantined territory milk and milk products, leather, and fur raw material, wool, hair, hoofs and the like;

c) to carry out fodder from farms (or populated points).

After the lifting of the quarantine, grain and bulky fodder, harvested from the districts of quarantined farms but that which has not come in contact with animals sick with anthrax and has not been soiled with their excrements, is permitted to be carried out.

That grain and bulky fodder which was harvested from districts of the quarantined farms where sick animals have grazed, are not permitted to be carried out from the farm and must be fed to those animals which were actively vaccinated against anthrax;

f) to use the milk of sick animals and to kill them for meat;

g) to perform autopsy on the cadavers (except in cases mentioned in paragraph 11 of these instructions), to skin dead animals in order to save the hides;

h) to perform surgical operations, except the inevitable ones;

i) to have markets, fairs and animal exhibits in the limits of the quarantined territory, as well as conduct other activities connected with the accumulation of animals. /Begin. p.10/.

19. After the examination of the animals of the quarantined point (farm or its part) the veterinary surgeon or veterinary feldsher must divide them into two groups:

The first group. To this group belong animals sick with anthrax and those which are suspected to become sick.

Second group. Animals which are supposed to be infected with anthrax, that means all susceptible animals of the respective farm or of its part.

Animals of the first group must be treated with anti-anthrax serum, also with symptomatic means.

Animals of the second group must be vaccinated according to the regulations mentioned in the paragraph "Anti-anthrax vaccinations" of these instructions.

20. The veterinary surgeon or veterinary feldsher is obliged to control the disposal of the animal cadavers and to check the carrying out of the cleaning and disinfection of the quarters and places where sick animals were kept.

21. Special personnel must be assigned for the caretaking of the sick animals and of those which are suspected to become sick; this personnel must be supplied with special clothes, uniforms and rubber galoshes. After work, the special clothing must be left at the working place.

22. Fodder contaminated with the excretions of animals sick with anthrax must be burned.

23. Manure, bedding and fodder residues of the sick animals must be burned on the spot (if no buildings are nearby) or near the infected place; all fire-preventive measures must be observed. The upper layer of the soil (in the stand, or stall) must be removed (not less than on 15 to 20 cms), mixed with a 20% solution of calcium hypochlorite and moved to the animal cemetery. The soil must be carried in a vehicle with a liquid-proof case. Prior to the carrying out, manure, bedding and fodder residues must be sprayed with a disinfective solution.

24. The animal cadavers may be permitted to be utilized on utilization plants, if the "Veterinary-sanitary regulations concerning the utilization and disposition of animal cadavers" approved on April 6, 1951 by the USSR Ministry of Agriculture, are observed. Burial of the cadavers is prohibited.

That portion of the pasture, where an animal has died of anthrax and where its cadaver lied, must be decontaminated by fire, then sprayed with a 20% solution of calcium hypochlorite containing not less than 25% of active chlorine, or with a hot 10% sodium hydroxide solution; thereafter the soil must be broken up and the mentioned disinfectants must be poured generously again, finally all together everything must be mixed with calcium hypochlorite at a proportion of 1 part lime and 3 parts soil.

25. For prophylactic purposes and in order to guard the health of men and animals, the following rules must be observed:

- people who have lesions, scratches, or other skin injuries on their hands, face or on other open regions of the body are not permitted to take care of the sick animals, to remove the cadavers, and to clean and disinfect the contaminated premises;

- milk of animals sick or suspected to become sick with anthrax is not permitted to be used for human food and in animal feeding; the milk of the other animals of the quarantined point is allowed to be used for food but only if it was previously boiled;

- milk of animals which were vaccinated with the 2nd Tsenkovskii's

vaccine during 15 days^{/r/} is permitted to be used for human food and in feeding animals, however, after boiling only. The milk of animals vaccinated with the STI vaccine can be used without any restrictions.

Anti-anthrax Vaccinations

26. Against anthrax, either prophylactic or enforced vaccinations must be conducted.

27. On all "stationary" /endemic/ anthracic points prophylactic vaccinations must be conducted annually, either in the fall or in the spring, depending on the local conditions, on the species of the animals and on the biopreparations; all susceptible animals must be vaccinated.

Remark. Nonvaccinated animals and those which were newly introduced into the point, must be vaccinated before they can be led to the pastures where all susceptible animals are vaccinated.

28. Only veterinary surgeons or veterinary fel'dshers are authorized to perform vaccinations.

29. During the vaccinations, all vaccinated animals must be registered accurately; an account of the results (reactions, complications) must be given. For the nonvaccinated animals a separate list must be made and the reasons why they have not been vaccinated, must be indicated.

30. For prophylactic vaccinations the 1st and 2nd Tsenkovskii's vaccines, and the STI vaccine must be used.

The vaccination must be carried out according to the order of the "Instructions on the administration of biological preparations" approved by

the USSR Ministry of Agriculture on March 11, 1950, and registered by the no. I-56.

31. Enforced vaccinations of animals are conducted in those cases when outbreaks of anthrax occur on single farms and populated points, on pastures of cattle and on farms and settlements of the endangered zone.

32. During enforced vaccinations the following must be carried out:

a) passive immunization with serum only, followed by active immunization for consolidation;

b) combined vaccination with serum and the 2nd Tsenkovskii's vaccine;

c) vaccinations of animals (except sheep and goats) with the STI vaccine (without the serum).

33. Only those animals must be subjected to passive immunization which had come into direct contact with sick or dead animals.

d) All other animals of that farm or of its part must be subjected to combined vaccinations or to vaccination with the STI vaccine.

34. On farms or populated points of the endangered zone, vaccinations with the Tsenkovskii's vaccine and with the vaccine STI must be conducted.
/Begin. p.12/

35. Veterinarians must observe the vaccinated animals up to the end of the vaccination reactions.

36. Neither transfer of the vaccinated animals nor slaughter for meat is permitted during the observation period.

Remark. It is permitted to slaughter the animals for meat 14 days postvaccination.

Lifting of the Quarantine

37. The quarantine ban may be lifted 15 days after the last fatality case or after the recovery of the last animal from anthrax; also after the end of the vaccinal reactions.

38. Prior to lifting the quarantine, the veterinary surgeon with the representative of the Council of Working People Deputies participating, must check the wellbeing (in regard to anthrax infection) of the animals and conduct on the farm the consolidating measures.

The consolidating measures are: thorough mechanical cleaning of the animal quarters and of its surrounding territory, and the final disinfection. All objects used in the care of the sick animals must be also decontaminated. Nonvaluable wooden things must be burned.

39. Concerning the lifting of the quarantine ban a written statement must be prepared and the following mentioned: the course of the epizootics prior to the vaccinations, number of fatalities, indicating the species and dates, also the place and the way of disposal; number and species of animals vaccinated by one or another method, doses of biopreparations, serial numbers, date of the preparation, name of bioplant, course of the reaction, complications after vaccination, course of epizootics after vaccination, sanitary-disinfectional measures conducted on the farm. This statement must be issued with a duplicate, the original must be left on

the farm and the other mailed for control and account to the Agricultural Department of the raion.

Control Measures Taken on Meat Combines
if Anthrax was Detected

40. In case gelatinous infiltrates are found in the subcutaneous cellular tissue during the dissection of the carcass of cattle, or subcutaneous edema are detected in the cervical or thoracic region of the swine, this must be immediately reported to the veterinary surgeon of the plant and the work on the carcass must be stopped.

In case anthrax is suspected, the veterinary surgeon of the plant (of the slaughter) must stop the primary processing work on the plant and start to carry out all the measures indicated in the 22nd paragraph of the "Instructions for the veterinary-sanitary examination of animals to be killed and for the veterinary-sanitary expertise of meat and meat products" approved by the USSR Ministry of Agriculture on October 26, 1951, no. I-27.

41. The primary examination of swine carcasses for anthrax must be done immediately after the draining of the blood and prior to passing of the carcass /begin. p.13/ for further dissection. The heads of the swine should not be cut off of the carcasses, they must be left hanging at the superficial tissues of the neck. The intestines must be taken out after the examination of the lymph nodes: the submaxillary, cervical, parotid, pharyngeal, tonsils and laryngeal.

42. The disinfection must be conducted under the direct supervision of the slaughter's veterinary personnel.

43. Cattle bases, and temporary cattle quarters, where cattle were kept during transportation and among which anthrax was detected, must be subjected to disinfection by spraying with a disinfective solution, to thorough mechanical cleaning of manure followed by disinfection with a 20% solution of calcium hypochlorite (the initial calcium chlorite must contain not less than 25% of chlorine), with a purified solution of calcium hypochlorite containing not less than 5% of active chlorine, with a hot 10% solution of sodium hydroxide or with a 4% formaldehyde solution.

The quarters, the equipment and tools of the slaughter plants must be treated similarly (the walls must be disinfected 2 meters high off the ground).

The instruments must be disinfected by boiling for 90 minutes in a closed container filled with a 0.5% soda solution. Other metallic objects must be disinfected by flame.

The special clothes must be decontaminated in the autoclave or by boiling for 90 minutes in water.

Manure of sick animals or of those which have died of anthrax on the base, must be burned. Other manure on the territory of the slaughter base, or of the meat combine to be disinfected, (according to the order of the veterinary personnel) must be also burned, if possible; otherwise, it must be biologically decontaminated. It is prohibited to make bricks of this manure.

43. All workers of the slaughter who had come into contact:

animals sick with anthrax, or with their products, must be informed of the danger and told to apply the necessary prophylactic measures against anthrax. They must be subjected to compulsory sanitary treatments.

44. In case anthrax was detected on the meat combine or other slaughter plants, slaughter of animals can be permitted only after a disinfection, guaranteeing the eradication of the infection.

The veterinary personnel of the enterprise must make a written statement concerning the conducted measures.

The temporary regulations of the Main Veterinary Administration of the USSR Peoples Commissariat of Agriculture are: "The carrying out of veterinary-sanitary and prophylactic measures against anthrax on meat-combines and other slaughter enterprises", September 24, 1940.

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