

VETERINARY DEMANDS FOR INFORMATION FROM THE MEAT INSPECTION

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INTRODUCTION

Animal disease registration have always been done at the meat inspection. The introduction of large scale systems for animal production have led to new demands for the surveillance of the herds. Large scale registrations at the meat inspection are of great interest. New techniques for collaborating and processing of data are available. However, the value of the registrations still depends on their quality, and the meat inspectors have only seconds to make their diagnoses. Although the possibility of getting valuable information from the meat inspection is great, the limitations of the systems should be taken into consideration.

CATEGORIES OF VETERINARIANS INTERESTED IN INFORMATION

The main categories are:

- veterinary authorities
- veterinarians in the meat inspection units
- veterinary consultants in abattoirs, breeding companies etc.
- practicing veterinarians

MAIN CATEGORIES OF INFORMATION DEMANDED BY VETERINARIANS

The main categories of information of interest from the meat inspection units, are, under normal conditions:

- cases of notifiable diseases
- cases concerning animal welfare
- statistics for internal use in the meat inspection unit and the abattoir
- various lesions as part of the surveillance systems for common diseases

In addition, the meat inspection unit might need information on health status in various herds.

Demands connected to surveillance of

common diseases will be given most attention in this paper.

Notifiable diseases. Animal welfare

The cases of notifiable diseases might be split into three categories: immediate, monthly or yearly reports. In a computerbased system the monthly and yearly reportable diseases are of interest.

Cases concerning animal welfare might be of such a nature that immediate action is necessary. For accumulation of information that might be used when evaluating different aspects of animal housing, special registration at slaughter and special reports might be carried out.

Condemnation and statistics

Condemnation of whole or parts of carcasses, and causes for this, have to be reported immediately to carcass owner and the abattoir. In addition, a yearly report about condemnations is requested. The purpose for this should be discussed and the formula for the yearly report should be harmonized with other registrations demanded.

Statistics for internal use might be information about damage to animals or carcasses, during handling and slaughtering, and registrations about hygiene standard at the slaughter line etc. Some of them can also be animal welfare questions.

Clinical condition

Such information is, in Norway, given for single animals that have been sick and have been treated, and for herds that have restrictions due to specific infections, i.e. salmonella. The information can be extended to include more general information about herds. This will make the ante mortem control better.

Surveillance of common diseases

The previous mentioned points are

well established tasks for the meat inspection units. To report lesions as a part of a surveillance system for common diseases is, today, not obviously the meat inspectors duty, as some of the information is only a service to the veterinarians, other consultants and the animal producers. It is not necessarily of interest for the sanction of the carcasses, important for the economical calculation and most often not being a notifiable disease.

For surveillance of common diseases in slaughterpig production, the Norwegian Pig Health Service has defined the following diagnoses to be the minimum required: abscesses, arthritis, pleuritis, pneumonia and "white spot liver". This level of ambition is about the same in Denmark and Sweden. However, special records when special problems arise should be possible to conduct.

The accuracy in the diagnostics is not critical for surveillance of the slaughterpig production, as a rather high prevalence of the diagnoses in question has to be found in herds that need advice. This conclusion will also comprise diseases in cattle, sheep and poultry.

For surveillance of herds that are selling animals for breeding, the registration at the meat inspection mainly will concern the respiratory system.

In countries without SPF (Specific Pathogen Free) or other intensive follow-up systems for health control, registrations at the meat inspection can be crucial in the surveillance. Accuracy in the registrations for these purposes are necessary.

Experiences in different countries are that the detection level for different lesions varies considerably between various meat inspection units. If the purpose is surveillance of breeding herds, the meat inspectors need to be well educated in pathoanatomical diagnostics.

If the herds are small, as most are in Norway, they will slaughter only a few pigs each time. To identify a few pigs from a special herd is relatively time consuming. The general opinion, before the system is thoroughly tested, is that all pigs on the line should be examined in the same way. If the prevalence of lesions is generally high, this will be quite a job. If the prevalence is low, it might be beneficial to register lesions on all carcasses instead of doing special marking and identifying of some of them. However, for special purposes, special investigation of various herds should be made possible.

One Norwegian meat inspection unit identify the number (owner) of carcasses at the same time as registering the diagnoses on the line and computerize the information immediately. Others bring the diagnoses some way on the carcasses to the slaughter operator, where all information about the carcasses is computerized. The last mentioned method seems to be the most convenient one.

Research on inheritance of resistance to diseases gets more and more attention. Large scale registrations of diseases might be necessary. Despite biotechnological progress, traditional methods for investigating inheritance of resistance to diseases should not be ruled out. If the animals can be marked with individual codes and this identification can be read at the slaughter line, there is a great opportunity to get information about inheritance of diseases and resistance to them, provided that meat inspectors are able to put precise diagnoses on the lesions.

In addition to diseases of the respiratory tract, lesions in the kidneys, the joints and in the heart might be of interest to evaluate from an inheritance point of view.

CONCLUSIONS

Most of the demands for information from the meat inspection are of the

same category in different countries. The demands connected to surveillance of common diseases will vary considerably between countries, depending on other surveillance methods in use. Without SPF systems having been established, the meat inspection data might be crucial for surveillance of breeding herds. Also SPF-herds might be controlled by registering lesions at the meat inspection in addition to other tests and registrations.

If the animals are marked individually and the meat inspectors are putting precise diagnoses on the various lesions at slaughter, this will provide greater opportunity of getting information about inheritance of diseases and the resistance to them. The need for this depends i.e. on the development and progress of new biotechnological methods.

The purpose of the registrations and the demands for information from the meat inspection should be discussed in a wide perspective before establishing an integrated information system.

When the elements involved are settled, all the registrations, records and processing of the data should be done as integrated and efficiently as possible. From one and the same data base it should be possible to select precisely the information that the various users are interested in.