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EVALUATION OF THE FRENCH FOOT-AND-MOUTH DISEASE EPIDEMIOVIGILANCE NETWORK

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Les méthodes actuelles d'analyse de risque qui se développent pour estimer et évaluer les conséquences sanitaires potentielles liées aux échanges d'animaux et des produits dérivés, reposent sur une bonne connaissance de la situation des maladies surveillées dans les pays ou les régions concernés. La pertinence des méthodes d'analyse de risque est, de ce fait, dépendante de la qualité de l'information initiale.
C'est donc pour illustrer le principe de la recherche et de l'évaluation des données de base que nous avons préparé et testé un questionnaire destiné à apprécier la qualité d'un système d'épidémiovigilance. Nous l'appliquons en prenant l'exemple du système français d'épidémiovigilance vis-à-vis de la fièvre aphteuse. Nous présentons le questionnaire utilisé et les commentaires liés à son exploitation. Ce document comporte 10 points différents regroupant 48 questions. Le temps de réponse reste raisonnable (de l'ordre d'une heure).
Le résultat final est quantitatif et permet de mesurer le niveau actuel du fonctionnement du réseau d'épidémiovigilance en France qui recueille 70 points sur un total de 100 points. Sous une forme synthétique, la figure obtenue permet d'identifier rapidement les points forts et les points à améliorer du réseau, et de proposer aussitôt les mesures de renforcement les plus appropriées.
Il serait intéressant de tester ce questionnaire sur d'autres réseaux et dans d'autres régions.

INTRODUCTION

To estimate and to evaluate the real or supposed sanitary consequences of animal and products exchanges through trade, a good knowledge of the situation of important diseases in these areas is needed. The quality of the risk analysis method is linked to the quality of initial information.
It becomes clear that any declaration of a free status for any disease must be evaluated through the method used for this claim. So here we test, a method oriented towards the appreciation of an epidemiovigilance system (Dufour, 1997). We have evaluated with it the foot-and-mouth disease epidemiovigilance network used in France. Strongly reinforced in 1992, year of the prohibition of the annual cattle vaccination against FMD within EU countries, the epidemiovigilance network for FMD in France is oriented towards the earliest as possible detection of any suspicion and its processing.
This network is a national one and is based on the sensibilisation of all farmers breeding susceptible species and on the same sensibilisation of veterinary practicionners. As soon as a clinical suspicion is detected, the farm is put under a legal control and samples are made by the local veterinary officer under the supervision of the national veterinary services. These samples are sent to one of the two authorized laboratories in the country (CNEVA Alfort and CNEVA Lyon). The results of the tests and data linked are processed in the CNEVA.
To organize the vigilance of all the participants of the network, a national sensibilisation network was performed in 1992 and 1993 and training sessions for veterinary officers have been realised every year since 1992 (four a year).
The evaluation of the way the network runs has been realised by using the evaluation method established by Dufour (1997), made of a questionnary, and quantitative evaluation grid and a notation protocole.

MATERIAL AND METHOD

The questionnary used in the assessment method is made of 48 questions arranged in 10 parts. It should be used in case of any exotic disease to the country, from which this same country wishers to stay free. So different diseases can be addressed through it. Part 1 concerns the country and the disease. Part 2 explains the way the network is running. Part 3 presents the aims, usually written as staying free. Part 4 is the sampling method, as part 5 deals with the ways the concerned people, the actors, are informed of the reasons why such a network needs to be running. Parts 6 presents the kind of tools used in this network, when part 7 explains the way the data are collected and exchanged. Environmental factors (wildlife for instance) are part 8 and in part 9 the processing and the interpretation of the data are rewed. Last part, number 10, explains how the informations are broadcast and to whom.
From a first experience with FMD in France, it took us about 1 hour ½ to fill the questionnary. By this way we tested in fact both the questionnary itself and the FMD epidemiovigilance network.

For every question, answer will be turned into a number and the maximal score is 100. For some of the answers, we admit that a good knowledge of the country is needed. For instance here we have to appreciate the awarness

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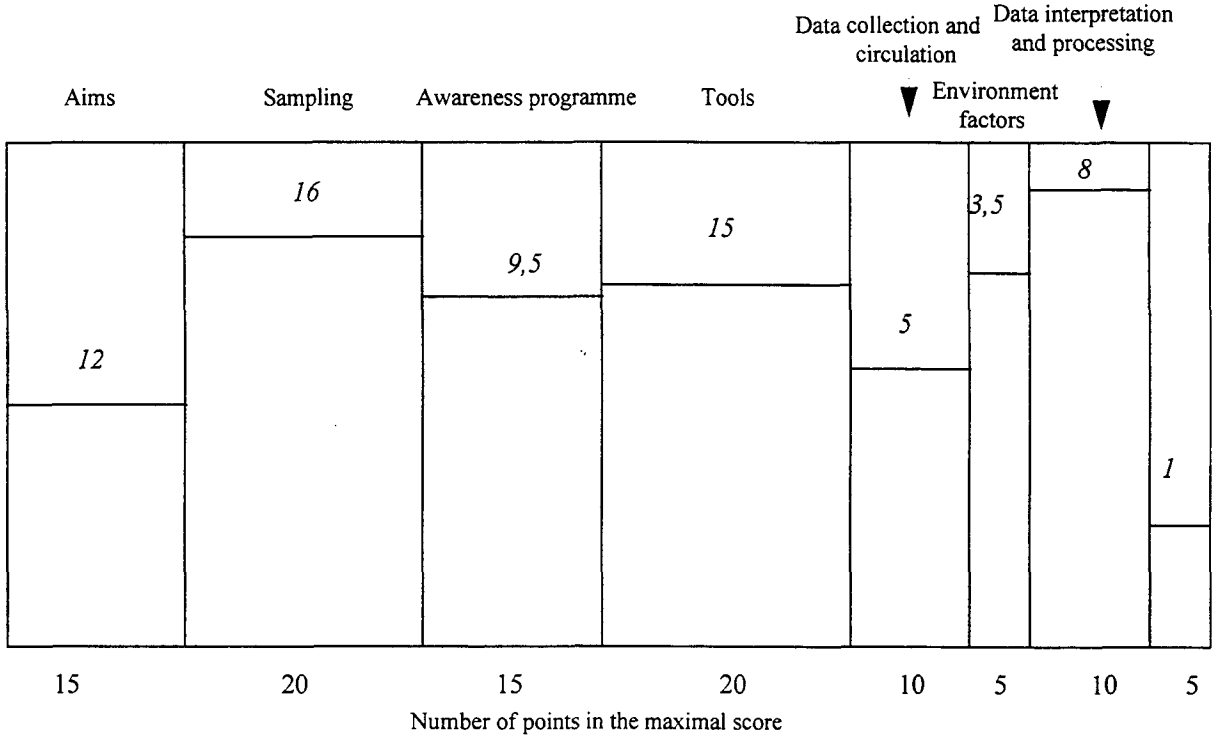
of pratictioners for FMD. As we made a random survey on 300 of them (out of the practitioners working with farm animals) a year ago we did had an objective evaluation for parts 4 and 5 for instance. The estimation of unnotified real suspicions stays a difficult point. We gave a figure of 80% suspicions notified (question 4-5) which may be discussed. The part of lost data (question 7-7) is easier to establish. These are the missing informations in the epidemiological surveys linked to any suspicion. Since the reglementation changed within European Union, with the prohibition of annual cattle vaccination against FMD, France experienced no outbreak and we were aware of about 10 suspicions a year. As already said, it is difficult, however, to assess the efficiency of the new vigilance network (Dufour, Moutou, 1994).

DISCUSSION

From this survey we obtained a 70 out of 100 score, which allows us to classify the network as sure of and ofquality. Nevertheless, two areas can be reinforced. The figure help to visualise rapidly the areras that can be improved (figure 1). The dotted part of the figure representes the actual score and the rectangle the full possible score.

Collection and circulation of data as well as exchange of information may be improved.

Figure 1
Synthetic presentation of the evaluation FMD network' results



If data linked to any suspicion were centralized rapidly, any missing data could be detected earlier, and could be ask for more efficiency then. The constitution of a data bank with all FMD suspicion may prove really usefull to analyse, in term of formation of epidemiologists or even in case of conformation of the suspicions.

The annual result, at least, of this vigilance system, should be sent to every actor, especially the praticioners, in charge of it in the field. Up to now, only the national laboratory and the central veterinary services know the number and the details of these suspicions. A larger diffusion could certainly increase also the vigilance and motivation of every partner of the network. Such a larger diffusion may be really easy and quite cheap to realise.

We have calculated that an annual meeting of 4 persons between the 2 national laboratories receiving all the suspicions would cost only about 6000 FF and improve part 7 from 5 to 8 (out of 10). If a newsletter was to be published, the score of part 10 could move from 1 to 3,5 (out of 5). This newsletter could be sent to every departemental veterinary officer every 3 monthes (100 x 4 a year) for a cost of about 8000 FF a year.

Besides this, it would be still important to test the specific sensibilisation of farmers who stay the first and most important partners in this system. Specific surveys should be addressed to them, as stratified questionnary. Cattle farmers may have a different feeling about FMD than sheep or pig farmers.

However, with just 14 000 FF (6000 + 8000) a year, the score can be moved from 71 to 77 (out of 100), as figure 2 can show it.

This questionnary has still to be test and evaluated with other diseases and in other situations, but we feel it may become important in the appreciation of the sanitary status of countries or geographical areas, being able to give a quantitative appreciation.

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