

# American Association of Avian Pathologists

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## COMPENDIUM OF VIEWS CONCERNING THE SALMONELLA PROBLEM

### AND THE AAAP COMMITTEE ON SALMONELLOSIS

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The following outline was developed from replies and suggestions sent to the AAAP Salmonellosis Committee Chairman during November 1973 in response to requests for ideas on future committee goals.

- I. Acknowledgment that a consumer confidence problem exists in relation to poultry and salmonellosis.

...it is possible to change the image of poultry as a source of human salmonella outbreaks and that it probably can best be done by a combination of efforts (1) continued investigation of means of reducing salmonella infections in and contamination of poultry and poultry products; (2) a carefully designed education program aimed at the persons concerned with preparation of poultry as a food in appropriate techniques for avoiding potential problems (obviously care must be taken not to further damage the "image." The National Pork Producers Association has, of course, had problems with this as it relates to trichinosis); and (3) concentration of possible changes in processing to reduce cross contamination (if indicated as the result of number (1)).

R.L.P.

...the poultry industry could help themselves a lot if the industry would aggressively get their house in order.

The problem won't go away by wishing. Progress can be made by all groups pulling together and recognizing that at this point we are thinking of control and not elimination of all salmonellas.

B.S.P.

The poultry industry does have an admirable image, but in order to strengthen that image it needs to reevaluate its present practices and give consideration to others.

B.C.Z.

If the poultry industry can show that it wants to reduce salmonellosis in poultry and does something about it then there will be a reduction of human salmonellosis attributed to poultry and its image in the eyes of public will change automatically.

M.C.K.

*C.K. for  
Directors of AAAP  
however*

If there is good solid information showing activity by several organizations in trying to reduce or eliminate this problem, then we need to get this before the American people in some way. The exact ways of getting this done may prove to be the biggest problem facing your committee.

J.T.T.

II. Acknowledgment of certain roots to the problem.

A. Breeding flocks.

We ... appreciate that salmonella contamination of poultry products begins with breeding flocks.

J.E.W.

The primary breeders have to concentrate on certain serotypes like typhimurium, heidelberg, St. Paul, etc. to get them out of the pipelines.

B.S.P.

For reducing or eliminating breeder flocks and hatcheries as sources of infection, the primary breeders should institute programs to produce salmonella free primary breeders before the same effect can be achieved at the grower level.

M.C.K.

B. Feeds.

Salmonella contaminated feed may be a major source of poultry salmonellosis. Attempts to eradicate salmonella from a poultry premise are useless unless the poultry producer can be supplied with salmonella free feed.

B.C.Z.

There needs to be some meaningful regulatory action put into effect ... USDA and FDA are not doing nearly enough to get regulations and requirements with real teeth in them.

J.E.W.

C. Product contamination.

The sad part of the whole situation is that the producers and processors of chicken are held responsible for the frequent irresponsible, negligent handling of their product after it leaves their control.

G.W.A.

Even though some poultry products may be salmonella free going into the processing plant, they may become contaminated at the processing plant, in transportation, or at the retail level.

An improved image of poultry products is wiped out by one salmonella outbreak, and these outbreaks will happen from time to time.

The reversal of the poultry product image in the public's eyes must be through education, based on facts regarding salmonella and other microbial problems.

D.M.W.

In general (consumer food safety) information is aimed at alerting persons preparing food at home, to the precautions that should be taken to avoid microbiological contamination of foods without drawing the connection that the possible source of this contamination might be poultry or red meat products. However, for the more sophisticated consumer, we must assume that alerting them to the problem will cause them to make such a connection because of their interface with other consumer information sources which make a point of making just such a connection.

W.B.B.

Although it is impossible to eliminate all salmonella from the environment, it is not impossible to greatly reduce their numbers with attendant benefit in the next area of the food production chain.

E.T.M.

#### D. Methods of Reporting.

How did this tarnished image of poultry as "Spreaders of Salmonellosis" ever get out of hand in the first place? I will have to admit to being one of the culprits who has added fuel to this fire along with scores of other laboratory diagnosticians. As you know, there is little difficulty in isolation of paratyphoid organisms - all you have to do is look for them. Recovery of these organisms always made a good "any port in a storm" diagnosis. How many thousands more avian gut cultures are made each year than from all other species combined? Is it any wonder that the presence of these organisms in the avian species is much more fully documented than that of any other species. In the same light, is it any wonder that paper epidemiologists have perported to the avian species to be "Paratyphoid Marys."

G.W.A.

Salmonella diagnoses in poultry are generally reported routinely to NPIP on Form 29. Proper form completion requires inclusion of the serotype encountered and this is often determined by referral of the isolate to Veterinary Services (VS), USDA. The results of serotyping by VS are automatically included in the CDC Salmonella Report. Salmonella diagnoses in mammalian livestock are not generally reported in this manner. As a consequence there is less pressure to have mammalian isolates serotyped by VS and therefore less chance that mammalian cases will appear in the CDC Report. Serious, persistent outbreaks of salmonellosis in mammals can easily go unreported while a high percent of poultry cases, some nearly subclinical, are dutifully drawn into the CDC Report.

E.T.M.

### III. Recommendations concerning committee goals.

#### A. Poultry flocks.

We as a committee can continue our efforts to put into force active programs to decrease (salmonella contamination). This basically, it seems to me, is the primary goal of our committee. We can establish standards for monitoring, cleaning up, and maintaining the salmonella-free status of breeding stock in the United States as a beginning.

J.E.W.

(Securing a real decrease in the extent of contamination) is entirely within our conventional sphere of interest. I will somewhat tentatively suggest that in the next year or two we attempt to define the problem and reach agreement on what can and cannot be done on a practical basis with current "tools" to reduce the incidence of contamination.

G.H.S.

Perhaps a coordination or compilation of this (practical field work in salmonella control in breeders) with more publication of results obtained when these programs are implemented by the industry would obtain the desired results.

J.N.A.

As a committee we can look forward to the possible establishment of a future program under which production flocks of market chickens are examined serologically, by litter sampling, by FA, and by cloacal swab to establish their state of exposure to salmonellae.

J.E.W.

B. Feeds.

Our committee should strive diligently to get poultry feeds in the USA cleaned up and free of salmonella.

J.E.W.

C. Product safety and acceptability.

I firmly believe that rather than send the poultry industry off on another ... control or eradication program ... the efforts should be channeled in the direction of education of food distributors, handlers, and consumers... I feel that a much more rational approach to this "problem" would be for this committee to develop a realistic and effective set of recommendations and guidelines aimed towards education rather than government control.

G.W.A.

Whether or not the AAAP Committee on Salmonellosis should be involved in this problem (education of homemakers on proper food handling) is debatable.

D.M.W.

(Changing the dirty image based on the current nature and extent of the industry problem) is a very difficult public relations job that requires primary leadership from the industry. As a scientific group, I think we should confine ourselves to a supporting role by serving as an information source if industry decides, perhaps with our encouragement, to make the effort. In this sense public relations is not our "bag" and is not compatible with our effort as scientists.

G.H.S.

D. National reporting.

Representatives of APHIS have indicated interest in suggestions from this committee for changes in the format, frequency, and distribution of the National Salmonella Report. We might, therefore, explore ways to obtain field and diagnostic laboratory data that would assure a more realistic picture of the national prevalence and costs of salmonellosis in mammalian livestock as well as poultry.

E.T.M.

E. Research

USDA should be requested to conduct research ... to come up with recommended programs for reducing salmonella infection in poultry so that poultry does not serve as the one of the major sources of salmonellosis in human beings. ... We as a committee should request FDA or USDA to initiate research and programs to produce salmonella free sources of animal protein for animal feed.

M.C.K.

...critically important "tools" are yet to be developed. Defining voids in current capabilities, as well as current capabilities, might help secure activity and support toward the goal of a dependably "clean" product.

G.H.S.

F. Industry support.

Arrange the (Salmonella control) recommendations (Chapter 7 of the NAS publication An Evaluation of the Salmonella Problem) in a priority listing for practicality and attainability and then promote investigations, research, and educational campaigns to get them adopted by the poultry industry.

J.N.A.

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