RESOLUTION NUMBER:  9  Approved

SOURCE:   COMMITTEE ON POULTRY AND OTHER AVIAN SPECIES

SUBJECT MATTER:   Egg Drop Syndrome Epizootiology

BACKGROUND INFORMATION:

Egg drop syndrome (EDS) became established as a problem in Pennsylvania in 2018 with 7 confirmed cases to date. In Indiana, 52 cases have emerged since August 30, 2021, in a highly dense, two-county cage free layer area. In Michigan, a broiler breeder farm in southern Michigan became infected in September of 2022. Over 800,000 layers were depopulated in an effort to eradicate the disease, but this effort failed as unvaccinated replacement pullets, moved to previously positive houses, broke with the disease again. White egg layers are also being reported as being infected and starting to show signs of poor production.

The chicken layer industry is fearful that this virus may be spread to other states or other areas in affected states due to the lack of knowledge of the proper techniques to prevent spread such as on egg handling materials, bird movement vehicles, etc. Eggs are moved widely in the industry on reused egg handling materials onto farms where the birds reside providing a risk of movement of EDS virus into flocks. Vaccines are not available in the United States (US) for routine use, so all egg laying chickens in the US are fully susceptible.

This EDS Atadenovirus is not easily isolated with our only tool for surveillance being the polymerase chain reaction (PCR) test or serology. PCR can detect either live or dead virus so using this means of evaluating cleaning and disinfection is not meaningful if a positive PCR result is obtained.

Specifically, the following are needs as viewed by veterinarians involved with this problem:

- A reproducible means of isolating the virus to aid in studies on virus elimination using cleaning and disinfection, effect of heat, effect of composting, stability in the environment, etc.
- Better knowledge of the effectiveness of decontamination of egg handling materials that are reused and sent onto farms – plastic flats, pallets
- Identify reservoirs of the EDS virus that may include wild birds, white egg layers, and ducks (domestic or wild)
  - Wide surveillance by PCR or serology would be helpful to determine these reservoirs.
- Identify vectors involved with spread of the disease such as insects, people, wild birds, or others
- Effective procedures for decontaminating EDS positive poultry houses

RESOLUTION:

The United States Animal Health Association urges Congress to allocate additional funds for the United States Department of Agriculture to continue researching the epizootiology of the egg drop syndrome virus to help prevent the further spread and strategies to eradicate the virus in the United States egg industry.