

THE CHICK PAPERS

Georgia Poultry Laboratory Network's Monthly Newsletter



A REV Serology Study in Georgia Broiler Breeders

By: Dr. Louise Dufour-Zavala and Brenda Glidewell

RETICULOENDOTHELIOSIS (REV) AND REV SEROLOGY:

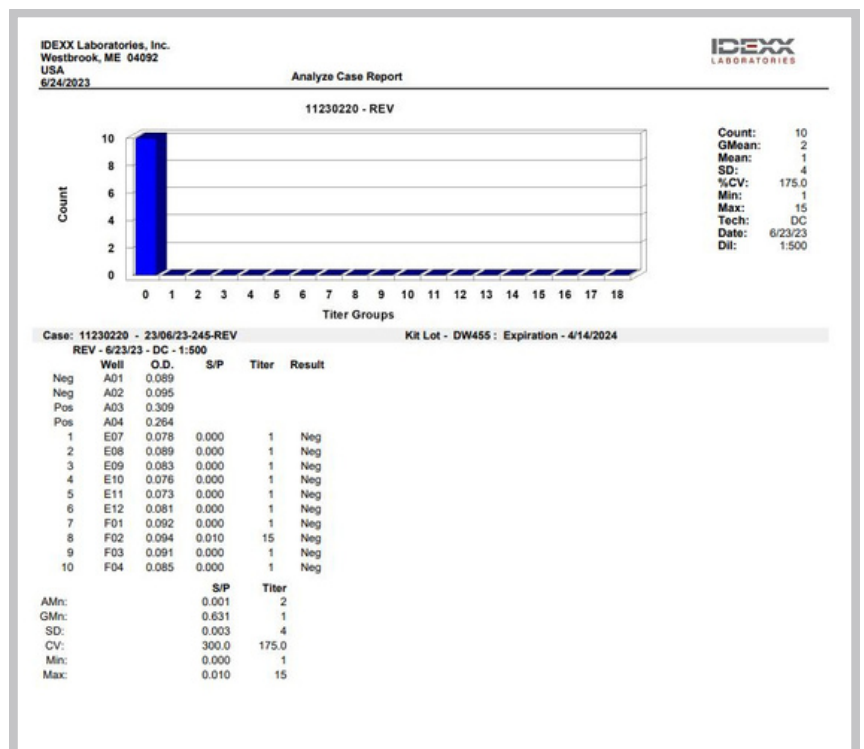
REV is one of the retroviruses that can cause tumors in poultry and is immunosuppressive if the infection occurs at an early age. When exposed later in life (after 10 weeks of age), chickens will likely develop neutralizing antibodies but may not necessarily develop tumors or immunosuppression. The virus is transmitted by blood sucking insects, and between chickens, can be transmitted horizontally or vertically from hen to chick although late infections may not lead to horizontal or vertical transmission.

SOURCES OF THE VIRUS:

Some naturally occurring pox viruses' genome have insertions of REV, making infections by pox virus a possible source of REV in chicken flocks. Contamination of vaccines with REV is rare but has been described as one of the possible sources of REV infections.

SEROLOGICAL SURVEY (2023):

With available REV antibody test kits from IDEXX, GPLN tested 90 broiler breeder flocks between 30 and 45 weeks of age from all over Georgia to determine if flocks showed any evidence of exposure. We tested 10-15 samples per flock, or approximately 1,000 samples.



RESULTS:

Out of 90 flocks, 5 had titers in 1-5 chickens with those titers barely over the positive cut-off. None of the flocks had any tumor problems and none had a positive GMT. Above is an example of a negative flock profile. This study gives us an REV baseline of negativity for Georgia flocks. Although REV infection is usually confirmed by PCR or virus isolation, serology is useful to detect exposure of a flock to REV, so this baseline will be important knowledge in the interpretation of REV titers in Georgia.

VISITORS & TOURS

MARK YOUR CALENDARS

THE 87TH ANNUAL MEETING

WEDNESDAY, OCTOBER 4TH

Audi Gumbs with USDA (far right) accompanied by Heath Jackson with GDA (middle) had a guided tour of the lab with Len Chappell.



CDC scientists toured the lab with two of our premier tour guides, Dr. Zavala and Dr. Waltman.

Pictured from left to right: Naomi Drexler, Beth Karp, Hattie Webb, Kaitlin Tagg, Dr. Louise Dufour-Zavala, Marta Zlotnick, Marisa Hast, Alexis Caplan, and Dr. Doug Waltman.



UGA Small Business Development Office toured the lab with Dr. Waltman mid-August.

