



**Joyce Veterinary
Services**



Dr. Jessalyn Walkey

HDC Disease Update

February 12, 2020



Top Broiler Diseases – 2019 (948 cases)

Disease	Incidence	Total Cases 2019 (1125 Dx)	Total Cases 2018 (686 Dx)
Colibacillosis	34%	380	228
Infectious Bronchitis Virus (IBV)	10.4%	120	40
Coccidiosis	8.3%	97	34
Reovirus/Valgus-Varus Deformity (VVD)	7.4%	84	80
Proventricular Dilation Syndrome (PDS)/Proventriculitis	5.6%	63	1
Runting Stunting Syndrome (RSS)	4.8%	54	28
Infectious Bursal Disease (IBD)	4.7%	53	30





Runting/Stunting Syndrome

Runting Stunting Syndrome (Astrovirus)

DEFINITION: VIRAL INFECTION OF INTESTINAL TRACT IN BROILER CHICKENS CAUSING MARKED MALABSORPTION, STUNTING/RUNTING AND IMMUNOSUPPRESSION.

Age of Onset: 5-6 days → continual through life of flock

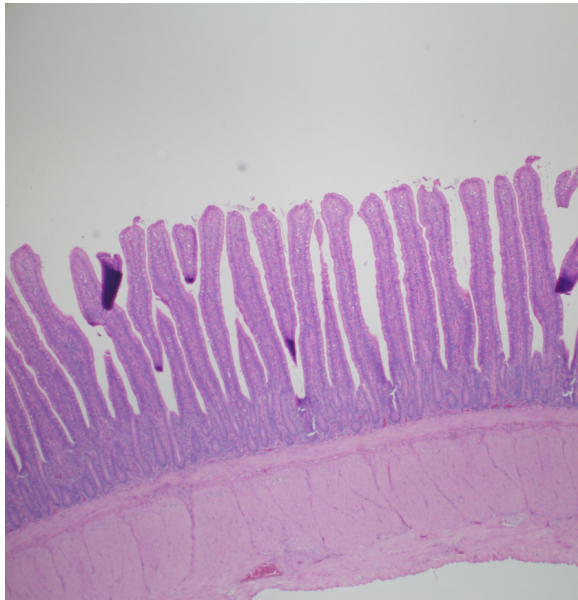
How Diagnosed:

- i) Inability to meet 7-day target weights
- ii) Clinical presentation
- iii) Gross PM findings
- iv) Histopathology (10 – 14 days)**

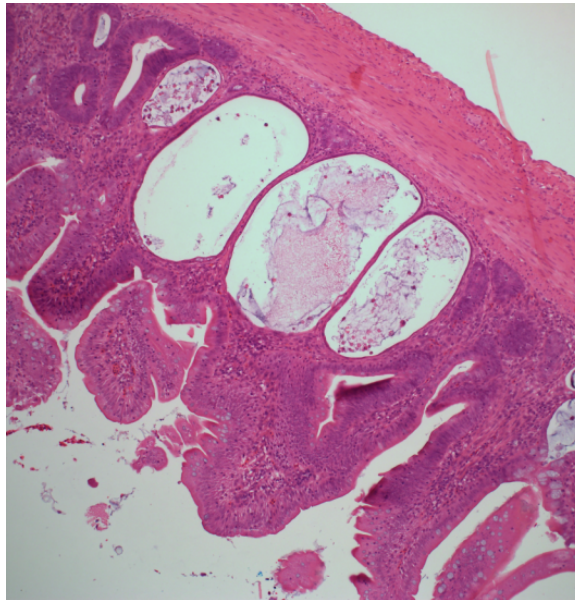
Cause: Viral; Georgia astrovirus

Treatment: None; support immune system; culling

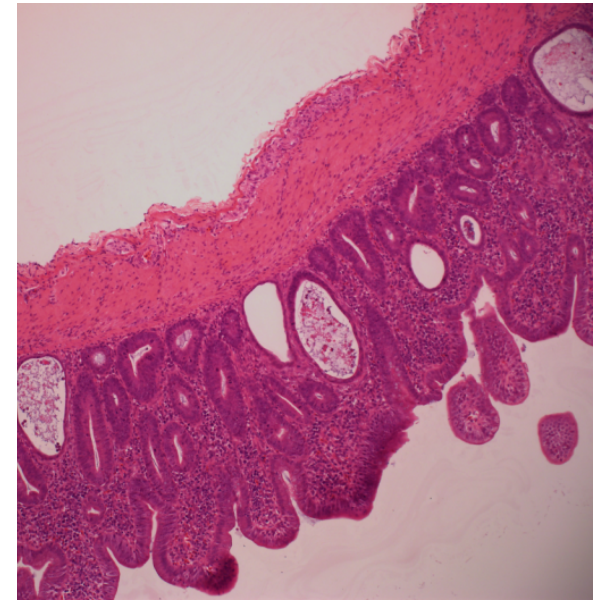




Normal small intestine

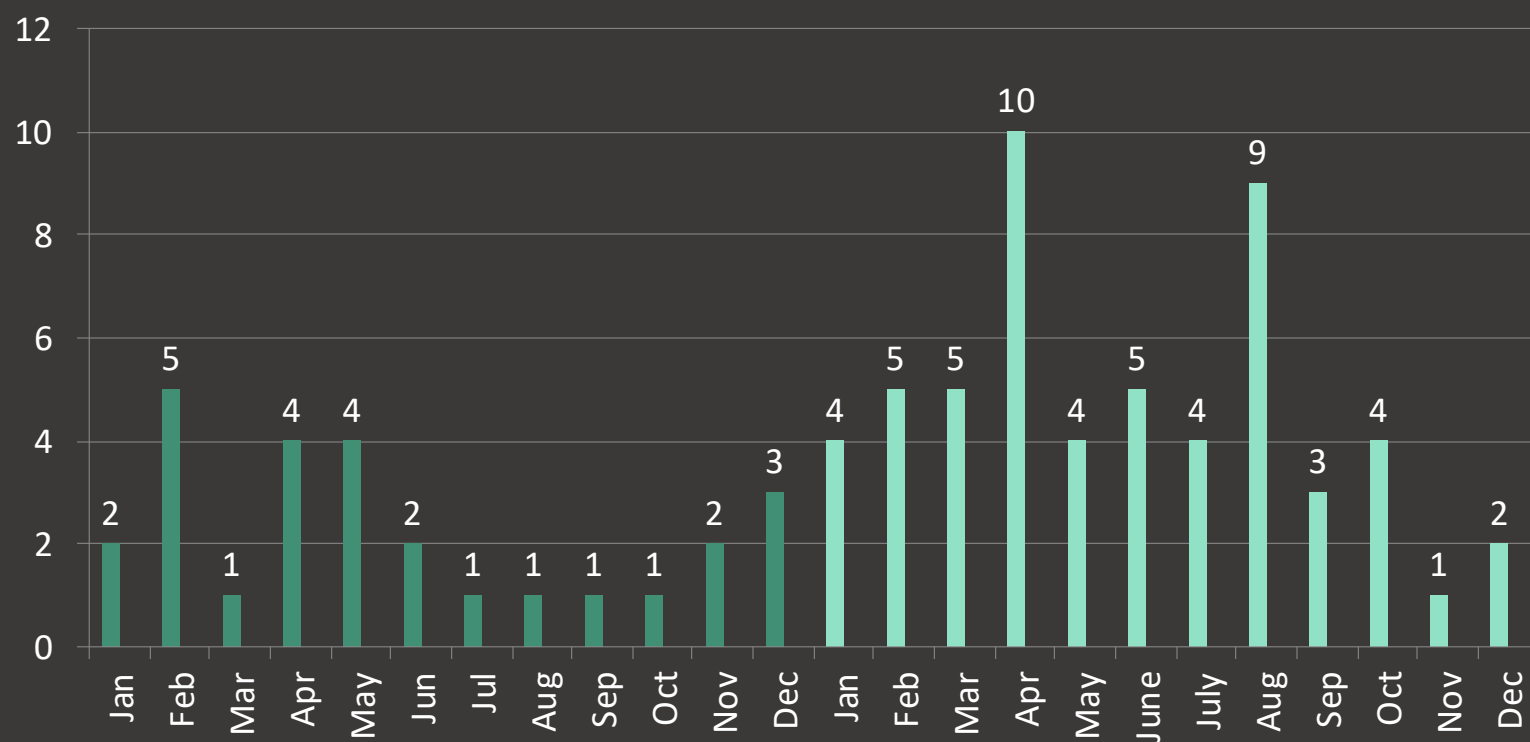


Villus atrophy, villus fusion and cystic crypts typical of RSS



Histological Findings

Incidence of Runting Stunting Syndrome 2018-2019





Joyce Veterinary Services

Practice Limited to Poultry

Dr. Mike Joyce
D.V.M., Dip Path., Diplomate A.C.P.V.

Dr. Jessalyn Walkey
BSc.H., D.V.M.

email: office@joyceveterinaryservices.com
office: 519-855-4606, fax 519-855-4483

9367 Wellington Rd. 22, RR#1, Hillsburgh, Ontario, N0B 1Z0

RUNTING STUNTING SYNDROME

Technical bulletin brought to you by:

Hensall District Co-op



OVERVIEW

Viral infection affecting the intestinal tract of young broiler chickens. RSS causes marked malabsorption, runting & immunosuppression. Birds are unable to catch up on weights causing uneven sizes through the life of the flock. The virus is transmitted vertically & horizontally, and males appear more susceptible than females.

CAUSE

Chicken Astrovirus (CAstV)

Georgia strain most commonly associated with RSS

CLINICAL SIGNS

Key indicators of RSS include:

Low weights in first days of life

Inability to meet 7-day target weights

Poor weight/size uniformity for duration of flock

Excessive culling and birds left in the barn after shipping

POSTMORTEM FINDINGS

PM ideally performed between 8-14 days

Lesions commonly seen include thin-walled, dilated intestines and watery intestinal contents. Given that RSS can cause immunosuppression, lesions of bacterial septicemia and bursal atrophy can also be seen.

DIAGNOSIS

Histopathology

Gut samples (including duodenum, jejunum, and pancreas) are fixed in formalin during PM at day 8-14.

Samples are submitted for histopathology at the University of Guelph, where RSS is either confirmed or ruled out.



Uneven chicks



Poor ADG & FCR



Impacts performance & profits



JVS RSS cases doubled 2018 to 2019

TREATMENT & PREVENTION

Unfortunately, there is no treatment or vaccine currently available for RSS. If

RSS is diagnosed in your flock, a supportive therapy program and C&D protocol will be determined based on severity, concurrent challenges, and flock status. Consult your veterinarian for further information.