



Proficiency testing for veterinary laboratories

Distribution Date: 05/05/2020

Results tabulation for 14175/BA PT0088: Salmonella in poultry

Culture	20/1363		20/1364		20/1365		20/1366		20/1367	
	Interpretation (+ve/-ve/IC)	Salmonella Group/Type	Interpretation (+ve/-ve/IC)	Salmonella Group/Type	Interpretation (+ve/-ve/IC)	Salmonella Group/Type	Interpretation (+ve/-ve/IC)	Salmonella Group/Type	Interpretation (+ve/-ve/IC)	Salmonella Group/Type
Intended	Salmonella Typhimurium (approx. 300 cfu per vial)		Salmonella Enteritidis (approx. 1000 cfu per vial)		Salmonella Typhimurium monophasic (approx. 400 cfu per vial)		Salmonella Enteritidis (approx. 20,000 cfu per vial) + Escherichia coli		Citrobacter youngae + Escherichia coli	
	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	Negative
1002	+ve	B:4,12	+ve	D1: 9,12	+ve	Group B 4, 12	+ve	D1: 9,12	-ve	Not detected
1023	+ve		+ve		+ve		+ve		-ve	
1033	+ve	D/Enteritidis	+ve	B/Typhimurium	+ve	D/Enteritidis	+ve	B/1,4,5,12:i-	-ve	
1067	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S.Typhimurium*	+ve	S. Enteritidis	-ve	
1076	+ve	S. typhimurium	+ve	S. enteritidis	+ve	S. typhimurium	+ve	S. enteritidis	-ve	
1081	+ve	GROUP B	+ve	S. Enteritidis	+ve	S. Enteritidis	+ve	S. Enteritidis	-ve	Not Detected
1089	+ve		+ve		+ve		+ve		-ve	
1095	+ve		+ve		+ve		+ve		-ve	
1096	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	Negative
1114	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S. Typhimurium	+ve	S. Enteritidis	-ve	
1115	+ve	Typhimurium	+ve	Enteritidis	+ve	4,5,12:i-	+ve	Enteritidis	-ve	
1125	+ve		+ve		+ve		+ve		-ve	
1133	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
1143	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	Negative
1157	+ve	Salm. (Gp.B)	+ve	Salm. (Gp.D)	+ve	Salm. (Gp.B)	+ve	Salm. (Gp.D)	-ve	
1158	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S.Typhimurium,m	+ve	S. Enteritidis	-ve	-
1161	+ve		+ve		+ve		+ve		-ve	
1198	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
1217	+ve	O:4 (B)	+ve	O:9 (D1)	+ve	O:4 (B)	+ve	O:9 (D1)	-ve	
1220	+ve	Group B	+ve	Group D	+ve	Group B	-ve		-ve	
1228	+ve		+ve		+ve		+ve		-ve	
1235	+ve		+ve		+ve		+ve		-ve	
1246	Nil return									
1261	Nil return									
1297	+ve		+ve		+ve		+ve		-ve	
1318	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
1340	+ve		+ve		+ve		+ve		-ve	
1374	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	Citrobacter
1382	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S. Typhimurium	+ve	S. Enteritidis	-ve	
1387	+ve	Serogroup B	+ve	Serogroup D	+ve	Serogroup B	+ve	Serogroup D	-ve	
1436	+ve	S.Typhimurium	+ve	S.Enteritidis	+ve	O4, Hi, -	+ve	S.Enteritidis	-ve	
1521	Nil return									
1559	-ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S.Typh. monof.	+ve	S. Enteritidis	-ve	
1614	+ve	not serotyped	+ve	not serotyped	+ve	not serotyped	+ve	not serotyped	-ve	
1626	Nil return									
1641	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
1647	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	external seroty	+ve	S. Enteritidis	-ve	
1648	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
1654	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
1669	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S. Typhimurium	+ve	S. Enteritidis	-ve	
1674	+ve	S.Typhimurium	+ve	S. Enteritidis	+ve	4,12:i-	+ve	S.Enteritidis	-ve	
1700	+ve	typhimurium B	+ve	enteritidis D1	+ve	typhimurium m B	+ve	enteritidis D1	-ve	
1733	+ve		+ve		+ve		+ve		-ve	

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Intended	Salmonella Typhimurium (approx. 300 cfu per vial)		Salmonella Enteritidis (approx. 1000 cfu per vial)		Salmonella Typhimurium monophasic (approx. 400 cfu per vial)		Salmonella Enteritidis (approx. 20,000 cfu per vial) + Escherichia coli		Citrobacter youngae + Escherichia coli	
	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	Negative
1759	+ve		+ve		+ve		+ve		-ve	
1770	+ve	S. typhimurium	+ve	S. enteritidis	+ve	Group B	+ve	S. enteritidis		
1798	+ve	S. typhimurium	+ve	S. enteritidis	+ve	B / i,	+ve	S. enteritidis	-ve	
1812	+ve	b/Typhimurium	+ve	D/Enteritidis	+ve	B/4,[5],12:i-	+ve	d/Enteritidis	-ve	
1853	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S. Typhimurium	+ve	S. Enteritidis	-ve	
1884	+ve		+ve		+ve		+ve		-ve	
1894	+ve	S.Typhimurium	+ve	S.enteritidis	+ve	S.typhimurium	+ve	S. enteritidis	-ve	
1944	+ve	B Typhimurium	+ve	D Enteritidis	+ve		+ve		-ve	
1980	+ve	S.TyphimuriumB	+ve	S.EnteritidisD1	+ve	S.TyphimuriumMP	+ve	S.EnteritidisD1	-ve	
2011	+ve		+ve		+ve		+ve		-ve	
2021	+ve	Salmonella spp	+ve	Salmonella spp	+ve	Salmonella spp	+ve	Salmonella spp	-ve	
2053	+ve	Salmonella spp	+ve	Samonella spp	+ve	Salmonella spp	+ve	Salmonella spp	-ve	
2062	+ve		+ve		+ve		+ve		-ve	
2098	+ve	B Typhimurium	+ve	D Enteritidis	+ve	B 4,5,12:i:-	+ve	D Enteritidis	-ve	Not Salmonella
2111	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	4:i:-	+ve	S. Enteritidis	-ve	
2112	+ve	B	+ve	D	+ve	B	+ve	D	-ve	n/a
2131	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S. Typhimurium	+ve	S. Enteritidis	-ve	not detected
2143	+ve	S. Typhimurium	+ve	S.Enteritidis	+ve	S.Typhimurium	+ve	S. Enteritidis	-ve	
2151	+ve		+ve		+ve		+ve		-ve	
2204	+ve		+ve		+ve		+ve		-ve	
2212	+ve	Salmonella spp	+ve	Salmonella spp	+ve	Salmonella spp	+ve	Salmonella spp	-ve	
2229	+ve	S. typhimurium	+ve	S. Enteritidis	+ve	S.Typh.monoph.	+ve	S. Enteritidis	-ve	
2240	+ve		+ve		+ve		+ve		-ve	
2266	+ve		+ve		+ve		+ve		-ve	
2356	+ve		+ve		+ve		+ve		-ve	
2412	+ve	Typhimurium	+ve	Enteritidis	+ve	1,4,[5],12:i:-	+ve	Enteritidis	-ve	Negative
2426	+ve		+ve		+ve		+ve		-ve	
2441	+ve		+ve		+ve		+ve		-ve	
2455	+ve		+ve		+ve		+ve		-ve	
2459	+ve	O4	+ve	O9	+ve	O4	+ve	O9	-ve	
2472	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve		+ve	S. Enteritidis	-ve	
2529	+ve		+ve		+ve		+ve		-ve	
2532	+ve	B/S.typhimurium	+ve	D/S.enteritidis	+ve	B/S.typhimurium	+ve	D/S.enteritidis	+ve	D/S.enteritidis
2552	+ve		+ve		+ve		+ve		-ve	
2573	+ve		+ve		+ve		+ve		-ve	
2578	+ve	B+	+ve	D+	+ve	B+	+ve	D+	-ve	
2626	+ve		+ve		+ve		+ve		-ve	
2636	+ve		+ve		+ve		+ve		-ve	
2662	Nil return									
2670	+ve	Group B	+ve	Group D1	+ve	Group B	+ve	Group D1	-ve	
2753	+ve		+ve		+ve		+ve		+ve	
2762	+ve		+ve		+ve		+ve		-ve	
2767	+ve	GpB/subsp 1	+ve	GpD/subsp 1	+ve	GpB/subsp 1	+ve	GpD/subsp 1	-ve	
2816	+ve		+ve		+ve		+ve		-ve	
2886	+ve		+ve		+ve		+ve		-ve	
2897	Nil return									
2907	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	
2926	+ve		+ve		+ve		+ve		-ve	
2930	+ve		+ve		+ve		+ve		-ve	

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Intended	Salmonella Typhimurium (approx. 300 cfu per vial)		Salmonella Enteritidis (approx. 1000 cfu per vial)		Salmonella Typhimurium monophasic (approx. 400 cfu per vial)		Salmonella Enteritidis (approx. 20,000 cfu per vial) + Escherichia coli		Citrobacter youngae + Escherichia coli	
	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	Negative
2959	+ve		+ve		+ve		+ve		-ve	
3002	+ve		+ve		+ve		+ve		-ve	
3015	+ve		+ve		+ve		+ve		-ve	
3020	+ve	S. Typhimurium	+ve	S. Enteritidis	+ve	S. Typhimurium	+ve	S. Enteritidis	-ve	
3061	+ve		+ve		+ve		+ve		-ve	
3076	+ve	salmonella spp	+ve	salmonella spp	+ve	salmonella spp	+ve	salmonella spp	-ve	
3086	+ve	Typhimurium	+ve	Enteritidis	+ve	Typhimurium	+ve	Enteritidis	-ve	
3154	+ve	Salmonella 1	+ve	Salmonella 1	+ve	Salmonella 1	+ve	Salmonella 1	-ve	Citrobacter
3205	+ve	B/Typhimurium	+ve	D/Enteritidis	+ve	B/Typhimurium	+ve	D/Enteritidis	-ve	
3290	+ve	O:4	+ve	O:9	+ve	O:4	+ve	O:9	-ve	
3361	+ve	Group B	+ve	Group D	+ve	Group B	+ve	Group D	-ve	

Intended results were determined using BPW into MSRV agar.

Comments provided by Michael Elliott, APHA Newcastle

Sample 20/1363 - Salmonella Typhimurium +ve Group B

All labs correctly identified the presence of Salmonella, and where provided the correct serotype / species, in this sample, with the exception of Lab 1033 incorrectly reported as Gp D Enteritidis and Lab 1559 recorded a negative result when also recovered as Typhimurium (likely to be a drop-down menu selection error).

Sample 20/1364 - Salmonella Enteritidis +ve Group D

All labs correctly identified the presence of Salmonella, and where provided the correct serotype / species, in this sample, with the exception of Lab 1033 who incorrectly reported as Gp B Typhimurium.

Sample 20/1365 - Salmonella Typhimurium monophasic +ve Group B

All labs correctly identified the presence of Salmonella, and where provided the correct serotype / species, in this sample, with the exception of Lab 1033 incorrectly reported as Gp D Enteritidis and Lab 1081 incorrectly reported as Enteritidis. Furthermore, several labs omitted to indicate identifying this Typhimurium being monophasic.

Sample 20/1366 - Salmonella Enteritidis & Escherichia coli +ve Group D

All labs correctly identified the presence of Salmonella, and where provided the correct serotype / species, in this sample, with the exception of Lab 1033 reported as Gp B (4,5,12:i-) which is indicative of monophasic Typhimurium, Lab 1220 did not isolate a Salmonella species from this sample, while Lab 1382 had correctly reported Enteritidis but didn't select a +ve interpretation result.

Sample 20/1367 - Citrobacter youngae & Escherichia coli -ve

All labs correctly identified the absence of Salmonella in this sample, with the exception of Lab 1770 did not report a result for this sample, Lab 2532 incorrectly reported a Gp D Enteritidis and Lab 2753 reported a +ve interpretation for this sample.

Lab 1033 had isolated four Salmonella species from the five samples and correctly identified sample 20/1367 as negative. It is likely that there had been some sample handling error with the other samples, as they did identify two Typhimurium (one biphasic and the other monophasic) and two Enteritidis samples, just in the wrong order. This warrants an investigation to rule out a wider performance issue with their Salmonella identification technique. Lab 1081 should also investigate the identification error for sample 20/1365.

Labs 1220, 1559, 2532 & 2753 should investigate their erroneous results, to identify potential weaknesses in their isolation procedures.

The remaining anomalies appear to be typing errors or omissions at the data entry stage.

There were 6 Nil Returns from labs 1246, 1261, 1521, 1626, 2662 & 2897.

Vetqas comment: Participants in this distribution were from countries including South Africa, Italy, Serbia, The Netherlands, Republic of Korea, Portugal, UK, Turkey, Canada, Belgium, Eire, Croatia, Germany, USA, Thailand, Spain, Greece, Malaysia, Cyprus, Australia and Brazil.



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Version: 05/12/2017

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Authorised: 24/06/2020