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NVSL SALMONELLA, MYCOPLASMA, AND PASTEURELLA MULTOCIDA UPDATE

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NPIP Group D *Salmonella* Proficiency Test

	2011	2012	2013	2014	2015
Participants	70	73	61	80	94
Mean Score	97%	92%	94%	98%	98%
Score Range	100-85%	100-29%	100-68%	100-80%	100-68%
Below Passing	0	7	4	0	1



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NPIP *Salmonella* serotyping Proficiency Test

	Serogrouping 2013	Serotyping 2013	Serogrouping 2014	Serotyping 2014	Serogrouping 2015	Serotyping 2015
Participants	18	14	34	23	34	21
Mean Score	98%	98.5%	99%	95%	97%	88%
Score Range	100-90%	100-90%	100-80%	100-80%	100-80%	100-60%



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Salmonella Serotyping

- 13,880 isolates submitted in 2015
 - 4,976 clinical
 - 6,396 non-clinical
 - 2,508 research and other
- 5,536 from chicken/turkey sources



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Most Common Serotypes – Chickens 2015

Rank	Clinical	Non-Clinical
1	Enteritidis	Senftenberg
2	Kentucky	Kentucky
3	Typhimurium	Enteritidis
4	Braenderup	Worthington
5	Heidelberg	Montevideo



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Salmonella Group D₁

- Chicken submissions, clinical + non-clinical
- 556 Group D₁ isolates
- 513 (91%) were SE
- Other 9%: Alabama, Berta, and Javiana



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Most Common Serotypes – Turkeys 2015

Rank	Clinical	Non-Clinical
1	Senftenberg	Senftenberg
2	Ouakam	Hadar
3	Muenchen	Anatum
4	Albany	London
5	4,[5],12:i:- / Typhimurium	Muenster



Molecular Typing: SE assay

- SE rule out testing for FDA egg rule
 - Receipt of samples that were not typeable via classic testing
 - Rough O:g,m:-
 - 9,12:poorly-motile
 - 9,12:non-motile
- xMAP *Salmonella* assay to determine the presence of *sdf* gene
 - *sdf* specific to SE



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Salmonella Pullorum

- 465 *Salmonella* Pullorum serological tests
- 2,550 mL *Salmonella* Pullorum tube antigen provided
- 1,175 mL *Salmonella* Pullorum stained microtiter antigen provided
- 338 mL of control antisera provided



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NVSL *Pasteurella multocida* Update

- 149 isolates for somatic typing
- 114 isolates for DNA fingerprinting
- 124 vials of antisera supplied
- 25 reference isolates supplied



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NVSL Avian *Mycoplasma* Update

- 282 Hemagglutination inhibition tests
- 320 mL of Hemagglutination antigen supplied
 - 70 mL MG
 - 45 mL MM
 - 205 mL MS
- 868 mL of control antiserum supplied
 - 290 mL MG
 - 68 mL MM
 - 260 mL MS
 - 250 mL Negative control



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Salmonella serotyping

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