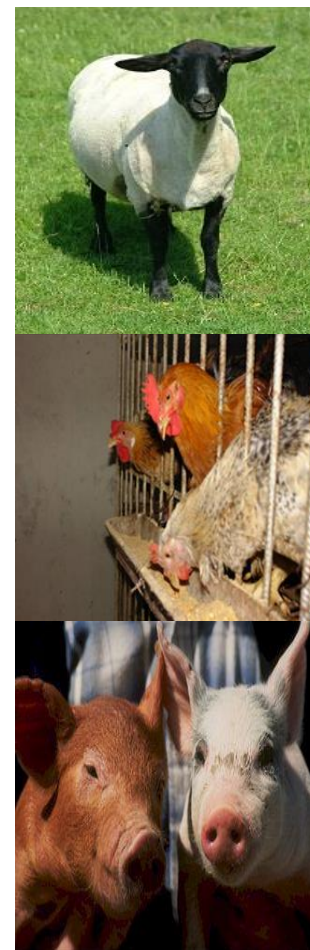


NVSL *Salmonella* Update

Brenda Morningstar-Shaw
Microbiologist

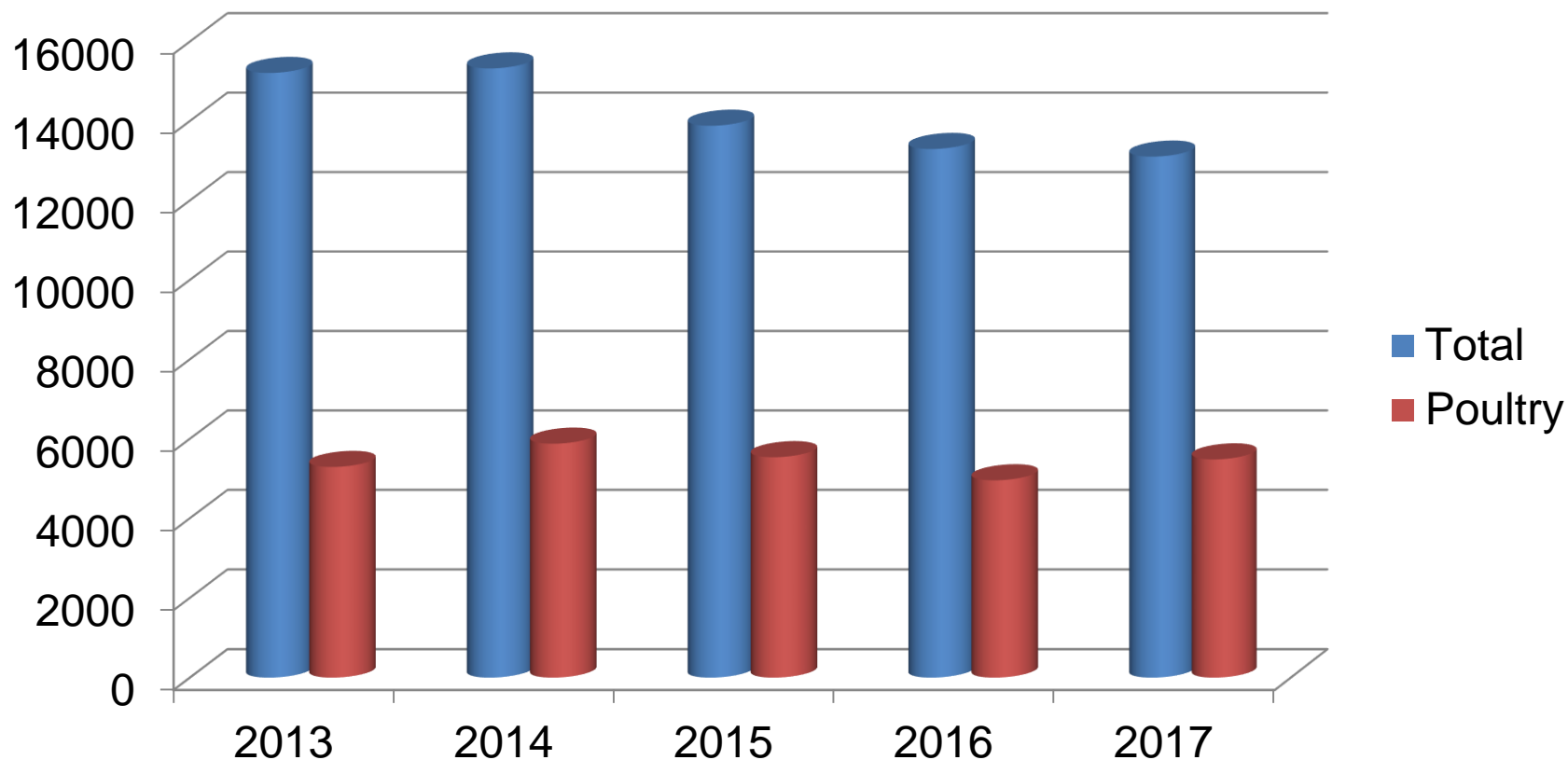
U.S. Department of Agriculture
Animal and Plant Health Inspection Service
Veterinary Services
Science, Technology and Services



***Salmonella* Serotyping**

- 13,103 isolates submitted in 2017
 - 5,479 Clinical
 - 5,489 Non-Clinical
 - 2,135 Research and other
- 5,481 from chicken/turkey sources

Isolates Received 2013-2017





5 Year Serotyping Summary

Year	Total Isolates	Total Clinical Isolates	Total Poultry Clinical Isolates	Total Non-Clinical Isolates	Total Poultry Non-Clinical Isolates
2013	15,209	5,516	601	6,753	4,688
2014	15,353	4,897	525	6,687	5,351
2015	13,880	4,976	498	6,396	5,038
2016	13,295	5,258	546	5,727	4,408
2017	13,103	5,479	679	5,489	4,802



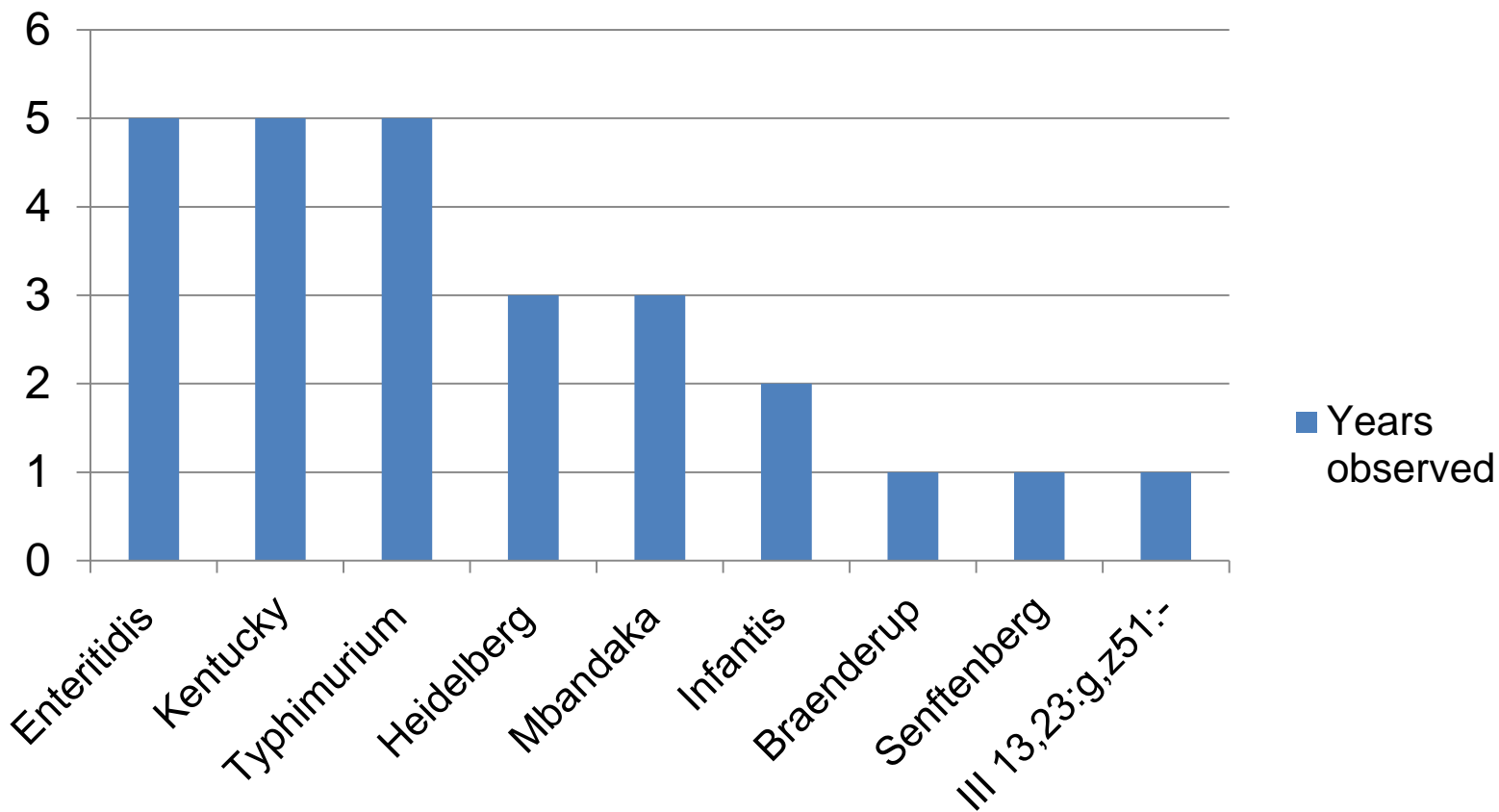
Most Common Serotypes – Chickens 2017

Rank	Clinical	Non-Clinical
1	Enteritidis	Kentucky
2	Typhimurium	Senftenberg
3	Kentucky	Mbandaka
4	Mbandaka	Enteritidis
5	Infantis	Worthington

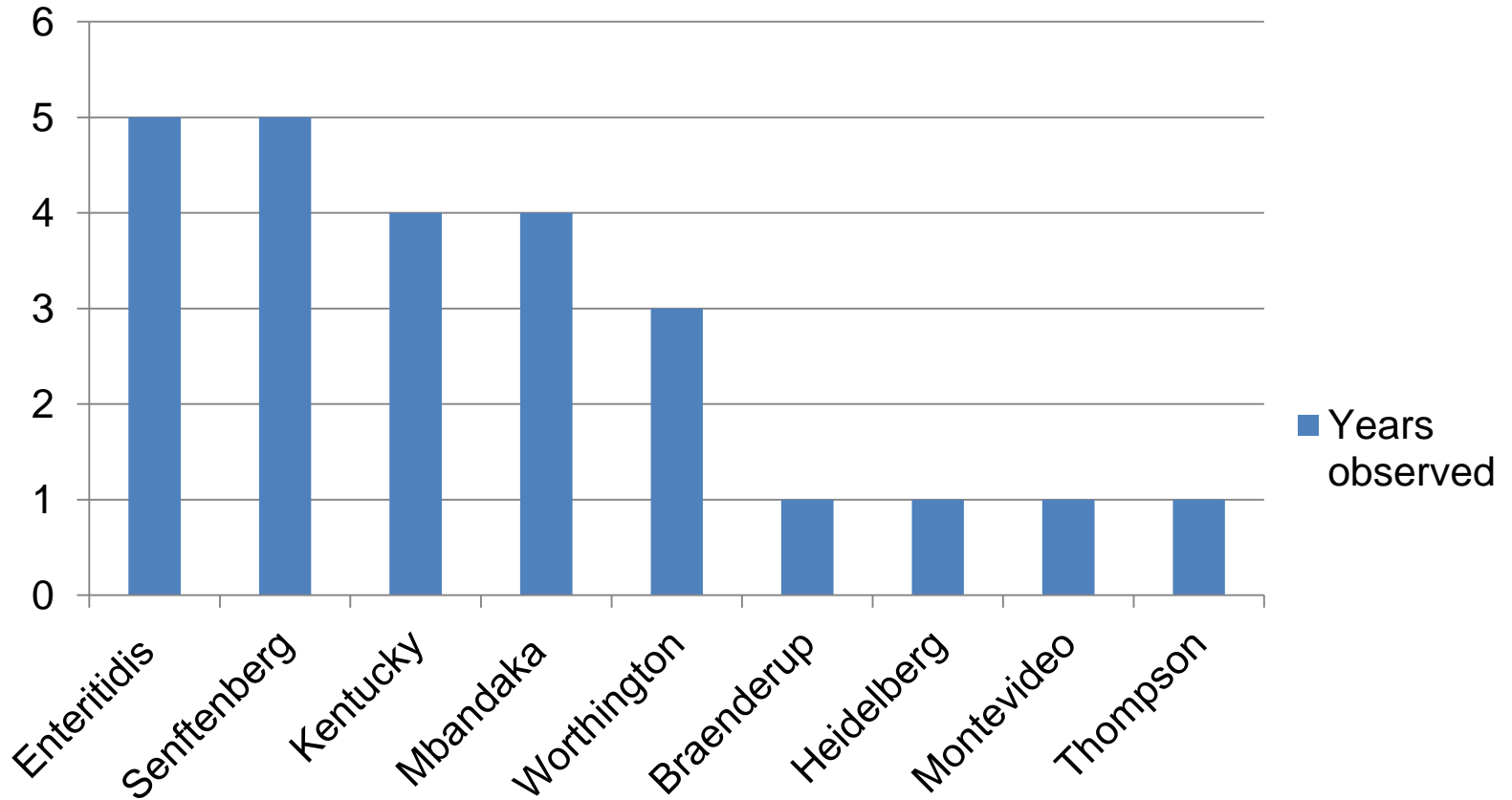
***Salmonella* Group D**

- Chicken submissions, clinical + non-clinical
- 435 Group D isolates
- 358 (82%) were SE
- Other 18%: Javiana, Berta, Ouakam

Top 5 Serovars Clinical Isolates from Chickens 2013-2017



Top 5 Serovars Non-Clinical Isolates from Chickens 2013-2017

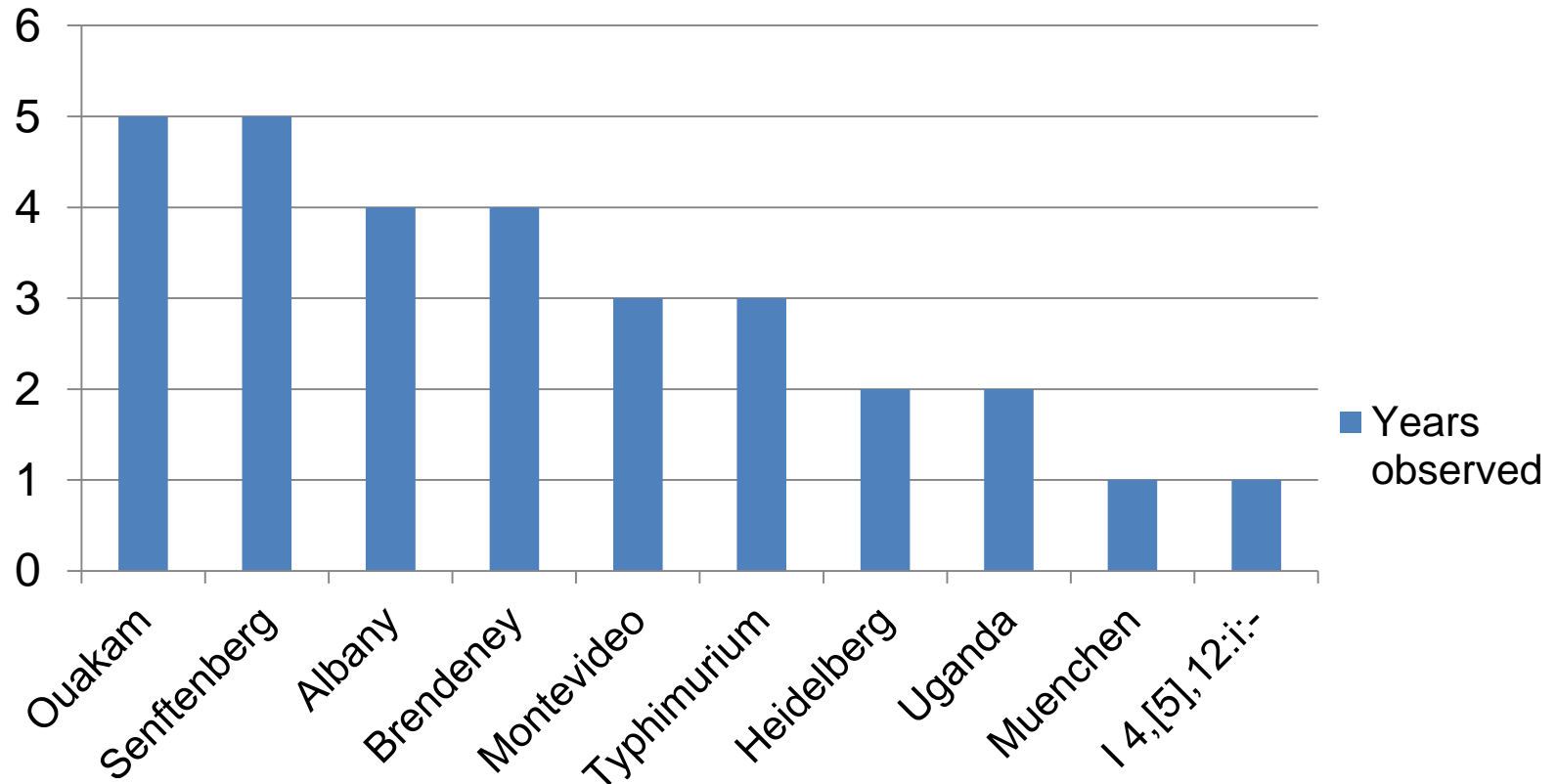




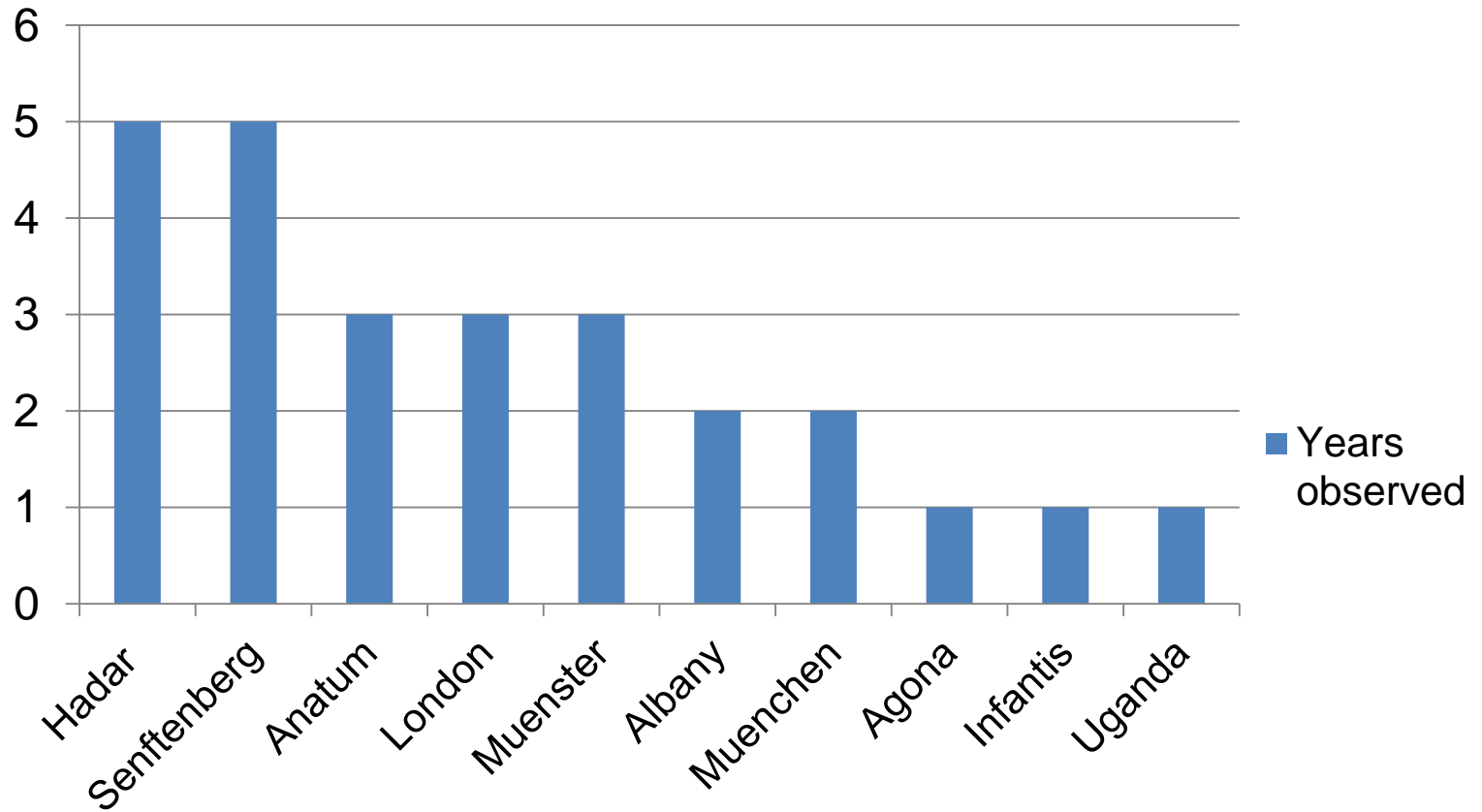
Most Common Serotypes – Turkeys 2017

Rank	Clinical	Non-Clinical
1	Senftenberg	London
2	Uganda	Senftenberg
3	Bredeney	Muenchen
4	Ouakam	Infantis
5	Typhimurium/ Montevideo	Hadar

Top 5 Serovars Clinical Isolates from Turkeys 2013-2017



Top 5 Serovars Non-clinical Isolates from Turkeys 2013-2017



Human outbreaks associated with Poultry 2013-2018

- Shell eggs
 - *Salmonella* ser. Braenderup
 - *Salmonella* ser. Oranienburg
- Various food products containing poultry meat
 - *Salmonella* ser. Typhimurium
 - *Salmonella* ser. Enteritidis
 - *Salmonella* ser. Heidelberg*



Human outbreaks associated with Poultry 2013-2018

- Outbreaks associated with live poultry
 - *Salmonella* ser. Braenderup (x2)
 - *Salmonella* ser. Enteritidis (x4)*
 - *Salmonella* ser. Indiana (x4)
 - *Salmonella* ser. Infantis (x5)
 - *Salmonella* ser. Hadar (x3)*
 - *Salmonella* ser. Lille
 - *Salmonella* ser. Litchfield (x2)
 - *Salmonella* ser. Mbandaka (x3)
 - *Salmonella* ser. Montevideo
 - *Salmonella* ser. Muenchen (x2)
 - *Salmonella* ser. Muenster*
 - *Salmonella* ser. Newport (x2)
 - *Salmonella* ser. Senftenberg
 - *Salmonella* ser. Typhimurium (x2)
 - *Salmonella* | 4,[5],12:i:-

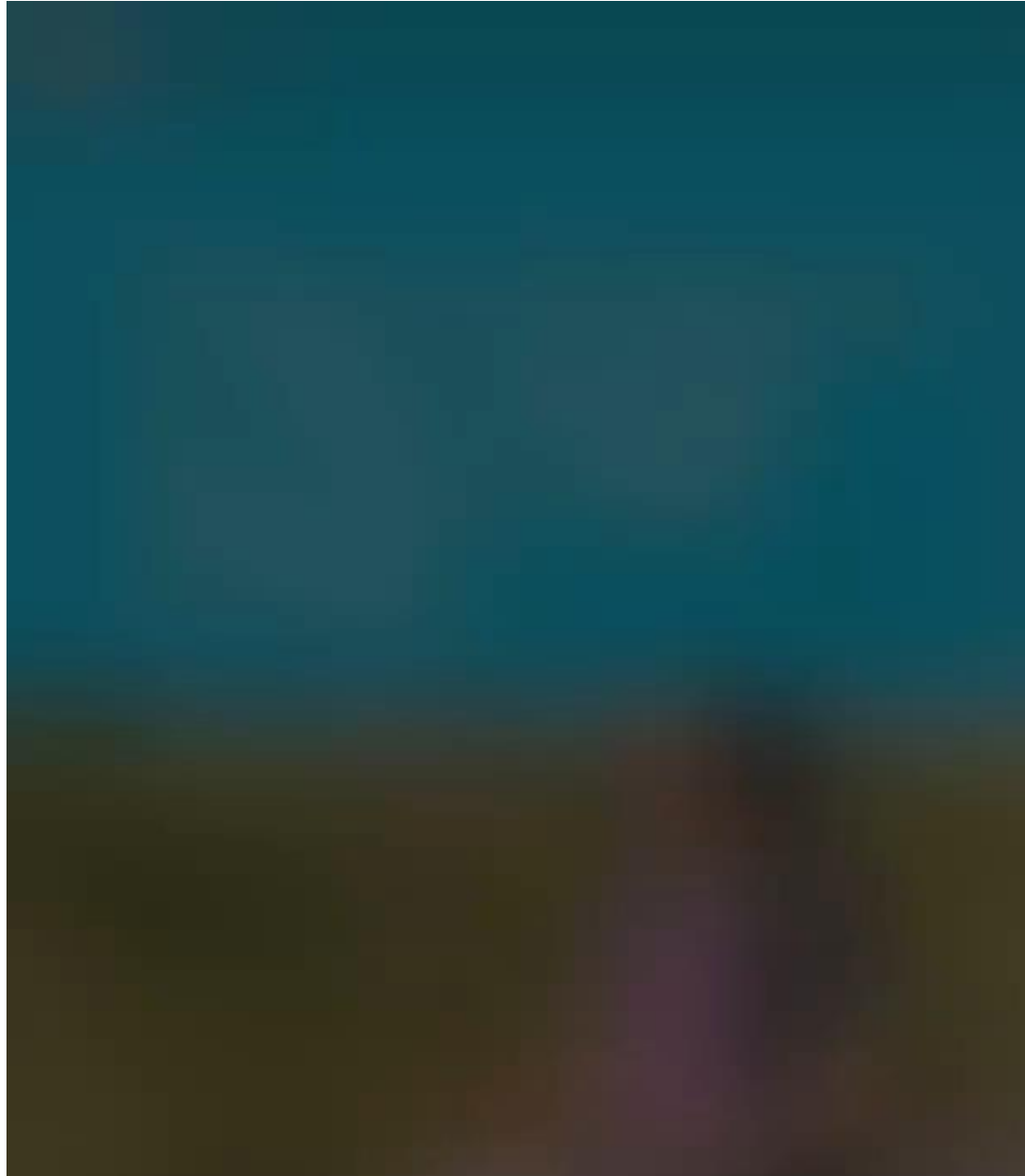


VS Electronic 10-3 is Available

<https://ncahappspub.aphis.usda.gov/NCAHPortal/auth/salmonellaSampleSubmission/create>

- NCAH Portal is used for electronic sample submissions
- Create an eAuthentication account prior to access
- Once submission has been made & samples received at the NVSL, future submitter information will auto populate
- Additional email & fax numbers are easily added
- Ability to clone past submissions with similar data
- Reports remain in the system for one year

“Not Everyone got an A on the Test”





SALMONELLA SEROTYPING

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