



The Future is Here: Managing New Workflows in the Last Frontier



PulseNet/OutbreakNet West Coast Regional Meeting Joint Session

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Fairbanks



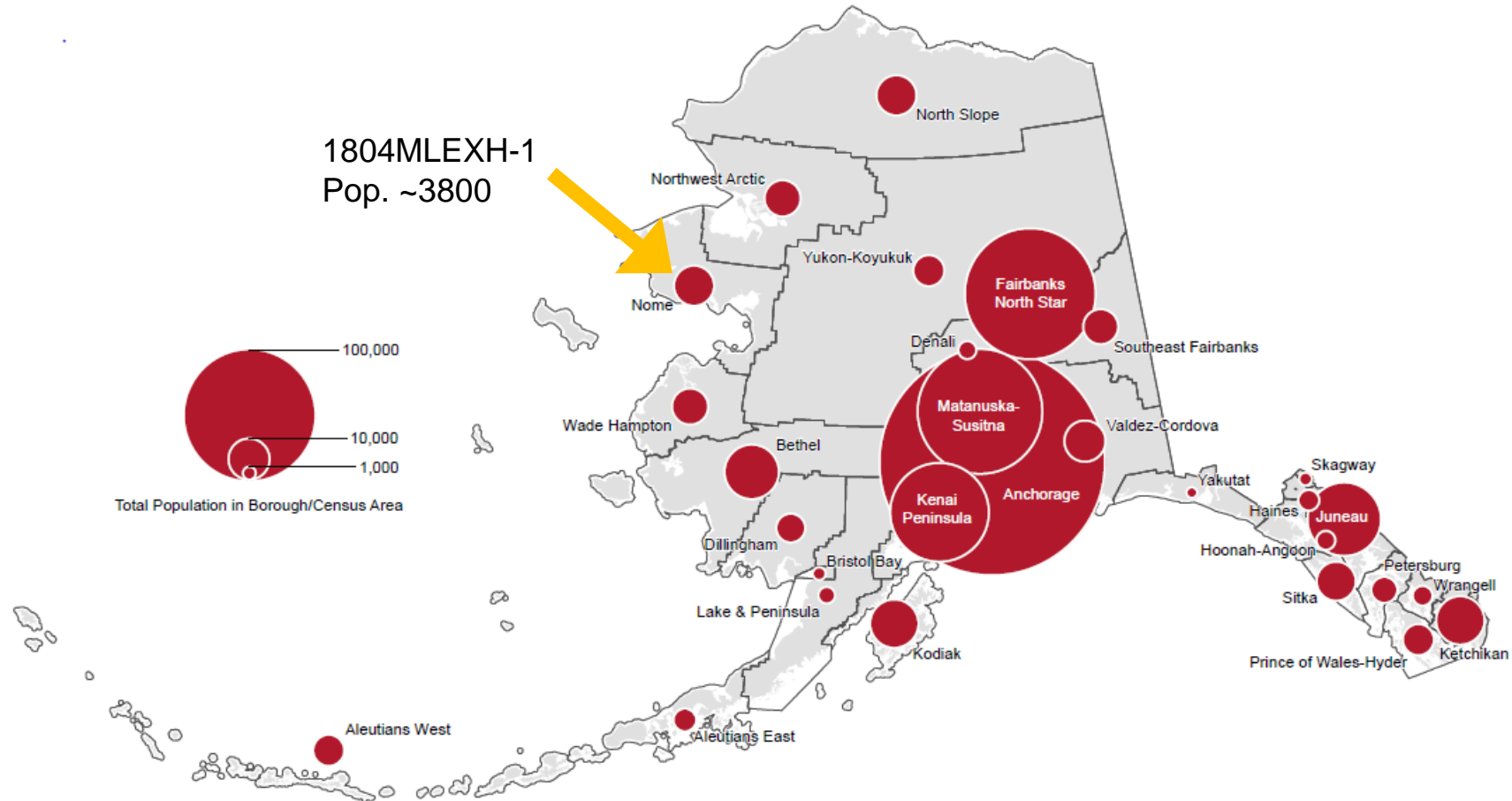
Anchorage



Dutch Harbor

Juneau

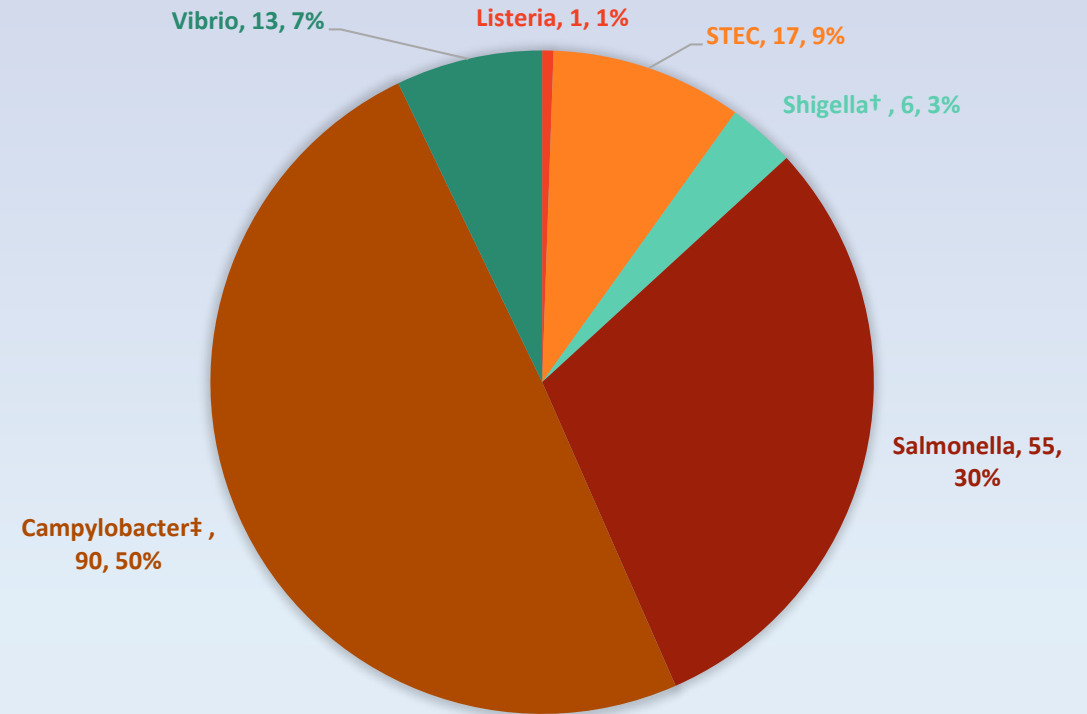
Total Population by Borough/Census Area



- Largest state in Union
- Population ~740K (ranked #48)

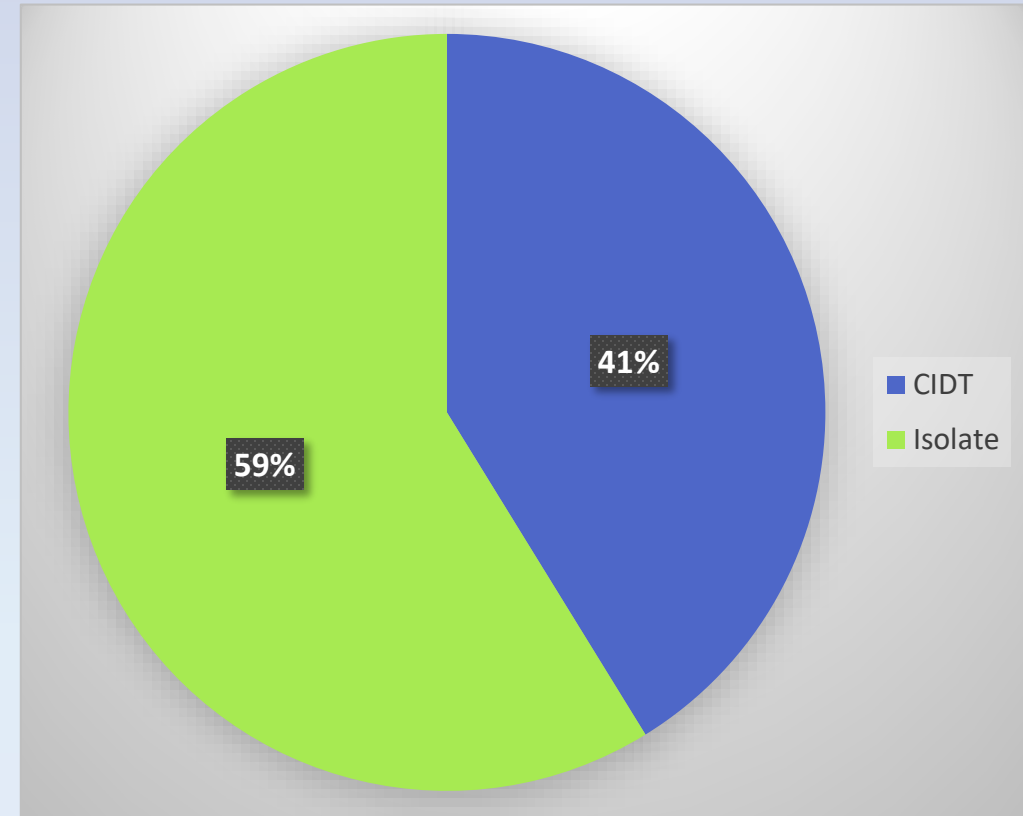
Real-Time Samples 2018 (n=182)

Organism	Total Isolated	CIDT	# PFGE	# WGS
<i>Listeria</i>	1	0	0	1
<i>STEC*</i>	17	16	17	15
<i>Shigella</i> [†]	6	0	7	7
<i>Salmonella</i>	54	8	52	54
<i>Campy</i> [‡]	90	59 (27 viable)	68	80
<i>Vibrio</i>	13	0	13	13
TOTALS	182	75	156	173

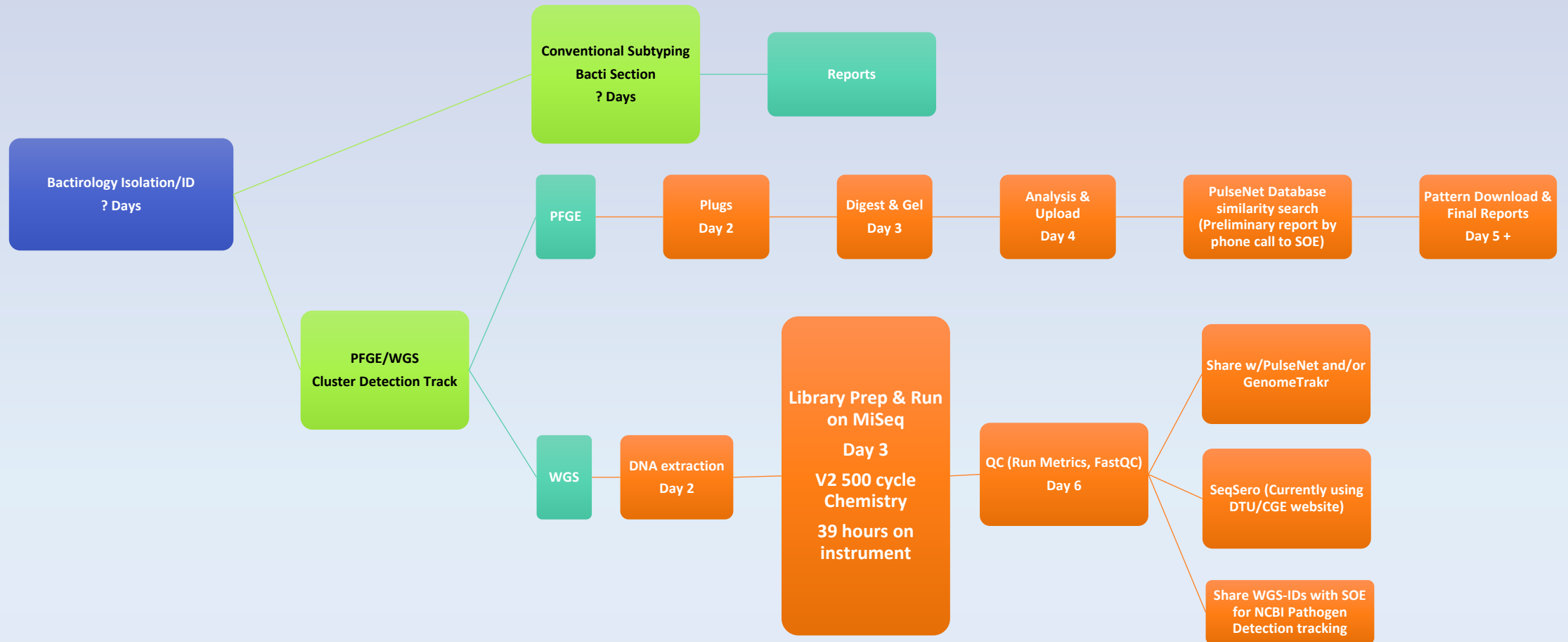


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Current Workflow



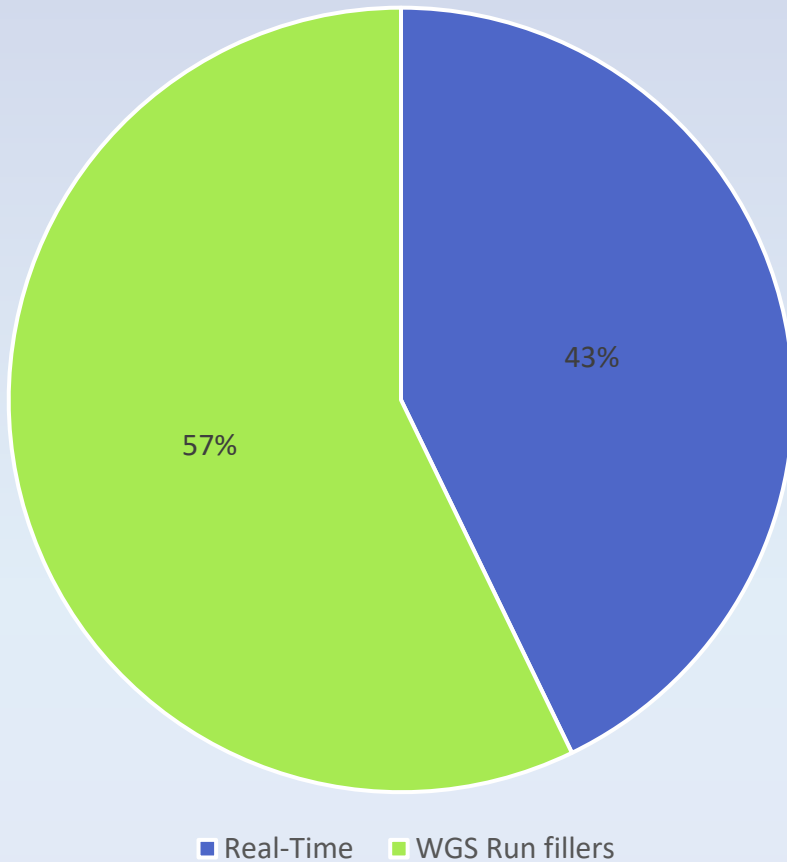
WGS throughput

Organism	Pre-Analytic	# WGS Run	WGS TAT
Listeria	8	1	3
O157 STEC*	12	11	5
Non-O157 STEC*	5	4	5
Shigella [†]	9	7	6
Salmonella	6	54	9
Campylobacter [‡]	8	80	8
Vibrio	7	13	8
WGS Run fillers		231	
TOTALS (173+231)	8	404	6

Considerations

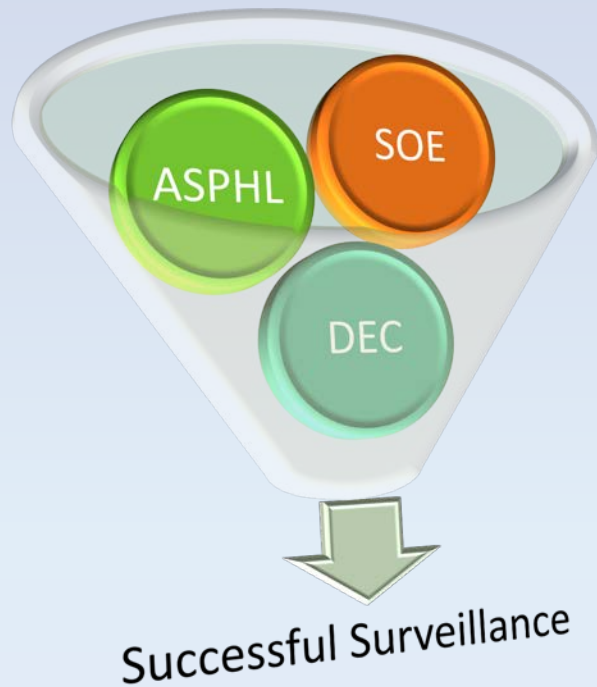
- Sample prioritization
- Batching (cost)
- Number of instruments
- Number of trained personnel (bench and data)
- Reporting Needs (communication/user education challenges)

WGS Real-Time vs. Filler Samples



- Historic isolates
 - *Salmonella*
 - *Vibrio*
 - Campy
- Certifications
- Proficiencies
- Validations/Verifications

Transition from PFGE to WGS



- Frequent Communication
 - Phone calls
 - Quarterly meetings
 - Secure reports
 - Shared resources
- Reporting Optimization
 - Required information
 - Helpful information
 - Report needs
 - Report formats

Thank You

