Highlights from the 2015 Laboratory Survey

Performed by Oregon Health Authority, Spring 2015

1. Which of the Laboratory education events or materials did you attend or use during the past year offered by the Oregon's Drug Resistant Organism Prevention and Coordinated Regional Epidemiology (DROP-CRE) network?

Option (38 responses)	%	Count
Oregon CRE Toolkit	50%	19
Webinars	66%	25
Teleconferences	40%	15
A website dedicated to the epidemiology of MDRO in Oregon	11%	4
Printed guidelines, leaflets, or posters	42%	16
Newsletters	24%	9

2. What types of education or assistance would your laboratory find the most valuable next year?

Options	**Not valuable**	**Moderately valuable**	**Very valuable**	**Extremely valuable**	**Count**
Lab Symposium on MDRO/CRE	4	9	8	10	35
Webinars on MDRO/CRE	1	6	9	18	36
Grand rounds - MDRO/CRE	3	13	3	9	34
Educational handouts on MDRO/CRE	1	9	10	13	35
Teleconference with Epi Team during CRE exposure/outbreak	2	5	9	11	35
Site visit from Epi Team during CRE exposure/outbreak	4	7	8	6	34
Update to the 2013 Oregon CRE Toolkit	3	6	11	11	36
Monthly CRE report update posted on OHA website	5	12	7	8	37

OHA (02/2016, MC)

3. Please indicate which of the following tests your laboratory routinely performs as part of susceptibility testing for Gram-negative bacilli. Choose all that apply.

Options	**%**	**Count**
None (no susceptibility testing done)	5%	2
Microscan Gram-negative susceptibility panel	48%	17
Phoenix Gram-negative susceptibility card (please specify card below)	3%	1
Vitek Gram-negative susceptibility card	0%	0
Vitek2 Gram-negative susceptibility card	48%	18
Manual susceptibility testing (disk diffusion, broth microdilution - please specify below)	26%	10
Other	8%	3

4. For *Enterobacteriaceae*, which susceptibility breakpoint is your laboratory using to define non-susceptible for Ertapenem?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	17%	6
≥ 1 µg/mL (2014 CLSI)	39%	14
≥ 4 µg/mL (Prior to June 2010 CLSI)	36%	13
Other	8%	3

5. For *Enterobacteriaceae,* which susceptibility breakpoint is your laboratory using to define non-susceptible for Doripenem?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	81%	29
≥ 2 µg/mL (2014 CLSI)	14%	5
Other	6%	2

6. For *Enterobacteriaceae,* which susceptibility breakpoint is your laboratory using to define non-susceptible for Imipenem?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	28%	10
≥ 2 µg/mL (2014 CLSI)	42%	15
≥ 8 µg/mL (Prior to June 2010 CLSI)	**25%**	**9**

Other	6%	2

7. For *Enterobacteriaceae,* which susceptibility breakpoint is your laboratory using to define non-susceptible for Meropenem?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	25%	9
≥ 2 µg/mL (2014 CLSI)	42%	15
≥ 8 µg/mL (Prior to June 2010 CLSI)	**31%**	**11**
Other	3%	1

8. For *Enterobacteriaceae*, which susceptibility breakpoint is your laboratory using to define non-susceptible for Ceftriaxone?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	0%	0
≥ 2 µg/mL (2014 CLSI)	47%	17
≥ 16 µg/mL (Prior to June 2010 CLSI)	**39%**	**14**
Other	14%	5

9. For *Enterobacteriaceae*, which susceptibility breakpoint is your laboratory using to define non-susceptible for Ceftazidime?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	8%	3
≥ 8 µg/mL (2014 CLSI)	44%	16
≥ 16 µg/mL (Prior to June 2010 CLSI)	**42%**	**15**
Other	6%	2

10. For *Enterobacteriaceae,* which susceptibility breakpoint is your laboratory using to define non-susceptible for Cefotaxime?

Option (36 responses)	%	Count
Not applicable (*i.e*., not testing this antibiotic)	33%	12
≥ 2 µg/mL (2014 CLSI)	33%	12
≥ 16 µg/mL (Prior to June 2010 CLSI)	**22%**	**8**
Other	11%	4

11. Does your laboratory currently perform any of the following tests to identify extended-spectrum beta-lactamases (ESBLs)? Choose all that apply.

Options (36 responses)	%	Count
Our laboratory does not use any of the following methods to identify ESBLs.	6%	2
Our AES (advanced expert system) will provide a suspected resistance mechanism (e.g., ESBL suspected).	69%	25
E-test	3%	1
Kirby-Bauer disk diffusion (via 3rd gen cephalosprorin +/- clavulanic acid disks)	39%	14
Nucleic Acid Test (NAT) directly from a specimen or positive blood culture bottle (e.g., Verigene® Gram Negative Blood Culture Test). Please specify test below.	3%	1
Other (please specify)	25%	9

12. Does your laboratory currently perform any of the following tests to identify carbapenemases?

Options (36 responses)	%	Count
Our laboratory does not use any of the following methods to identify carbapenemases.	17%	6
Our AES (advanced expert system) provides a suspected resistance mechanism	67%	24
Modified Hodge test	36%	13
E-test	0%	0
Carba NP test	3%	1
Nucleic Acid Test (NAT) directly from the specimen or blood culture bottle (e.g., Verigene®, Biofire Film ArrayTM).	6%	2
PCR-based detection from culture (e.g., NDM, KPC PCRs).	3%	1
Other	14%	5

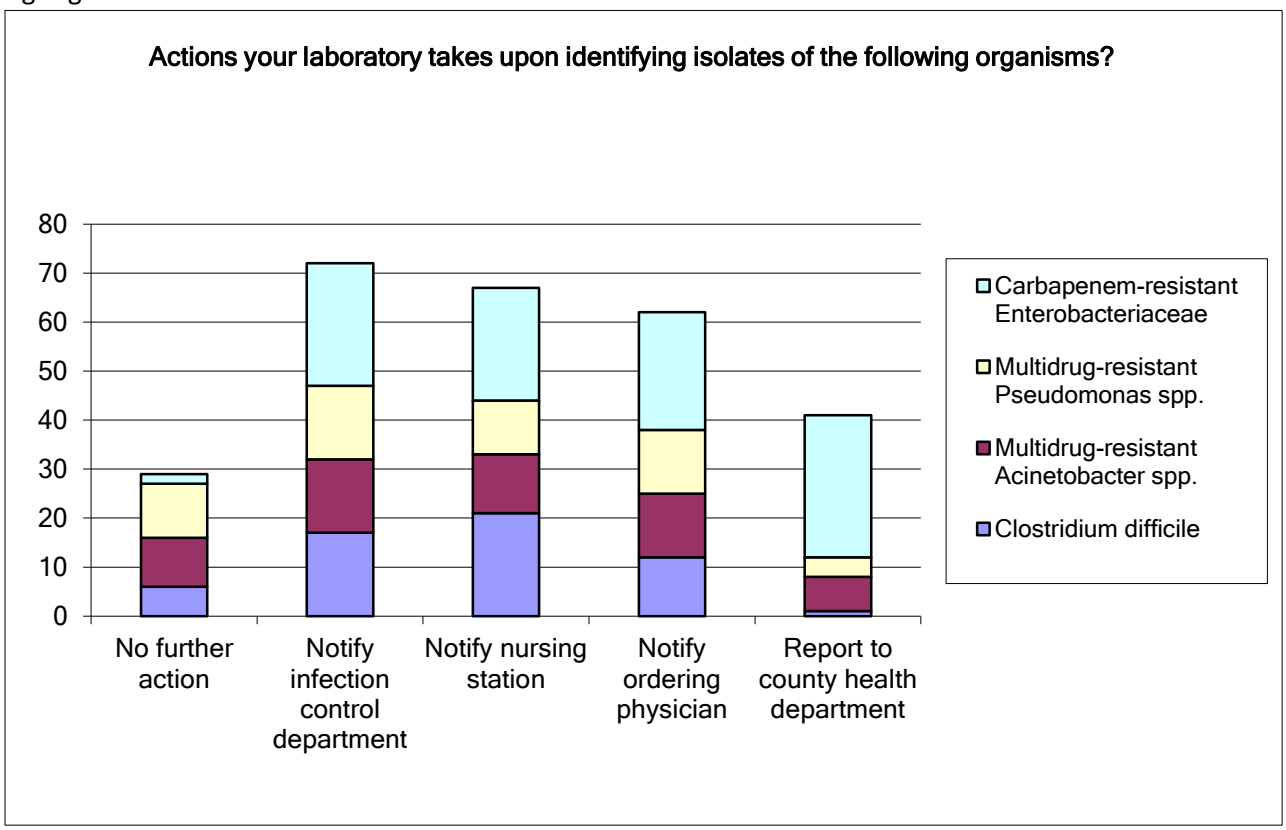
13. What specific manual susceptibility tests are used for carbapenem-resistant Enterobacteriaceae (CRE) confirmation?

Options (36 responses)	**%**	**Count**
None	58%	21
Disk diffusion	33%	12
Broth microdilution	0%	0
E-test	14%	5
Other	19%	7

14. Which of the following statements apply to how your lab information system (LIS) reports?

Options (38 responses)	%	Count
Not applicable.	3%	1
Minimum Inhibitory Concentrations (MICs) are recorded in the LIS.	74%	28
MICs are reported in the medical record.	66%	25
Sensitive-Intermediate-Resistant (S-I-R) interpretations are recorded in the LIS.	89%	34
S-I-R interpretations are reported in the medical record (MR).	87%	33
ESBL producers are recorded in the LIS.	66%	25
There is a statement accompanying the susceptibility report noting that the organism is a suspected ESBL.	63%	24
Carbapenem susceptibility test results are suppressed in certain situations in the medical record	32%	12
Carbapenemase test results are reported in the medical record.	66%	25
There is a statement accompanying the susceptibility report noting organism is a CRE.	71%	27

15. In addition to reporting in the medical record, what actions would you lab take upon identifying isolates of the following organisms?



16. How does your laboratory report CRE isolates to state and local public health?

Options (38 responses)	%	Count
Not applicable because our lab does not perform that level of bacteriology.	11%	4
Only send isolates to Oregon State Public Health Lab (OSPHL).	8%	3
Electronic Laboratory Reporting and send isolates to OSPHL.	34%	13
Fax report to local public health and send isolates to OSPHL.	24%	9
The hospital infection preventionist reports to public health and the lab sends isolates to OSPHL.	8%	3
Other	16%	6

17. Where is *Clostridium difficile* testing performed for your Laboratory?

Option (38 responses)	%	Count
On-site, always	76%	29
Off-site always	11%	4
Both on and off-site	13%	5
Unknown	0%	0

18. Does your laboratory have a policy to reject stool specimens for *C. difficile*? Choose all that apply.

Options (38 responses)	**%**	Count
Our laboratory does not have a rejection policy.	16%	6
Yes, when stools are formed (i.e., stools do NOT take the shape of the container).	61%	23
Yes, if there is a positive stool specimen positive within 48 hours.	0%	0
Yes, if there is a negative stool specimen within 48 hours.	0%	0
Other rejection policies (please specify)	24%	9

19. Has this rejection policy changed during the last year?

Options (38 responses)	%	Count
No	95%	36
Yes	5%	2

20. How often is *C. difficile* testing performed?

Options (38 responses)	%	Count
More than once daily	42.1%	16
Daily, not including weekends	2.6%	1
Daily, including weekends	31.6%	12
Three times per week	0.0%	0
Weekly	2.6%	1
Unsure	0.0%	0
Other (please specify)	21.1%	8

21. What type and order of *C. difficile* testing is routinely performed?

Answer Options	**EIA**	**NAAT**	**GDH antigen plus EIA for toxin**	**GDH plus NAAT**	**GDH plus EIA for toxin, then by NAAT for discrepant results**	**Toxigenic culture**	**CCNA**	**CPE**	**Other**	**Unsure**	**Count**
1st line of testing	4	16	9	0	6	0	0	0	2	1	38
2nd line of testing	1	5	0	0	1	0	0	0	4	2	13
3rd line of testing	0	0	0	0	0	0	0	0	2	1	3

22. Which Nucleic Acid Amplification test is currently used by your laboratory? Choose all that apply.

Options (38 responses)	**%**	**Count**
Our laboratory does not use nucleic amplification testing.	40%	15
BD-GeneOhm C. difficile	3%	1
Cepheid Xpert C. difficile	18%	7
Cepheid Xpert C. difficile/Epi (also provides 027/NAP1/BI	21%	8
Meridian Illumigene	16%	6
Prodesse (Gen-Probe) Progastro CD	0%	0
Luminex xTAG GPP	0%	0
Other Nucleic Acid testing kit:	11%	4

23. Which EIA test kit is currently used by your laboratory? Choose all that apply.

Options (38 responses)	%	Count
Not applicable, our laboratory does not use EIA	50%	19
Premier (Meridian) Toxins A & B	5%	2
Premier (Meridian) Toxin A	0%	0
Remel ProSpecT Toxins A & B	0%	0
TechLab Toxins A & B	0%	0
Inverness Medical/Wampole Toxins A & B QuikCheck	3%	1
Inverness Medical/Wampole QuikCheck Complete	26%	10
Other Antigen test kit:	18%	7

24. Has your *C. difficile* lab testing algorithm changed during the last year?

Options (38 responses)	%	Count
No	95%	36
Yes	5%	2