



## CHALLENGES IN COCCIDIOIDOMYCOSIS SURVEILLANCE IN WASHINGTON STATE: PROVIDER AWARENESS AND LABORATORY REPORTING

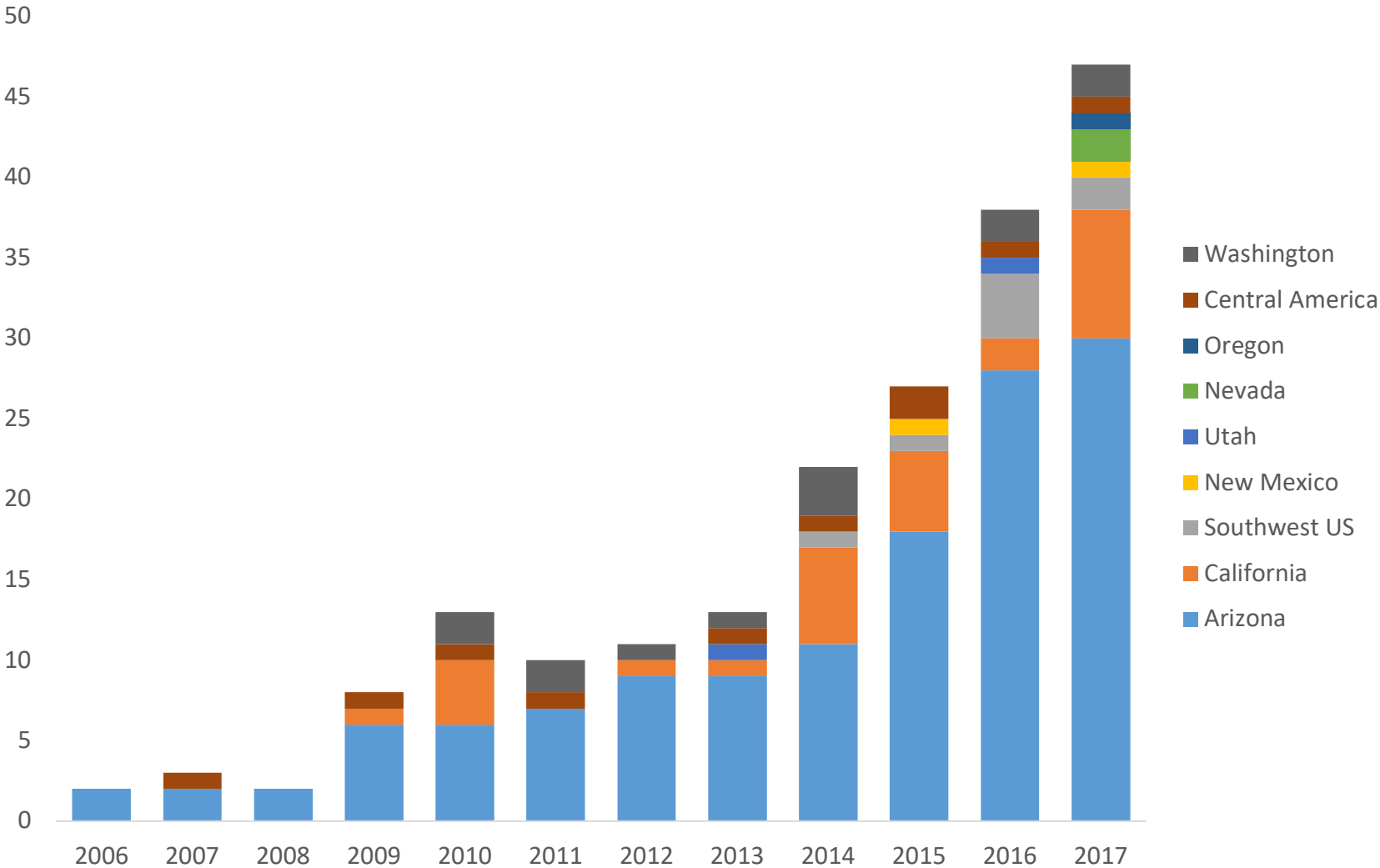
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# Overview

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- Review of cases in WA
- Commercial laboratory data and surveillance system evaluation
- KAP survey update

# Coccidioidomycosis Cases by Exposure Location



# Surveillance Evaluation

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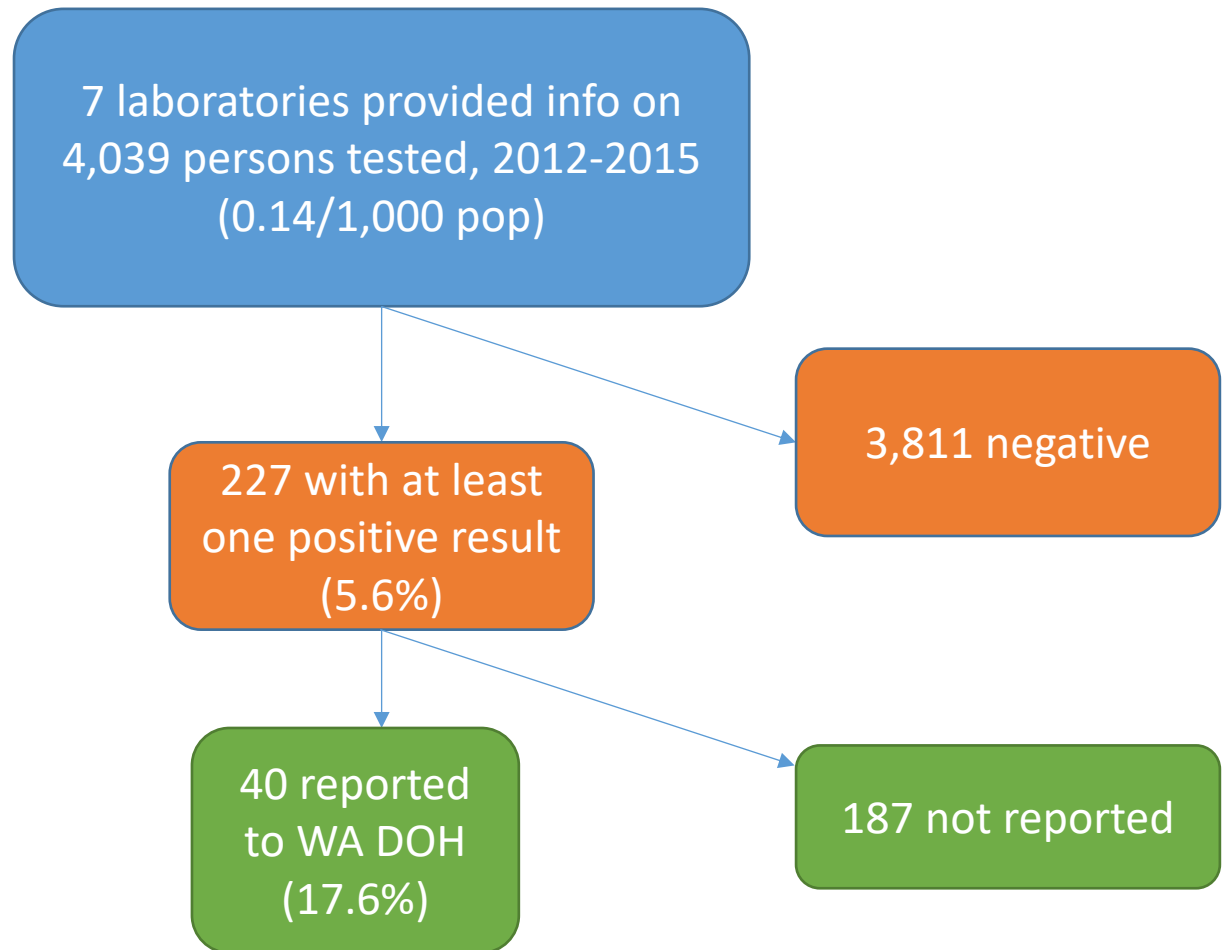
- Main objectives were to understand:
  1. Frequency of test ordering
    - Better understand provider's test ordering practices
  2. Prevalence of disease based directly on lab data
    - Have test ordering practices changed during the period of study?
  3. Completeness of case reporting
    - Identify gaps in reporting
    - Are providers/labs reporting positive results?

# Surveillance Evaluation: Methods

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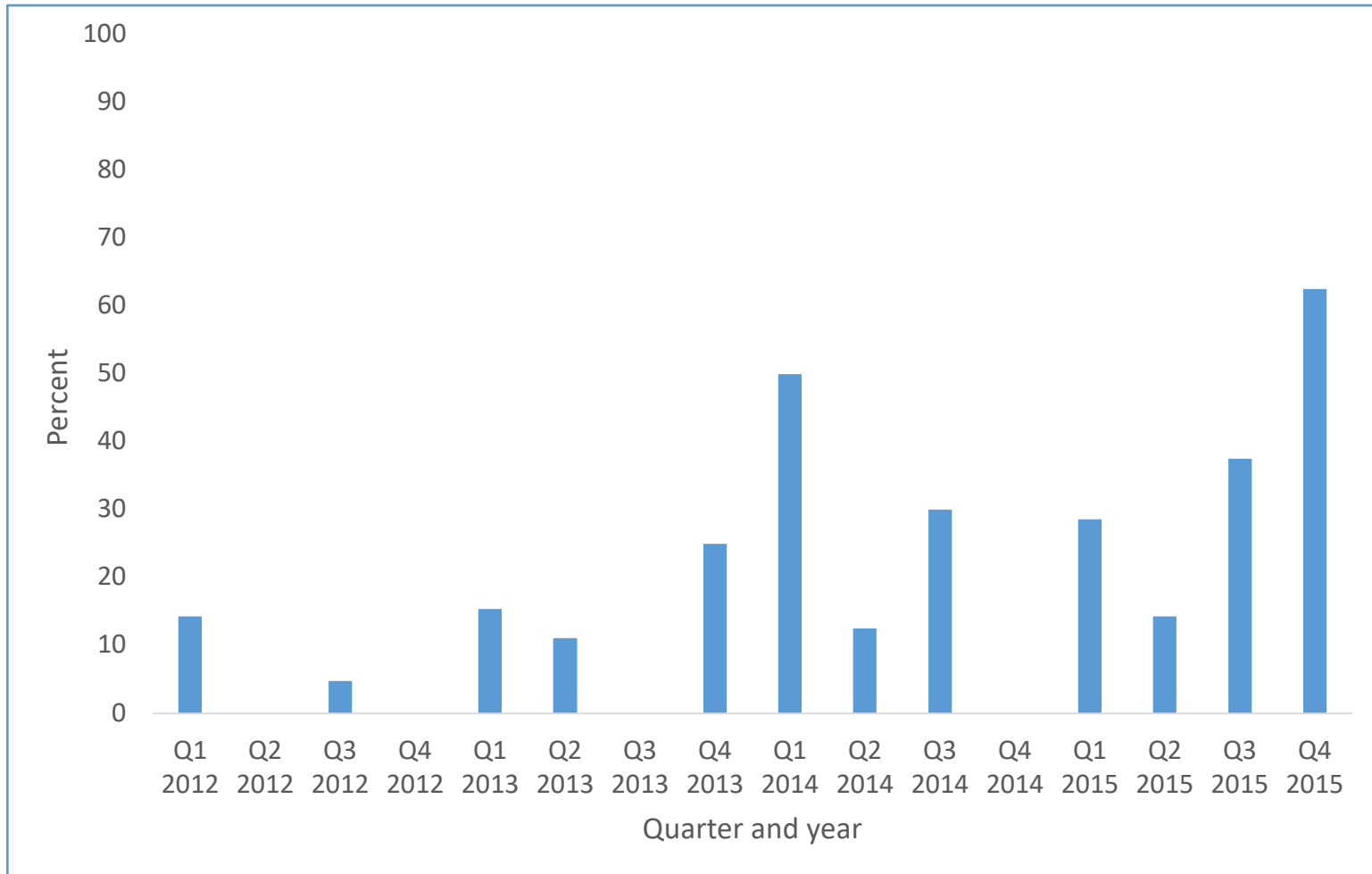
- Requested laboratory testing records (all results) from labs providing coccidioidomycosis testing to WA residents, 2010-2015
  - 9 laboratories
- Merged and deduplicated records, used a hierarchy to determine patient's residence: personal address → insurance subscriber address → provider address
- Compared positive results to surveillance database
  - Pre-2014 and post-2014

# Surveillance Evaluation: Results



This only represents half of the patients reported during 2012-2015

# Percent of positive results reported to DOH



Reporting increased from 9.2% during 2012-2013 to 28.8% 2014-2015

# Surveillance Evaluation: Results

Characteristic	Any positive result	No positive result	All results
Mean age at earliest specimen collection (years)	57.8	55.9	56.0
% Female	38.1	48.6	48.0
% Male	61.9	51.4	52.0

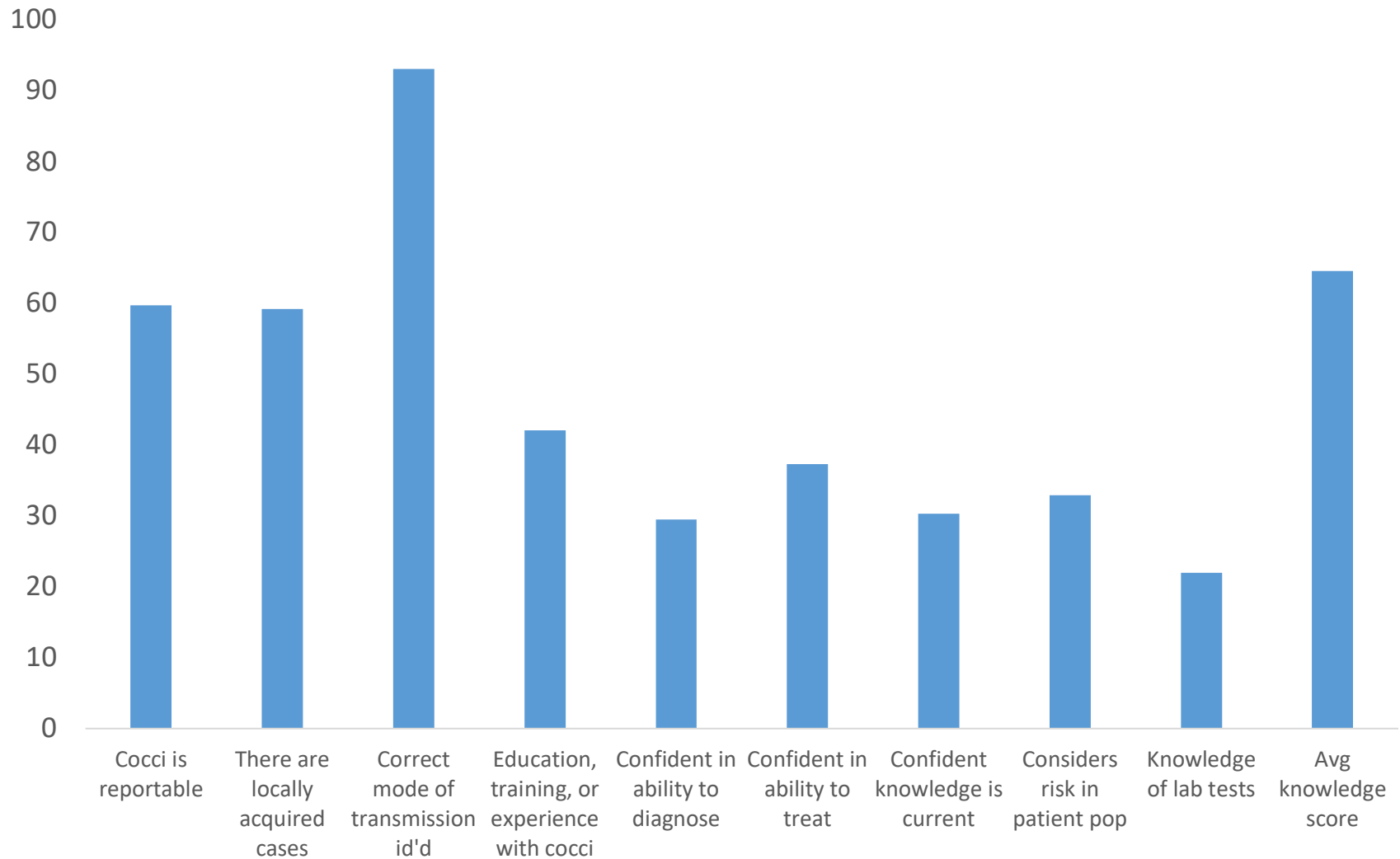


# Healthcare Provider KAP Survey

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- **Purpose:** Assess baseline knowledge regarding diagnosis, treatment, and reporting of coccidioidomycosis
- **Methods:** Surveyed providers in south-central Washington: Benton-Franklin, Yakima, Walla Walla health districts
  - Used LHJ contact lists for distribution of survey link
  - Administered Feb-Apr 2017
- 86 providers responded (~12% response rate)
- 10% reported that they had not heard of coccidioidomycosis or Valley Fever

# Provider Affirmative Responses (%)



# Providers estimates vs surveillance data

Local health jurisdiction	Respondents' estimated no. of cases diagnosed in last 5 years*	Cases in PHIMS
Benton-Franklin	4	5
Yakima	8	8
Walla Walla	0	2
Total	12	15

But...12% response rate

# KAP Survey Results

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- Previous education, training, or experience with cocci was with only factor associated with confidence in ability to diagnose, confidence that knowledge is current, and consideration of risk in patients
- Infectious disease/Internal medicine scored highest
- OB-GYN scored lowest

# Conclusions

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- There are significant gaps in coccidioidomycosis case reporting both from laboratories and providers
- Reporting has increased over time, but significant challenges remain
- Outreach to both laboratories and providers is necessary to improve surveillance



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