

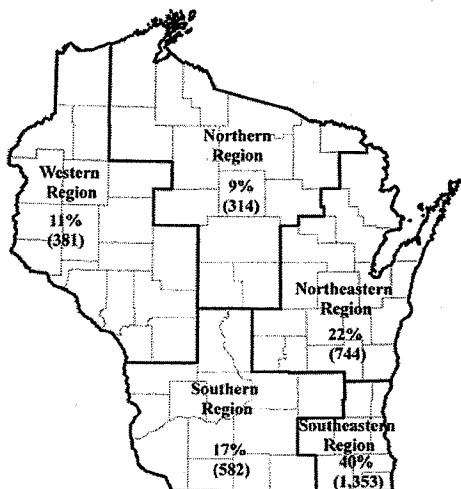
At a Glance: Wisconsin Clinical Laboratory Science Workforce Survey, 2010

Laboratory science professionals are among the health disciplines that constitute the public health workforce. As demonstrated by the recent Novel Influenza A (H1N1) outbreak, laboratory science professionals address public health challenges. They conduct testing to report results for certain infectious diseases (e.g., HIV, influenza, and Lyme disease), emerging communicable diseases, and chronic diseases; they also assist in monitoring individual health and wellness. In March and April, 2010, the Wisconsin Department of Health Services (DHS) conducted this survey to assist educational institutions, hospitals, clinics, and others in workforce planning to assure a sufficient, competent, and diverse workforce.

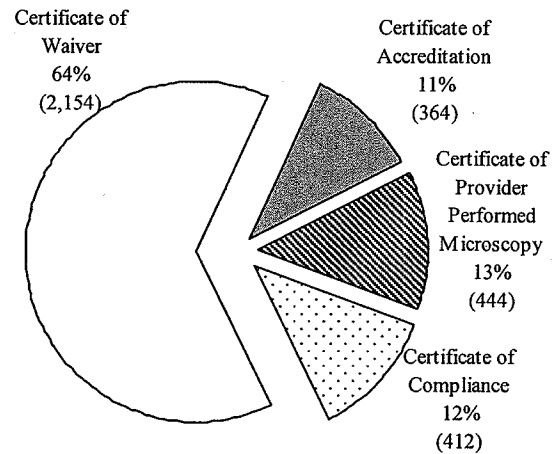
There were 3,374 CLIA-certified (Clinical Laboratory Improvement Amendments certification) laboratories in Wisconsin as of September 2, 2009. CLIA certification ranges from Certificate of Waiver (can perform only relatively simple tests) to Certificate of Compliance and Certificate of Accreditation (can perform tests of high complexity). A sample of 746 laboratories, stratified by CLIA type and DHS region, was drawn from the full list of laboratories. There was a 43% response rate, with 319 laboratories completing the survey. Results were weighted to represent all clinical laboratories in Wisconsin (see Survey Methods).

CLIA-Certified Laboratories, Wisconsin, 2010

Number of Laboratories by DHS Region



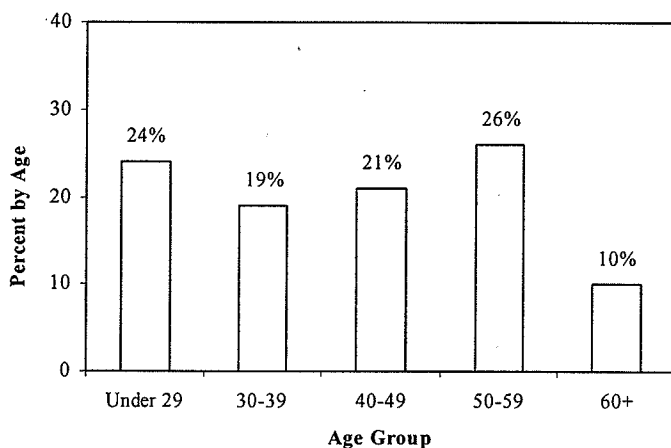
Number of Laboratories by CLIA Type



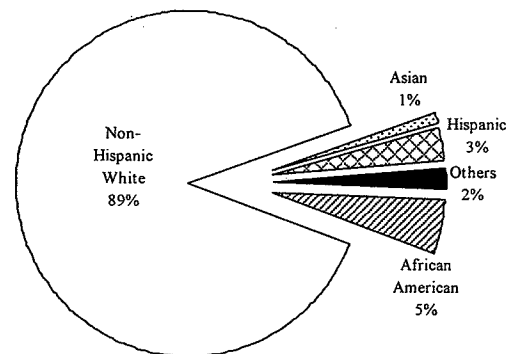
Source: Wisconsin Department of Health Services, Wisconsin Clinical Laboratory Science Workforce Survey, 2010.

Employees of Respondent Laboratories by Age and Race/Ethnicity, Wisconsin 2010

Age



Race and Ethnicity



Source: Wisconsin Department of Health Services, Wisconsin Clinical Laboratory Science Workforce Survey, 2010.

Note: In the 319 laboratories that completed the survey, there were a total of 8,558 personnel whose job directly related to laboratory testing.

Emergency Preparedness and Response

- 70% of 289 respondent clinical laboratories indicated they had an Emergency Preparedness and Response Plan.
- Of the 282 laboratories responding to the emergency response training question, 93 laboratories (33%) indicated that 100% of their employees were trained in emergency response and preparedness.

Estimated Statewide Full-Time Equivalent (FTE) Laboratory Employees by Job Title, Wisconsin, 2010

Job Title/Discipline	Estimated FTEs Statewide	Estimated FTE Vacancies, Statewide
<i>Staff with clinical laboratory professional education and training</i>		
Pathologists	737	8
Pathology Assistants	76	0
Managers/Administrators	2,917	38
Certified Medical Technologists – MT(ASCP), CLS(NCA), etc.	7,826	130
Medical Technologists (non-certified)	3,066	0
Certified Medical Laboratory Technicians – MLT(ASCP), CLT(NCA), etc.	2,981	277
Medical Laboratory Technicians (non-certified)	694	9
Phlebotomists	5,210	258
Histotechnologists (Bachelor of Science degree, B.S.)	303	0
Histotechnician	570	36
Cytologists	428	0
Cytogenetic Technologists	246	0
Molecular Biologists	47	0
<i>Other professionals who perform laboratory testing</i>		
Registered Nurses	4,571	108
Licensed Practical Nurses	2,986	100
CMA/MA	1,061	28
CNA/NA	8,198	280
Other	9,420	454
Total	51,337	1,726

Source: Wisconsin Department of Health Services, Wisconsin Clinical Laboratory Science Workforce Survey, 2010.

Note: Estimated statewide numbers of FTE laboratory employees by job title were based on FTEs reported by the respondent laboratories, and calculated using a multiplier of 9.5. These estimates assume that all Wisconsin laboratories have a distribution of employees by discipline similar to that of the 319 respondent laboratories that completed the survey. Formula used to calculate the multiplier: $319/3,374 \times 100 = 9.5$.

Survey Methods: The survey universe consisted of 3,374 laboratories in Wisconsin that were CLIA-certified as of September 2, 2009. A sample of 746 laboratories stratified by CLIA type and DHS region was drawn from the universe list. In March 2010, laboratories in the sample were contacted by U.S. mail and asked to complete the survey on the Internet at the Wisconsin DHS, Division of Quality Assurance (DQA) Clinical Laboratory website. Two follow-up postcards were mailed to laboratories that did not respond to the initial request. This yielded a response rate of 43%, with 319 of 746 laboratories completing the survey. The data were adjusted by post-stratification weighting so the results conformed to the characteristics (CLIA laboratory type and DHS region) of the survey universe. This survey does not include local health departments, because their workforce is included in the *Local Health Department Survey* at <http://dhs.wisconsin.gov/stats/index.htm>.

Clinical Laboratory Improvement Amendments (CLIA) Certification: To ensure that laboratory testing is of a consistently high quality, the Centers for Medicare & Medicaid Services regulates all laboratory testing (except research) performed on humans in the U.S. through CLIA, as follows: 1) Certificate of Waiver (COW) laboratories can only perform waived tests; 2) Certificate of Provider Performed Microscopy (PPM) laboratories, in addition to waived tests, may also perform certain microscopic examinations during the course of a patient visit using specimens that are not easily transportable; 3) Certificate of Compliance (COC) laboratories and Certificate of Accreditation (COA) laboratories can perform waived tests, as well as tests of moderate and high complexity.

Acknowledgement: The Department of Health Services completed this survey for the *Collaborative Response to a Growing Workforce Crisis* program, funded by the Healthier Wisconsin Partnership Program, "Advancing a Healthier Wisconsin" endowment at the Medical College of Wisconsin.

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