

Featured Article

American Society for Clinical Pathology's 2010 Wage Survey of U.S. Clinical Laboratories

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Since 1988, the American Society for Clinical Pathology (ASCP) has conducted its Wage and Vacancy Survey to provide the most recent wage data and determine the extent and distribution of shortages within the nation's clinical laboratory workforce. This confidential survey has been administered every two years and has served as the primary source of information for academic, governmental, and industry labor analysts. While continuity remains a central objective in monitoring trends, the survey has evolved in response to changes within the profession. New questions have been added to the 2010 survey to examine some of the factors affecting wage and vacancy rates. This year, the ASCP Wage and Vacancy Survey has been administered as two separate surveys, beginning with the Wage Survey.

Methodology

The 2010 Wage Survey was conducted through collaboration between the ASCP's Public Policy Office in Washington, DC and the Society's Board of Certification (BOC). Electronic invitations were sent on April 1, 2010 via Zarca Interactive (an online survey vendor) to 21,418 laboratory managers, directors, and supervisors across the United States. The majority of these initial recipient email addresses were

derived from the ASCP database, with the following partnering societies: American Association of Pathologists' Assistants (AAPA), American Society of Cytopathology (ASC), American Society for Cytotechnology (ASCT), and National Society for Histotechnology (NSH), contributing to the initial recipient cohort. To maximize survey response, recipients were able to forward the electronic survey invitation to fellow colleagues within the laboratory profession. Due to the recipient's ability to forward the survey invitations, an accurate rate of responses cannot be calculated. The survey was closed on May 25, 2010.

The 2010 Wage Survey sought to *collect staff and supervisor -level data* on the following clinical laboratory occupations:

- Medical Technologists (MT)/Medical Laboratory Scientists (MLS)/Clinical Laboratory Scientists (CLS)
- Medical Laboratory Technicians (MLT)/Clinical Laboratory Technicians (CLT)
- Laboratory Assistants (LA)
- Phlebotomists (PBT)
- Specialists in Blood Banking (SBB)
- Cytotechnologists (CT)
- Histotechnicians (HT) & Histotechnologists (HTL)
- Pathologists' Assistants (PA)

Respondents were employed at hospitals, non-pathologist physicians' offices, outpatient clinics, and reference labs. Respondents who did not fall in any of the given categories were asked to choose the "Other" option. In order to further analyze the wage rates by facility, hospitals were subdivided into four categories based on size: hospital/500 beds or more, hospital/300-499 beds, hospital/100-299 beds, hospital/less than 100 beds. This year's wage survey also asked for zip codes from each participant to achieve state level estimates though the data received was insufficient to provide comprehensive state information.

Wages

The total number of responses received from the wage survey was 10,117. **Table 1** details the total number of respondents by occupational title. **Figure 1A** and **Figure 1B** show the percentage distribution of survey respondents. The data indicates that most of the respondents have a Bachelor's

Table 1 Total Number of Respondents by Occupational Title

Occupational Title	Occupational Level		
	Staff (N)	Supervisor (N)	Total (N)
MT/CLS/MLS	3,130	2,486	5,616
MLT/CLT	777	212	989
LA	330	32	362
PBT	566	130	696
HTL	220	196	416
HT	418	205	623
CT	474	291	765
PA	351	142	493
SBB	26	131	157
Total	6,292	3,825	10,117

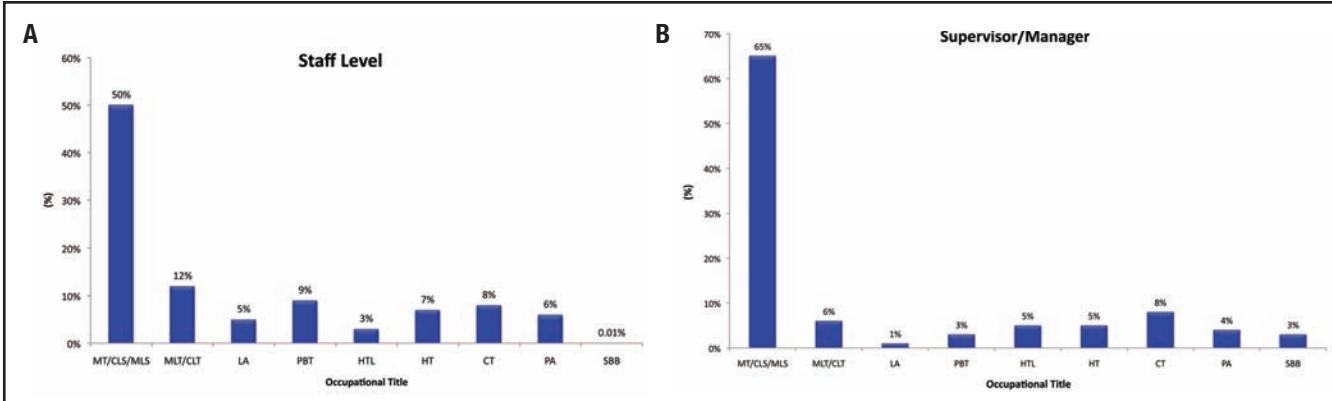


Figure 1 (A) Percent distribution of staff level survey respondents. (B) Percent distribution of supervisory level survey respondents.

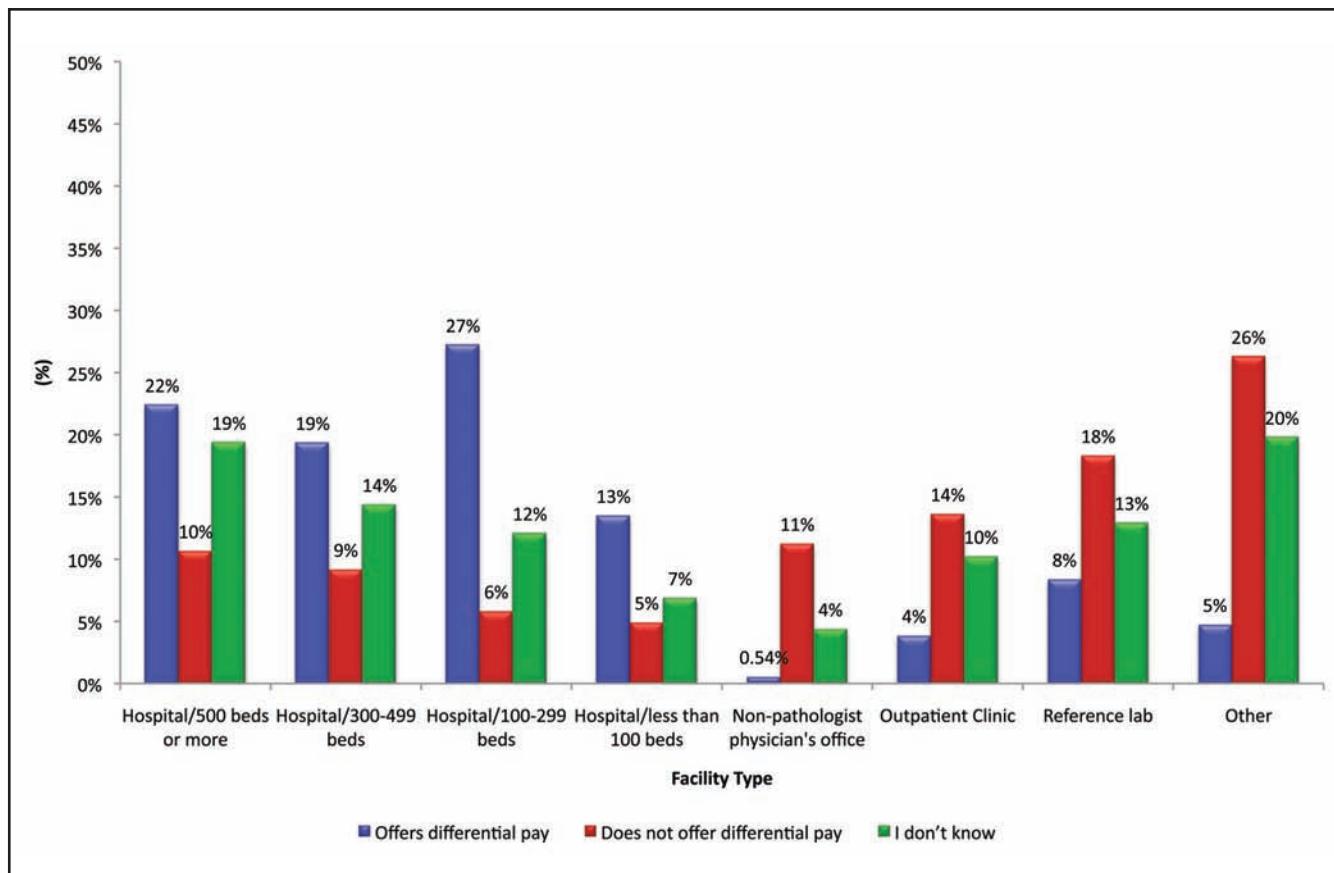


Figure 2 Percentage of facilities that offer differential pay to laboratory personnel.

degree, work full time in their current position, and do not work for more than one employer. In addition, differential pay or special rate for “on-call” status was generally offered only by hospitals, **Figure 2** and **Figure 3**.

Medical Technologists (MT)/Medical Laboratory Scientists (MLS)/Clinical Laboratory Scientists (CLS)

MT/MLS/CLS	Average Wage	Average Experience
Staff Level	\$26.16/hr (\$54,412/yr)	16.53 years
Supervisory Level	\$31.68/hr (\$65,478/yr)	17.36 years

The national average hourly wage for staff level MT/MLS/CLS employees is \$26.16 ($SD = \5.49). (**Figure 4**) Reference laboratories and hospitals with 300-499 beds pay the highest hourly rates for staff level MT/MLS/CLSs, \$27.08. Non-pathologist physicians' offices pay the lowest rates, \$20.32/hour. Certified staff level MTs earn 10% more than those who are not certified. (**Table 2**) The average years of experience the respondents have is 16.53 years.

MT/MLS/CLS supervisors earn an average hourly wage of \$31.48 ($SD = \5.8). (**Figure 4**) Results of the wage difference between laboratory facilities for MT supervisors does

not allow for statistically significant comparisons because respondents for most of the facilities included in the survey had sample size less than 30. Certified MT/MLS/CLS supervisors also receive higher salaries, approximately 3% more, than those who are not certified. (**Table 2**) The average years of experience a MT supervisor has is 17.36. Geographically, MTs regardless of position level are paid significantly higher wages in California, Maryland, Massachusetts, Connecticut, and Oregon. (**Table 3**)

Medical Laboratory Technicians (MLT)/Clinical Laboratory Technicians (CLT)

MLT/CLT	Average Wage	Average Experience
Staff Level	\$19.78/hr (\$40,768/yr)	14.43 years
Supervisory Level	\$23.72/hr (\$49,338/yr)	15.68 years

Staff level MLT/CLTs are paid an average rate of \$19.78 per hour ($SD = \4.96). (**Figure 4**) Pay rates among facilities are comparable, \$19.58/hr on average, except for non-pathologist physicians' offices where the hourly rate is \$18.26. Certified staff level MLTs earn 10% more compared to those who are not certified. The average years of experience a staff MLT has is 14.43 years.

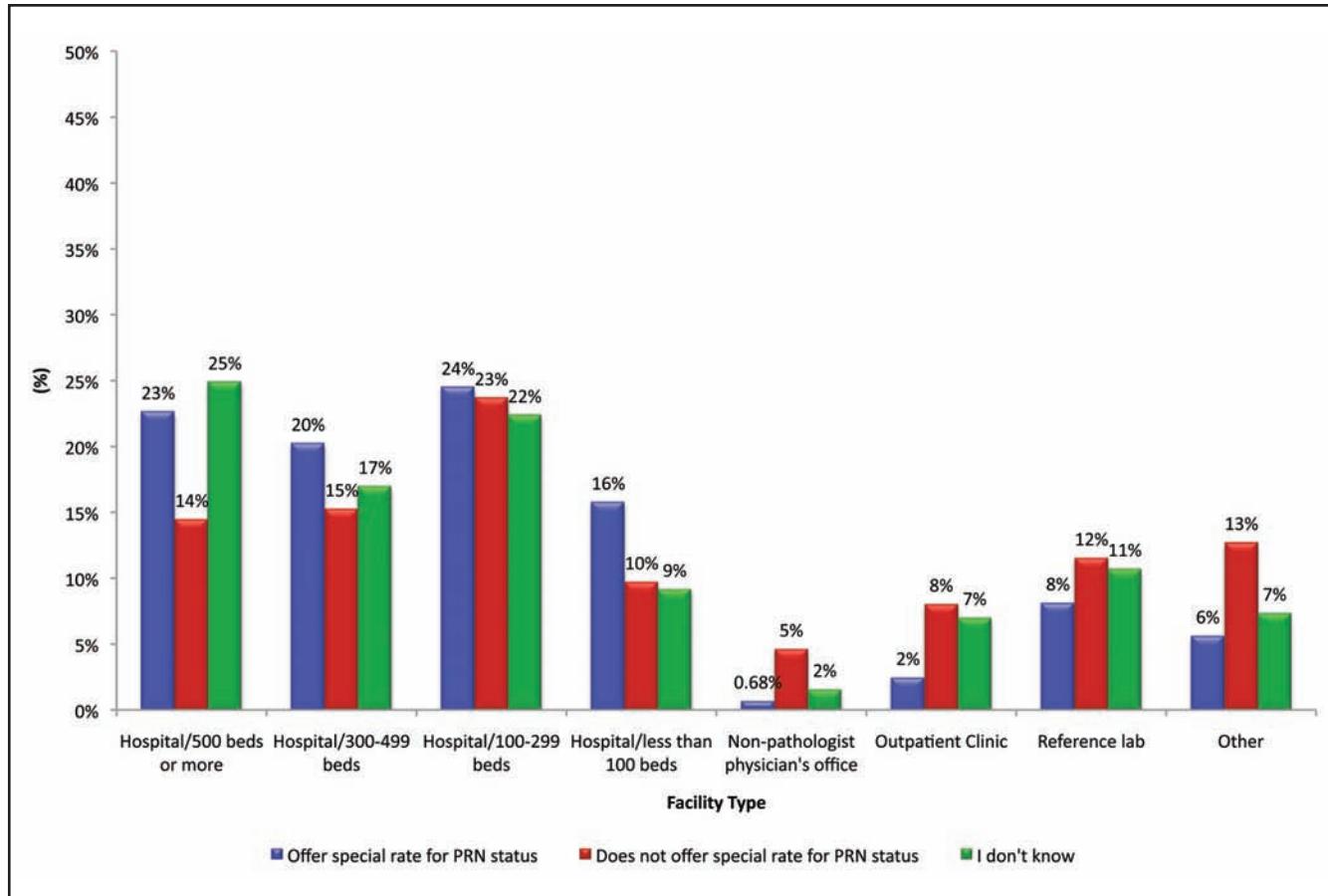


Figure 3 Percentage of facilities that offer special rate for employees with "on-call" or PRN status.

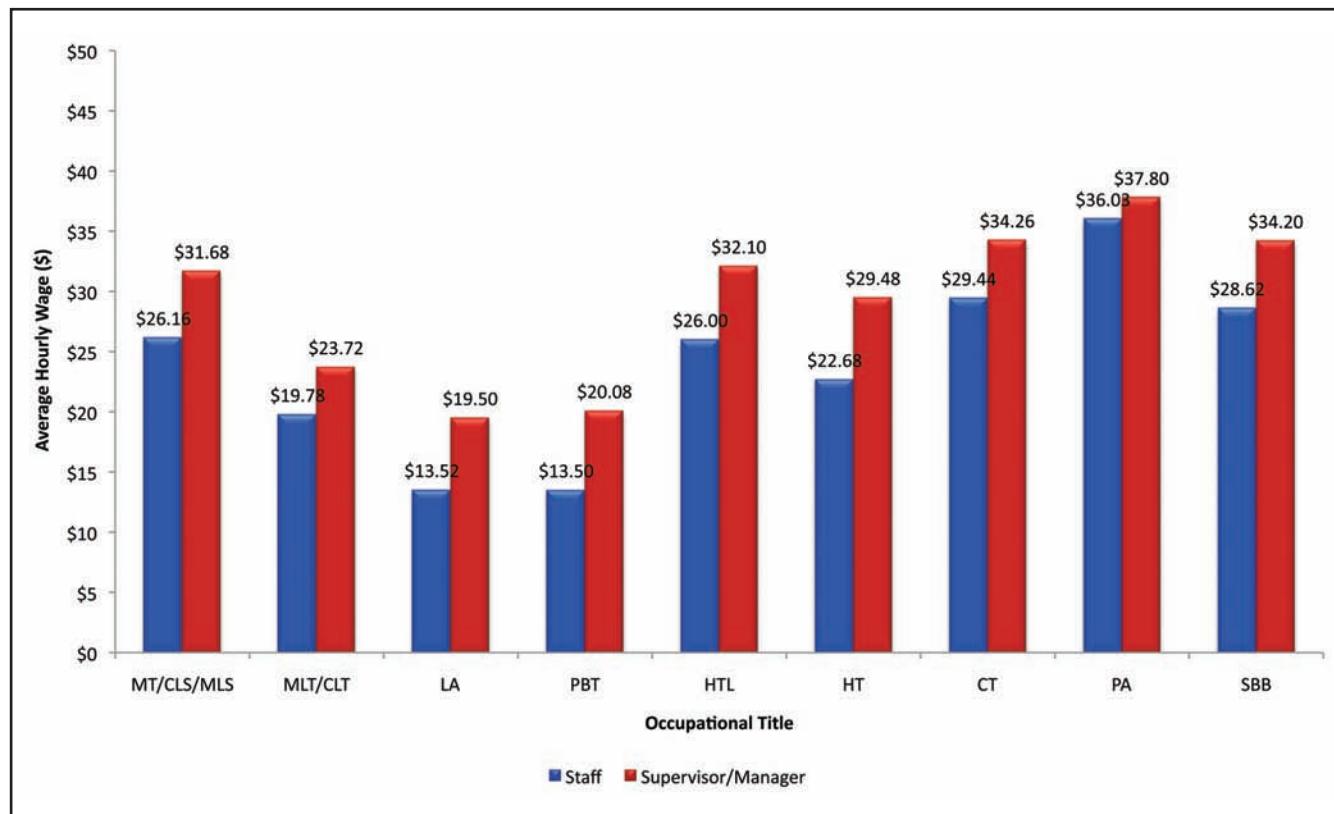


Figure 4 Average hourly wage for laboratory staff and supervisor.

MLT/CLT supervisors earn an average hourly wage of \$23.72 (SD = \$6.06). (Figure 4) MLT/CLT supervisors also receive notably higher pay in hospitals with 100-299 beds and reference laboratories, \$26.46/hr and \$26.14/hr, respectively. The facility that provides the lowest pay for MLT/CLTs is outpatient clinics, which pay an hourly rate of \$19.92. Sample size ($n < 30$) constraints prevented further analysis of wage rate differences by certification. On average, a MLT/CLT supervisor has 15.68 years of experience in their position. MLT/CLT staff and supervisors receive the highest wages in Indiana, Illinois, Wisconsin, and North Carolina. (Table 3)

Laboratory Assistants (LA)

LA	Average Wage	Average Experience
Staff Level	\$13.52/hr (\$28,122/yr)	8.86 years
Supervisory Level	\$19.50/hr (\$40,560/yr)	13.66 years

On average, LAs make \$13.52 per hour (SD = \$3.33). (Figure 4) Pay rates among the laboratory facilities are comparable, except for the non-pathologist physicians' offices, which provide for LAs the highest hourly wage of \$14.72. A staff LA typically has an average experience of 8.86 years. There is negligible difference in wages between a certified and non-certified staff LA.

LA supervisors earn an average rate of \$19.50 per hour (SD = \$9.17). (Figure 4) The average years of experience a supervisor has is 13.66. Further analysis of wage data by facility and certification could not be performed as the results would be rendered statistically insignificant (ie, $n < 30$). Texas pays the highest wage for both staff and supervisor LAs. (Table 3)

Phlebotomists (PBT)

PBT	Average Wage	Average Experience
Staff Level	\$13.50/hr (\$28,080/yr)	8.69 years
Supervisory Level	\$20.08/hr (\$41,766/yr)	10.48 years

Staff PBTs are paid an average hourly wage of \$13.50 (SD = \$3.75). (Figure 4) Results indicate that reference laboratories pay the highest hourly wage, \$16.74, while the rest of the facilities from the survey have comparable rates, averaging \$13.41/hr. A staff PBT typically has an average experience of 8.69 years. Certified staff PBTs earn at least 10% more than those who are not certified. (Table 3)

The average hourly wage for PBT supervisors is \$20.08 (SD = \$7.88). (Figure 4) The overall sample size ($n < 30$) for PBT supervisors was too small for meaningful statistical analysis of pay rates by facility. On average, a phlebotomy supervisor has 10.48 years of experience in their position. Pay rates are higher for certified PBT supervisors, 6.7% more than for non-certified PBT supervisors. (Table 3) PBT staff and supervisors earn the most in California, Illinois, Colorado, and Minnesota. (Table 3)

Table 2 Average Hourly Wage for Laboratory Staff and Supervisor by Certification

Occupational Title	Staff (average hourly wage - \$)		Supervisor/Manager (average hourly wage - \$)	
	Certified	Not Certified	Certified	Not Certified
MT/CLS/MLS	26.26	23.54	31.80	30.74
MLT/CLT	20.00	17.90	24.00	*
LA	13.96	13.22	*	*
PBT	14.06	12.66	20.38	19.02
HTL	26.36	*	32.22	*
HT	22.98	19.60	29.48	*
CT	29.22	*	34.34	*
PA	37.17	*	38.37	*
SBB	*	*	34.32	*

*Sample size was less than 30 ($n < 30$) and did not allow for statistically significant comparisons (including all categories for SBB).

Table 3 List of Highest and Lowest Paying States by Occupational Title

Occupational Title	Higher Paying States (average wage per hour)	Lower Paying States (average wage per hour)
MT/CLS/MLS	California (CA) - \$36.10 Maryland (MD) - \$32.40 Massachusetts (MA) - \$32.18 Connecticut (CT) - \$31.80 Oregon (OR) - \$30.98	West Virginia (WV) - \$25.88 Ohio (OH) - \$25.54 Arkansas (AR) - \$25.16 Nebraska (NE) - \$24.66 North Dakota (ND) - \$23.78
MLT/CLT	Indiana (IN) - \$22.70 Illinois (IL) - \$20.56 Wisconsin (WI) - \$20.48 North Carolina (NC) - \$20.04	Ohio (OH) - \$19.74 Minnesota (MN) - \$19.64 Virginia (VA) - \$19.42 Texas (TX) - \$19.34 South Carolina (SC) - \$18.96
LA	Texas (TX) - \$14.74	*
PBT	California (CA) - \$23.36 Illinois (IL) - \$17.10 Colorado (CO) - \$16.36 Minnesota (MN) - \$15.52	New York (NY) - \$13.82 Texas (TX) - \$13.80 North Carolina (NC) - \$12.78 Wisconsin (WI) - \$12.52 Ohio (OH) - \$12.10
HTL	California (CA) - \$30.82 Texas (TX) - \$27.88	*
HT	California (CA) - \$30.44 Illinois (IL) - \$26.26 Arizona (AZ) - \$26.16	Texas (TX) - \$23.78
CT	California (CA) - \$37.60 Washington (WA) - \$33.82 Minnesota (MN) - \$32.36 New York (NY) - \$31.96 Texas (TX) - \$31.06	North Carolina (NC) - \$29.46 Indiana (IN) - \$28.38 Ohio (OH) - \$27.94
PA	California (CA) - \$39.32	Illinois (IL) - \$37.04 Texas (TX) - \$36.98 Florida (FL) - \$36.90
SBB	California (CA) - \$37.20 New York (NY) - \$34.20	Texas (TX) - \$31.10 Ohio (OH) - \$30.00

Histotechnologists (HTL)

HTL	Average Wage	Average Experience
Staff Level	\$26.00/hr (\$54,080/yr)	13.09 years
Supervisory Level	\$32.10/hr (\$66,768/yr)	17.02 years

The average hourly wage for staff HTLs is \$26.00 (SD = \$5.83). (**Figure 4**) The average number of years a staff HTL has been working under their current occupational title is 13.09. HTL supervisors earn an average hourly wage of \$32.10 (SD = \$5.77) (**Figure 4**) and have an average experience of 17.02 years. Analysis of wage data by laboratory facilities and certification for both staff and supervisor HTLs was not performed as the results would provide statistically insignificant values. The highest paying states for both HTL levels are California and Texas. (**Table 3**)

Histotechnicians (HT)

HT	Average Wage	Average Experience
Staff Level	\$22.68/hr (\$47,174/yr)	11.31 years
Supervisory Level	\$29.48/hr (\$61,318/yr)	14.30 years

Staff level HTs earn an average of \$22.68 (SD = \$5.28) per hour. (**Figure 4**) Typically, a staff level HT has an average experience of 11.31 years. Certified staff HTs earn 14.7% more than non-certified HT staff. For HT supervisor-level employees, the average hourly wage is \$29.48 per hour (SD = \$5.99). (**Figure 4**) The average years of experience a HT supervisor has is 14.30. The overall sample sizes (n<30) for staff and supervisor HT was too small for meaningful statistical analysis of pay rates by laboratory facility and certification. (**Table 2**) California, Illinois and Arizona are the highest paying states for both HT staff and supervisor. (**Table 3**)

Cytotechnologists (CT)

CT	Average Wage	Average Experience
Staff Level	\$29.44/hr (\$61,235/yr)	15.75 years
Supervisory Level	\$34.26/hr (\$71,261/yr)	18.53 years

Staff level CTs are paid an average hourly wage of \$29.44 (SD = \$5.50). (**Figure 4**) The average years of experience a staff CT has is 15.75. CT supervisors earn an average wage of \$34.26 per hour (SD = \$4.44) (**Figure 4**) and have an average experience of 18.53 years. A further analysis of wage differences by laboratory facilities and certification for staff and supervisor CTs was not performed as the results would be rendered statistically insignificant (ie, n<30). The highest paying states for CTs regardless of position level are California, Washington, Minnesota, New York, and Texas. (**Table 3**)

Table 4 Average Hourly Wage by Facility Type

Occupational Level	Higher Paying Facilities	Lower Paying Facilities
Staff	Hospitals, Reference labs	Non-pathologist physicians' office, Outpatient clinics, Other
Supervisor/Manager	Hospitals, Reference labs	Non-pathologist physicians' office, Outpatient clinics, Other

Pathologists' Assistants (PA)

PA	Average Wage	Average Experience
Staff Level	\$36.03/hr (\$74,922/yr)	9.38 years
Supervisory Level	\$37.80/hr (\$77,376/yr)	12.49 years

The average hourly wage for staff level PAs is \$36.03 (SD = \$5.42). (**Figure 4**) On average, a staff level PA has 9.38 years of experience. PA supervisor level employees earn an average rate of \$37.20 per hour (SD = \$5.19) (**Figure 4**) and have an average experience of 12.49 years. Due to sample size restrictions (n<30) statistical analysis of wage differences between facilities and certification could not be performed. California is the highest paying state for both staff and supervisor PAs. (**Table 3**)

Specialists in Bloodbanking (SBB)

SBB	Average Wage	Average Experience
Staff Level	\$28.62/hr (\$59, 530/yr)	16.38 years
Supervisory Level	\$34.20/hr (\$71,136/yr)	16.90 years

Staff level SBBs are paid an average hourly wage of \$28.62 (SD = \$6.29). (**Figure 4**) The average years of experience a SBB staff has is 16.38. Supervisory SBB's earns an average hourly wage of \$34.20 (SD = \$4.74) (**Figure 4**) and have an average experience of 16.9 years. The small sample size for the number of SBB's prevented statistical analysis of wage differences by facility type and certification. SBBs earns higher wages in California and New York. (**Table 3**)

Summary

Nationally, laboratories pay the highest wages for staff and supervisory level PAs, CTs, SBBs, and MT/MLS/CLSSs. Wages are lowest for LA and PBT staff level positions. Pay rates by position are highest in hospitals and reference laboratories for most of the laboratory positions surveyed. (**Table 4**) Reference laboratories also provide the highest rates for PBTs, HTLs, and HTs compared to the other facilities in the survey. Salaries for staff and supervisory/managerial level CTs were comparable between hospitals and reference laboratories. Where the data allowed for comparisons between certification, wages tend to be higher for certified laboratory personnel regardless of position type or level. This differential was most noticeable for staff level laboratory personnel, ranging from at least 10 percent more for medical technologists and medical laboratory technicians to as much as 14.3 percent more for histotechnicians. **IM**