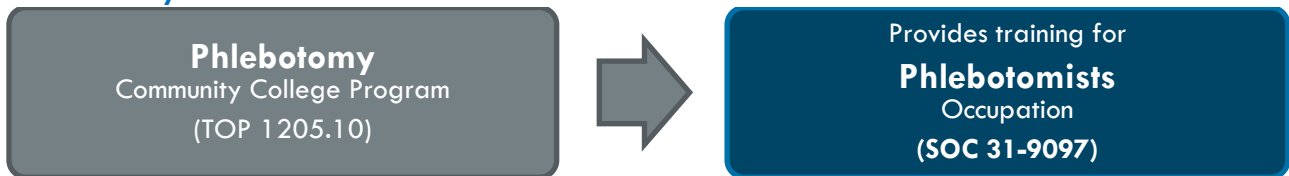


# Phlebotomy

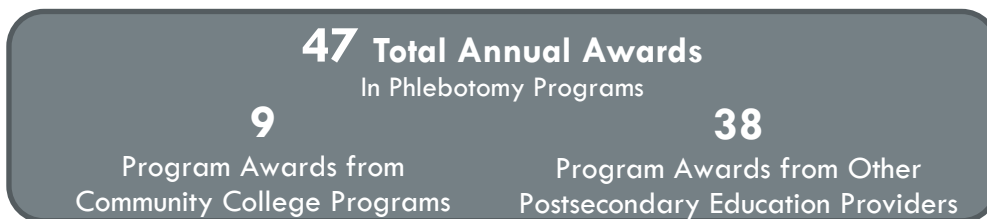
*Inland Empire/Desert Region (Riverside and San Bernardino counties)*

*This workforce demand report uses state and federal job projection data developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to verify their current employment needs.*

## Summary



Over the next five years (2021-2026), employment for phlebotomists is projected to



**The Inland Empire/Desert Centers of Excellence**  
 **Recommends**  
**Phlebotomy Program Expansion**  
 to meet the need for more workers in the region

## Introduction

This report provides labor market occupational demand and wage research and postsecondary program outcomes related to phlebotomy. California Community College phlebotomy programs (TOP 1205.10) prepare students for employment through instruction related to the principles and practices for puncturing the skin to give injections, and puncturing veins or arteries to obtain blood samples for analysis and diagnosis (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by phlebotomy programs prepare students for employment as phlebotomists.

**Phlebotomists (31-9097)**

Draw blood for tests, transfusions, donations, or research. May explain the procedure to patients and assist in the recovery of patients with adverse reactions.

**Sample job titles:** Lab Liaison Technician, Mobile Examiner, Patient Service Technician (PST), Phlebotomist, Phlebotomy Technician, Registered Phlebotomist

*Entry-Level Educational Requirement: Postsecondary nondegree award*

*Training Requirement: None*

*Work Experience: None*

*Incumbent workers with a Community College Award or Some Postsecondary Coursework: 61%*

In 2021, there were 1,482 phlebotomist jobs in the region. Regional employment for phlebotomists is projected to increase by 11% through 2026; 215 job openings are projected annually. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers aged 55 years and older in the region.

*Exhibit 1. Five-year projections for phlebotomists, Inland Empire/Desert Region, 2021-2026*

Occupation	2021 Jobs	2026 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Phlebotomists	1,482	1,651	11%	1,073	215	13%

Source: Lightcast 2022.2

An online job ad search for phlebotomists was conducted to reveal the employers seeking these workers, including the time it takes to fill positions, earnings information, and in-demand skills. Exhibit 2 shows the number of job ads posted during the last 12 months, August 2021 through July 2022, and the regional and statewide average time to fill these jobs. The job ads included in this search have been limited to positions requiring phlebotomist certification.

On average, employers in the local region fill online job ads for phlebotomists in 28 days, the same as the statewide average time to fill. Time to fill information indicates that employers in the region likely face similar challenges filling open positions as other employers in California.

*Exhibit 2. Job ads and time to fill, Inland Empire/Desert Region, August 2021 through July 2022*

Occupation	Job Ads	Regional Average Time to Fill (Days)	Statewide Average Time to Fill (Days)
Phlebotomists	410	28	28

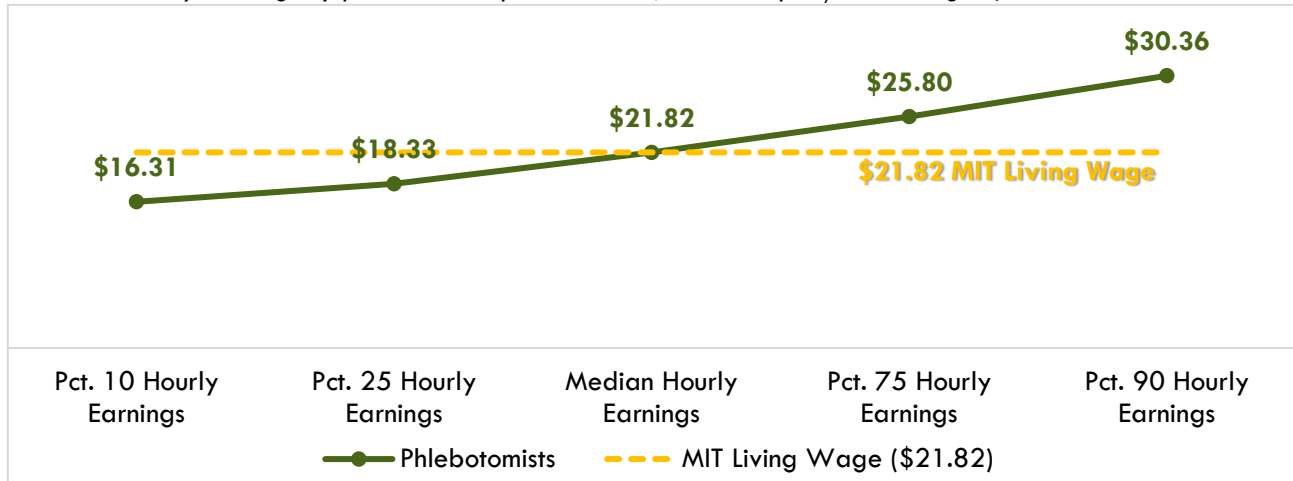
Source: Burning Glass – Labor Insights

### Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a living wage. The MIT living wage calculator estimates that an individual must earn \$21.82 per hour or \$45,386 annually in California (Glasmeier, 2022).

Exhibit 3 displays the hourly earnings for phlebotomists. The median hourly earnings for phlebotomists are the same as the living wage standard, indicating that the top 50% of workers earn a living wage.

Exhibit 3. Hourly earnings by percentile for phlebotomists, Inland Empire/Desert Region, 2021



Source: Lightcast 2022.2

Benefits information, provided in the occupational guides developed by the California Labor Market Information Division, reveals that employers may provide health and life insurance, sick leave, vacation, and retirement plans (Detailed Occupational Guides, 2022).

### Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for phlebotomists over the last 12 months. Online job ad salary information reveals that employers are willing to pay phlebotomists an average annual salary of \$44,000, below the region's \$45,386 annual (\$21.82 hourly) MIT living wage standard. Consider the salary information with caution since only 22% (90 out of 410) of online job ads for this occupation provided salary information. The salary figures are prorated to reflect full-time, annual earnings status.

Exhibit 4. Advertised salary information, Inland Empire/Desert Region, August 2021 through July 2022

Number of job ads	Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	Average Annual Salary
90	8%	81%	8%	3%	\$44,000

Source: Burning Glass – Labor Insights

## Job Titles, Employers, Skills, Education, and Work Experience

Exhibit 5 displays the job titles most frequently used in job ads for phlebotomists during the last 12 months.

Displaying advertised job titles may provide insight into the positions sought by employers posting ads. Aside from phlebotomist, the most frequently requested job title in the region was phlebotomist I.

*Exhibit 5. Job titles most frequently used in phlebotomist job ads, Inland Empire/Desert Region, August 2021 through July 2022*

Job Titles	Job Ads
Phlebotomist	139
Phlebotomist I	50
Phlebotomist II	32
Phlebotomy Technician	31
Mobile Phlebotomist	24
Certified Phlebotomist	14
All other job titles	120
<b>Total</b>	<b>410</b>

Source: Burning Glass – Labor Insights

Exhibit 6 displays the employers that posted more than five job ads for phlebotomists during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. Quest Diagnostics Incorporated, a clinical laboratory company, posted the most job ads for phlebotomists in the region.

*Exhibit 6. Employers posting the most job ads for phlebotomists, Inland Empire/Desert Region, August 2021 through July 2022*

Top Employer	Job Ads
Quest Diagnostics Incorporated	111
Actalent	27
BioLife Plasma Services	18
Loma Linda University Health	14
Sonic Healthcare USA	13
Corona Regional Medical Center	9
Kaiser Permanente	9
Temecula Valley Hospital	7
San Antonio Regional Hospital	7
TridentCare	7

Top Employer	Job Ads
All other employers	188
<b>Total</b>	<b>410</b>

Source: Burning Glass – Labor Insights

Exhibit 7 lists a sample of specialized and employability skills employers seek when seeking workers to fill phlebotomist positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job ads may be utilized to guide curriculum development.

Exhibit 7. Sample of in-demand skills from employer job ads, Inland Empire/Desert Region, August 2021 through July 2022

Specialized skills (n=394)	Employability skills
<ul style="list-style-type: none"> <li>• Venipuncture</li> <li>• Specimen Collection</li> <li>• Data Entry</li> <li>• Customer Service</li> <li>• Custer Billing</li> </ul>	<ul style="list-style-type: none"> <li>• Telephone Skills</li> <li>• Research</li> <li>• Typing</li> <li>• Communication Skills</li> <li>• Detail-Oriented</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 8 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for phlebotomists. According to the Bureau of Labor Statistics, 61% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." Approximately 97% of job ads for phlebotomists sought candidates with at least a high school diploma or vocational training.

Exhibit 8. Typical entry-level education, educational attainment, and minimum advertised education requirements, Inland Empire/Desert Region, August 2021 through July 2022

Typical Entry-Level Education Requirement (National)	CC-Level Educational Attainment* (National)	Number of Job Ads	Real-Time Minimum Advertised Education Requirement		
			High school or vocational training	Associate degree	Bachelor's degree or higher
Postsecondary nondegree	61%	301	97%	3%	-

Source: Lightcast 2022.2, Burning Glass – Labor Insights

\*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 9 displays the work experience typically required for phlebotomists and the real-time work experience requirements from employer job ads. Approximately 83% of employers sought phlebotomists with zero to two years of previous work experience.

Exhibit 9. Work experience required and real-time work experience requirements, Inland Empire/Desert Region, August 2021 through July 2022

Work Experience Typically Required	Real-Time Work Experience			
	Number of job ads	0 – 2 years	3 – 5 years	6+ years
None	214	83%	15%	2%

Source: Lightcast 2022.2, Burning Glass – Labor Insights

### Certifications

Exhibit 10 displays the most frequently required certifications in employer job ads. All of the job ads included in this search require a phlebotomist certification. The Laboratory Field Services division of the California Department of Public Health (CDPH) is responsible for licensing phlebotomists in California. The three levels of phlebotomy certifications include Limited Phlebotomy Technician (LPT), Certified Phlebotomy Technician I (CPT I), and Certified Phlebotomy Technician II (CPT II), representing different scopes of practice. The LPT certification authorizes skin puncture for blood collection only; the CPT I certification authorizes skin puncture and venipuncture blood collection; and the CPT II authorizes skin puncture, venipuncture, and arterial puncture blood collection (CDPH, 2022). Each certification requires a high school diploma or equivalent and training from a CDPH-approved training program. For more information, please visit the CDPH website (CDPH, 2022).

Exhibit 10: Certifications most frequently required by employers, Inland Empire/Desert Region, August 2021 through July 2022

Certification (n=410)	Jobs Ads
Phlebotomy Certification	410
Driver’s License	108
Basic Life Support	45

Source: Burning Glass – Labor Insights

### Student Completions and Programs Outcomes

Exhibit 11 displays student completions for phlebotomy programs (TOP 1205.10) over the last three academic years (2018-21). Palo Verde College is the only regional community college currently offering a CDHP-approved phlebotomy program. Over the previous three academic years, regional community colleges issued nine awards annually in phlebotomy programs. Program completion and student outcome methodologies are found in the appendix.

Exhibit 11. Annual average community college awards for phlebotomy programs, Inland Empire/Desert Region, Academic Years 2018-2021

TOP 1230.10 – Phlebotomy (Local Program Title)	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2021-21	Total CC Annual Average Awards, Academic Years 2018-21
<b>Palo Verde</b> (Phlebotomy)				<b>9</b>
Certificate < 6-semester units	12	15	0	9
<b>Total</b>	<b>12</b>	<b>15</b>	<b>0</b>	<b>9</b>

Source: MIS Data Mart, COCI

California program outcome data may provide useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 12.

Exhibit 12. 1205.10 – Phlebotomy strong workforce program outcomes, Inland Empire/Desert Region, Academic Year 2018-2019 (Unless Noted)

Strong Workforce Program Metrics: 1205.10 – Phlebotomy	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2019-20)	25	515
Completed 9+ career education units in one year (2019-20)	-	22%
Perkins Economically disadvantaged students (2019-20)	88%	87%
Students who earned a degree, certificate, or attained apprenticeship (2019-20)	-	39
Transferred to a four-year institution (transfers)	-	19
Job closely related to the field of study (2017-18)	-	81%
Median annual earnings (all exiters)	\$18,316	\$33,280
Median change in earnings (all exiters)	-	35%
Attained a living wage (completers and skills-builders)	-	41%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 13 displays awards for other postsecondary education providers reported in phlebotomy technician/phlebotomist programs (CIP 51.1009). Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years. Two other regional postsecondary education providers issued 38 awards annually over the last three academic years.

Exhibit 13. Other educational providers phlebotomy technician/phlebotomist programs, three-year annual average credentials, Inland Empire/Desert Region, Academic Years 2017-2020

51.1009 – Phlebotomy Technician/Phlebotomist	Award <1 academic year	Other Educational Providers Annual Average Credentials, 2017-2020
California Nurses Educational Institute	5	5
Riverside Office of Education-School of Career Education	33	33
<b>Total</b>	<b>38</b>	<b>38</b>

Source: IPEDS

## Summary of Findings

The knowledge, skills, and abilities trained by phlebotomy programs (TOP 1205.10) prepare students for employment in the phlebotomist occupation. Phlebotomists are projected to have 215 annual job openings and increase employment by 11% over the next five years in the Inland Empire/Desert Region. The median hourly earnings for phlebotomists are the same as the living wage standard, indicating that the top 50% of workers earn a living wage.

Community college phlebotomy programs have issued nine awards annually over the last three academic years. Other postsecondary education providers have issued 38 awards annually in programs related to phlebotomy. Combined, education providers in the region have issued 47 awards annually in phlebotomy programs over the last three academic years.

The Centers of Excellence recommends expanding phlebotomy programs to meet the regional demand for more workers. Colleges considering this program should partner with relevant employers and confirm their demand for phlebotomists and the skills needed for students to secure work in this field shortly after exiting the program.

### Contact

Michael Goss  
 Paul Vaccher  
 Centers of Excellence, Inland Empire/Desert Region  
[michael.goss@chaffey.edu](mailto:michael.goss@chaffey.edu)  
 August 2022

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## Appendix: Methodology

Exhibit 11 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2018 and 2021 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variations that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's

Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from California's Employment Development Department's Unemployment Insurance database records. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2022a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2022a).

Job ad data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job ads often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or collecting resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2021 to 2026 job growth, wages, entry-level education, training, and work experience required for phlebotomists in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

Occupation	2021 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 <sup>th</sup> to 90 <sup>th</sup> percentile)	Median Hourly Wage (50 <sup>th</sup> percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Phlebotomists (31-9097)	1,482	169	11%	215	\$16.31 to \$30.36	\$21.82	\$46,400	Postsecondary nondegree award & None	None

Source: Lightcast 2022.2