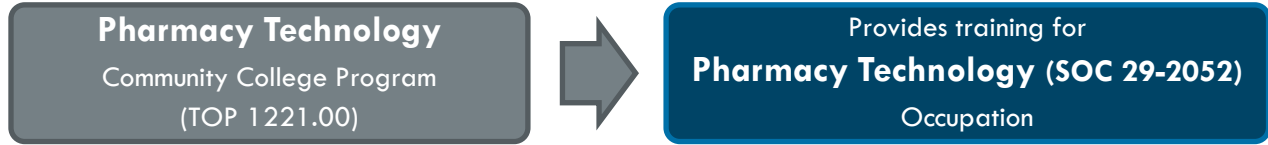


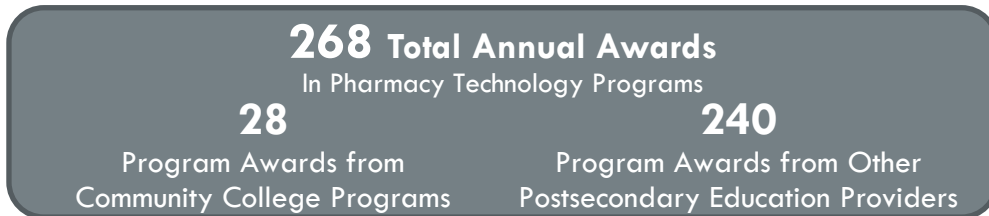
Pharmacy Technician

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

Summary



Over the next five years (2022-2027), employment for pharmacy technicians is projected to:



The Inland Empire/Desert Centers of Excellence

 **Recommends**

pharmacy technology program expansion
to meet the need for more workers in the region

Introduction

California Community College pharmacy technology programs (TOP 1221.00) prepare students for employment through instruction of the principles and procedures used to assist in maintaining and dispensing pharmaceutical supplies and medications (Taxonomy of Programs, 2023). The knowledge, skills, and abilities trained by pharmacy technology programs lead to employment as pharmacy technicians.

Pharmacy Technicians (29-2052)

Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.

Sample job titles: Accredited Pharmacy Technician, Certified Pharmacy Technician (CPhT), Chemotherapy Pharmacy Technician (Chemo Pharmacy Technician), Compounding Technician, OR Pharmacy Tech (Operating Room Pharmacy Tech), RPhT (Registered Pharmacy Technician)

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: Between one and twelve months on-the-job training

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 52%

Job Demand

In 2022, there were 4,271 pharmacy technician jobs in the Inland Empire/Desert Region. Regional employment for this occupation is projected to increase by 7% through 2027; 456 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 greater in the region.

Exhibit 1. Five-year projections for pharmacy technicians, Inland Empire/Desert Region, 2022-2027

Occupation	2022 Jobs	2027 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Pharmacy Technician	4,271	4,557	7%	2,278	456	11

Source: Lightcast 2023.3

An online job ad search for pharmacy technicians was conducted to reveal the employers seeking these workers, including the median posting duration, earnings information, and in-demand skills. Exhibit 2 displays the number of job ads posted for pharmacy technicians over the last 12 months and the median posting duration. Over the previous 12 months, there were 223 job ads for pharmacy technicians in the region.

On average, regional employers kept online job ads for pharmacy technicians open for 30 days, one day longer than the regional average across all occupations. This may indicate that employers face similar challenges filling pharmacy technician positions as other jobs.

Exhibit 2. Job ads and posting duration, Inland Empire/Desert Region, September 2022 through August 2023

Occupation	Job Ads	Median Posting Duration (Days)
Pharmacy Technician	223	30

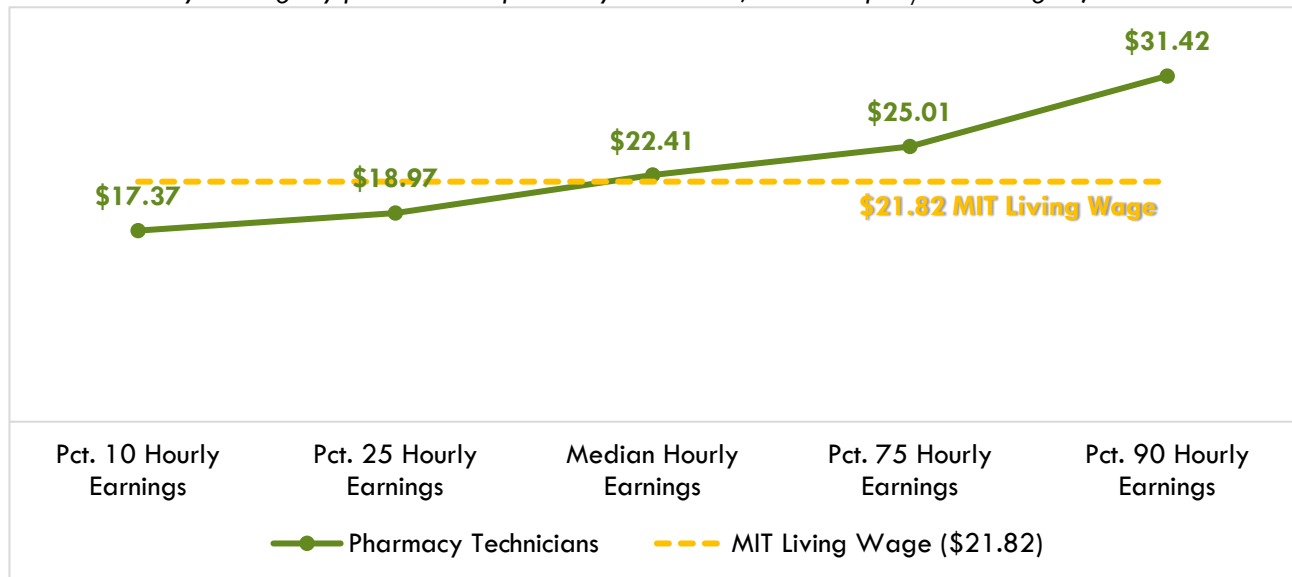
Source: Lightcast 2023.3

Earnings

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 to be self-sufficient in California (Glasmeier, 2023).

Exhibit 3 displays the hourly earnings for pharmacy technicians. The median hourly earnings for pharmacy technicians are above the living wage estimate, indicating that at least the top 50% of workers earn a living wage.

Exhibit 3. Hourly earnings by percentile for pharmacy technicians, Inland Empire/Desert Region, 2022



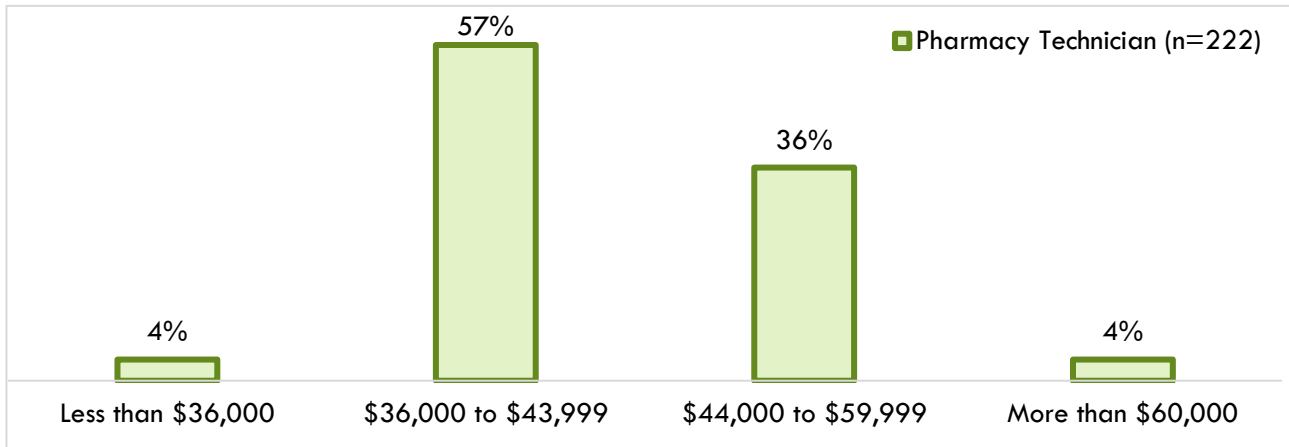
Source: Lightcast 2023.3

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised salaries for pharmacy technicians over the last 12 months.

Online job ad salary information reveals employers are willing to pay pharmacy technicians an annual salary of \$42,000 or \$20.18 per hour, below the region's \$45,386 annual or \$21.82 hourly living wage standard.

Exhibit 4. Online advertised salaries for pharmacy technicians, Inland Empire/Desert Region, September 2022 through August 2023



Source: Lightcast 2023.3

Online Job Advertisements: Job Titles, Employers, Skills, Education, & Work Experience

Exhibit 5 displays the job titles most frequently used in pharmacy technician job ads over the last 12 months. Displaying advertised job titles may provide insight into the types of positions sought by employers posting job ads.

Exhibit 5. Job titles most frequently used in pharmacy technicians job ads, Inland Empire/Desert Region, September 2022 through August 2023

Job Titles	Unique Job Ads
Pharmacy Technicians	150
Certified Pharmacy Technicians	26
Pharmacy Clerks/Technicians	12
Lead Pharmacy Technicians	6
Outpatient Pharmacy Technicians	6
All other job titles	23
Total	223

Source: Lightcast 2023.3

Exhibit 6 displays the employers posting the most job ads for pharmacy technicians during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. CVS Health posted the most job ads for pharmacy technicians over the last 12 months.

Exhibit 6. Employers posting the most job ads for pharmacy technicians, Inland Empire/Desert Region, September 2022 through August 2023

Top Employer	Unique Job Ads
CVS Health	49
Walgreens Boots Alliance	30
United States Department of Veterans Affairs	10
ABC Pharmacy	9
Kaiser Permanente	6
All other employers	119
Total	223

Source: Lightcast 2023.3

Exhibit 7 lists a sample of specialized and employability skills employers seek when seeking workers to fill pharmacy technician positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Common 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.

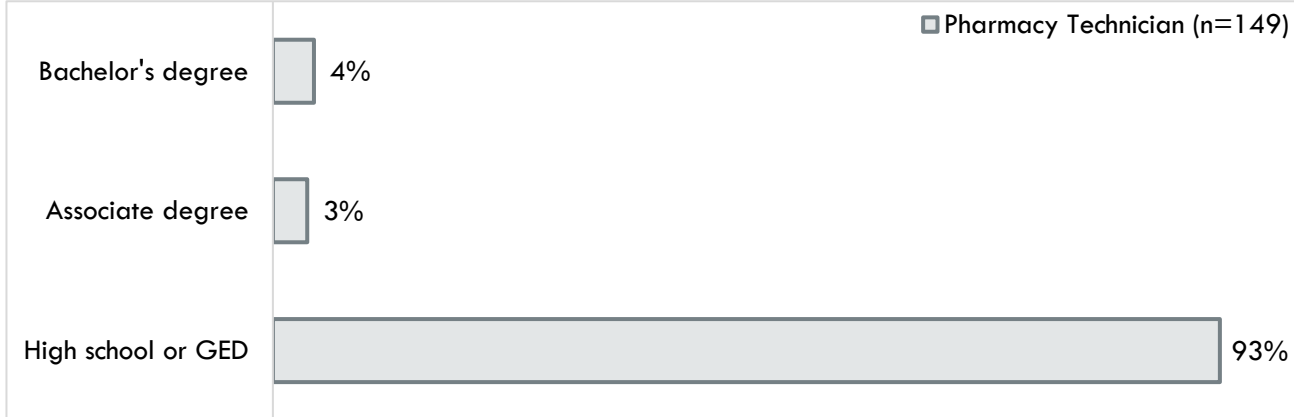
Exhibit 7. Sample of in-demand skills from employer job ads, Inland Empire/Desert Region, September 2022 through August 2023

Specialized skills (n=223)	Common skills
<ul style="list-style-type: none"> • Workflow Management • Inventory Management • Medication Dispensation • Regulatory Compliance • Quality Control 	<ul style="list-style-type: none"> • Customer Service • Communication Skills • Packaging and Labeling • Mathematics • Writing

Source: Lightcast 2023.3

Exhibit 8 displays the minimum advertised education requirements for pharmacy technicians. According to the Bureau of Labor Statistics, 52% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." Most employer job ads (93%) were seeking a candidate holding a high school diploma or equivalent as a minimum education level requirement.

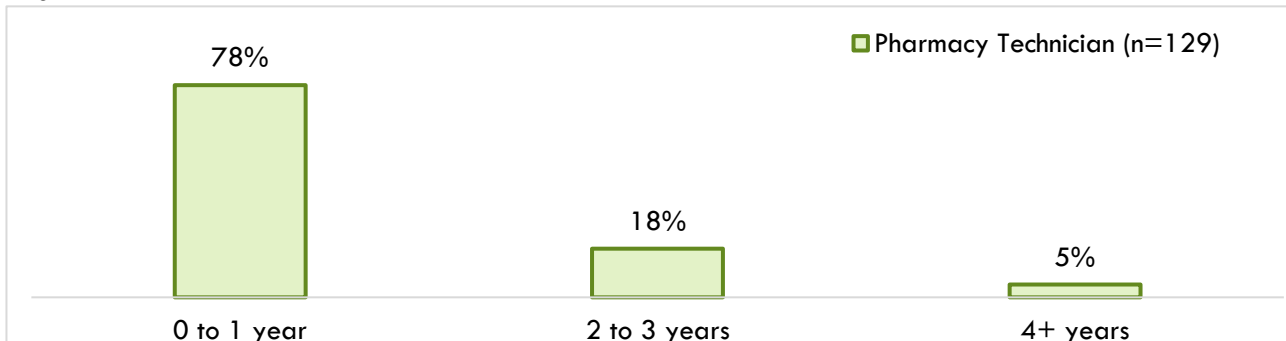
Exhibit 8. Minimum advertised education requirements, Inland Empire/Desert Region, September 2022 through August 2023



Source: Lightcast 2023.3

Exhibit 9 displays the work experience typically required from employer job ads for pharmacy technicians. Approximately 78% of employers listing minimum experience requirements sought candidates with zero to one year of previous work experience.

Exhibit 9. Real-time work experience requirements, Inland Empire/Desert Region, September 2022 through August 2023



Source: Lightcast 2023.3

Certifications

Exhibit 10 displays the most frequently required certifications in employer job ads. All employer job ads for pharmacy technicians sought individuals with a pharmacy technician license. Please visit the California State Board of Pharmacy website for more information regarding pharmacy technician licenses.

Exhibit 10: Certifications most frequently required by employers, Inland Empire/Desert Region, September 2022 through August 2023

Certification	Jobs Ads
Licensed Pharmacy Technician	223

Source: Lightcast 2023.3

Student Completions and Programs Outcomes

Exhibit 11 displays student completions for pharmacy technology (TOP 1221.00) programs over the last three academic years (2019-22). In the previous three academic years, three regional community colleges issued 28 annual average awards in pharmacy technology programs. Program completion and student outcome methodologies are found in the appendix.

Exhibit 11. Annual average community college awards for pharmacy technology programs, Inland Empire/Desert Region, Academic Years 2019-2022

TOP 1221.00 - Pharmacy Technology (Local Program Title)	Academic Year 2019-20	Academic Year 2020-21	Academic Year 2021-22	Total CC Annual Average Awards, Academic Years 2019-22
Chaffey College (Pharmacy Technician)				6
Associate Degree	10	0	0	3
Certificate 16 < 30-semester units	9	0	0	3
College of the Desert (Pharmacy Technician)				0
Certificate 6 < 18-semester units	0	0	1	0
San Bernardino Valley College (Pharmacy Technology)				22
Associate Degree	12	8	18	13
Certificate 16 < 30-semester units	3	3	21	9
Total	34	11	40	28

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. 1221.00 – Pharmacy technology strong workforce program outcomes, Inland Empire/Desert Region, Academic Year 2020-2021 (Unless Noted)

Strong Workforce Program Metrics: 1221.00 - Pharmacy Technology	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2021-22)	445	1,380
Completed 9+ career education units in one year (2021-22)	20%	27%
Students who attained a noncredit workforce milestone in a year (2021-22)	-	72%
Students who earned a degree, certificate, or attained apprenticeship (2021-22)	25	160
Job closely related to the field of study (2019-20)	75%	69%
Median annual earnings (all exiters)	\$30,832	\$35,916

Strong Workforce Program Metrics: 1221.00 - Pharmacy Technology	Inland Empire/Desert Region	California
Median change in earnings (all exiters)	46%	28%
Attained a living wage (completers and skills-builders)	54%	42%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 13 displays awards for other postsecondary education providers reported in pharmacy technician/assistant (CIP 51.0805) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent two years. Ten other regional postsecondary education providers issued 240 annual average awards over the last two academic years.

Exhibit 13. Other educational providers pharmacy technician/assistant training programs, two-year annual average credentials, Inland Empire/Desert Region, Academic Years 2019-2021

51.0805 – Pharmacy Technician/Assistant	Academic Year 2019-20	Academic Year 2020-21	Other Educational Providers Annual Average Credentials, 2019-2021
American Career College-Ontario			
Certificates 1 < 2 years	36	44	40
American College of Healthcare and Technology			
Certificates 1 < 2 years	10	10	10
California Nurses Educational Institute			
Certificates < 1 year	0	1	1
North-West College-Riverside			
Certificates 1 < 2 years	22	45	34
Riverside County Office of Education-School of Career Education			
Certificates < 1 year	39	48	44
San Joaquin Valley College-Hesperia			
Certificates 1 < 2 years	27	18	23
Associate degree	0	0	0
San Joaquin Valley College-Ontario			
Certificates 1 < 2 years	15	17	16
Associate degree	0	0	0
San Joaquin Valley College-Rancho Mirage			
Certificates 1 < 2 years	0	6	3
Associate degree	0	1	1
San Joaquin Valley College-Temecula			
Certificates 1 < 2 years	25	24	25
Associate degree	0	1	1

51.0805 – Pharmacy Technician/Assistant	Academic Year 2019-20	Academic Year 2020-21	Other Educational Providers Annual Average Credentials, 2019-2021
UEI College-Riverside			
Certificates 1 < 2 years	52	39	46
Total	226	254	240

Source: IPEDS

Summary of Findings & Recommendation

Pharmacy technicians are projected to have 456 annual job openings and increase employment by 7% in the Inland Empire/Desert Region over the next five years. The hourly earnings for pharmacy technicians meet the living wage requirement at the median level, indicating that at least 50% of workers earn a living wage in the region.

Over the last three academic years, three regional community colleges issued 28 annual average awards in pharmacy technology programs. Over the last three academic years, ten other postsecondary education institutions issued 240 annual average awards in pharmacy technician/assistant programs. Combined, regional postsecondary education institutions issued 268 annual average pharmacy technology awards.

The Centers of Excellence recommends expanding pharmacy technology training programs to meet the regional demand for more workers. Colleges considering this program should partner with applicable employers to document their demand for pharmacy technicians and the skills and certifications needed for students to earn a living wage after exiting the program.

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September 2023

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Appendix: Methodology

Exhibit 11 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2019 and 2022 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. 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, 2023a). 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, 2023a).

Table 1. 2022 to 2027 job growth, wages, entry-level education, training, and work experience required for pharmacy technicians in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

Occupation (SOC)	2022 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Pharmacy Technicians (29-2052)	4,271	286	7%	456	\$17.37 to \$31.42	\$22.41	\$48,400	High school diploma or equivalent & One to twelve months	None

Source: Lightcast 2023.3