

Pharmacy Technician

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

Summary

- Employment for pharmacy technicians is expected to **increase by 10% between 2018 and 2023**. A total of **393 annual job openings** will be available each year over the five-year timeframe.
- The 25th percentile, entry-level, hourly wage for pharmacy technicians is **\$15.40**, above the regional living wage standard for a two-adult household (both working) with one child.
- There was an average of 50 credentials issued annually from regional community college training programs over the last three academic years. Seven private educational institutions outside the community college system issued an annual average of 211 credentials over the previous three academic years. Combined, there is a potential annual supply of **261 qualified pharmacy technician** workers from regional training programs.

Introduction

This report provides data on the occupation related to the California Community College pharmacy technology (TOP 1221.00) program. This program prepares students for employment as pharmacy technicians by providing instruction on the principles and procedures used to assist in maintaining and dispensing pharmaceutical supplies and medications (Taxonomy of Programs, 2012). The occupational description and a sample of job titles for pharmacy technicians are listed below.

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; Billing and Quality Technician; Certified Pharmacy Technician (CPhT); Compounding Technician; **Lead Pharmacy Tech**, Certified Pharmacy Technician (Lead Pharmacy Tech, CPhT); Lead Pharmacy Technician (Lead Pharmacy Tech); Pharmacy Technician (Pharmacy Tech); Senior Pharmacy Technician; Technician; Technician, Inventory Specialist

Entry-Level Educational Requirement: High school diploma or equivalent

Training Requirement: One to twelve months of on-the-job training

Work Experience Required: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 56%

Job Opportunities

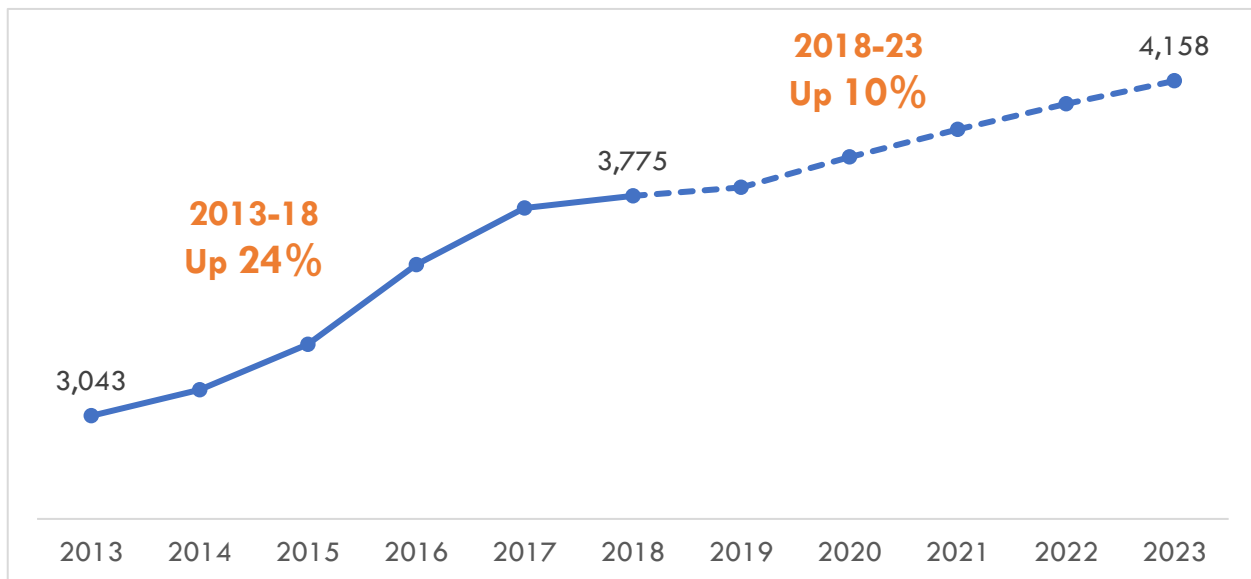
In 2018, there were 3,775 *pharmacy technician* jobs in the Inland Empire/Desert region (IEDR). This occupation is projected to increase employment by 10% through 2023. Employers are expected to have 1,967 job openings over the next five years to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements). Exhibit 1 displays five-year projected job growth, and Exhibit 2 displays historical (2013 to 2018) and projected (2018-2023) jobs for *pharmacy technicians*.

Exhibit 1: Five-year projections for pharmacy technicians

2018 Jobs	2023 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
3,775	4,158	10%	1,967	393	10%

Source: EMSI 2020.1

Exhibit 2: Historical and projected jobs for pharmacy technicians in the IEDR, 2013 – 2023



Source: EMSI 2020.1

Job Postings

Over the last 12 months in the IEDR:

1,166

Job postings for pharmacy technicians

On average, employers spend **41 Days** filling positions for pharmacy technicians, the same as the rest of California

\$35,000

Median advertised annual salary

Earnings

The MIT Living Wage Calculator measures the wage an individual must earn to support his or herself and their family (Glasmeier, 2020). The entry-level wage for pharmacy technicians in the IEDR is higher than the MIT Living Wage estimate of \$12.39 per hour for a single adult living in the IEDR. The average IEDR household had 3.3 residents in 2017 (American Factfinder, 2018). This entry-level wage is also above the MIT Living Wage estimate of \$14.75 for a two-adult household, both working with one child living in the IEDR. Variations of the hourly and annual earnings necessary to support a three-person household are displayed in Exhibit 3.

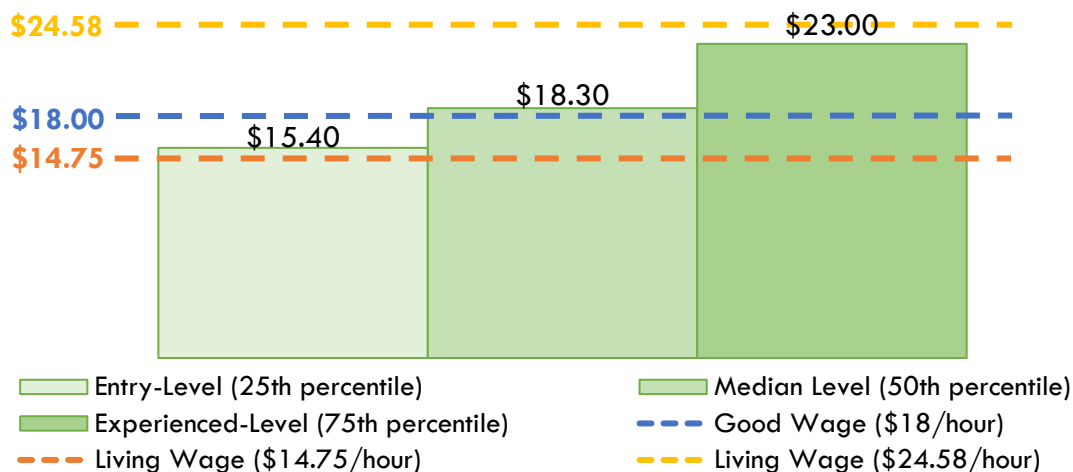
Exhibit 3: Variations in hourly and annual MIT Living Wage estimates for three resident households

Three Resident Household	Hourly Wage	Annual Wage
2 Adults (Both Working), 1 Child	\$14.75 (each adult)	\$30,700 (each adult)
2 Adults (1 Working), 1 Child	\$24.58	\$51,100
1 Adult, 2 Children	\$32.73	\$68,100

Source: MIT Living Wage Calculator

The median wage (50th percentile) for *pharmacy technicians* above the \$18.00 per hour (\$37,440 per year) “good job” wage established by the Brookings Institute in their *Advancing Opportunity in California’s Inland Empire* report (Shearer, Shah & Gootman, p. 25). Pharmacy technicians generally receive medical and dental insurance in addition to other benefits according to occupational guides developed by the California Labor Market Information Division (Detailed Occupational Guides, 2020). Exhibit 4 displays the hourly earnings for *pharmacy technicians* in the IEDR.

Exhibit 4: Hourly earnings for pharmacy technicians



Source: EMSI 2020.1, MIT Living Wage Calculator, Brookings Institute

Employers, Skills, Education, Work Experience, and Certifications

Exhibit 5 displays the employers that posted more than ten job ads for *pharmacy technicians* over the last 12 months in the IEDR.

Exhibit 5: Employers posting the most job ads for pharmacy technicians, Feb 2019 – Jan 2020

Employers	Job Ads
CVS Health	249
Walgreens Boots Alliance, Inc.	122
Rite Aid Corporation	98
Loma Linda University Health	67
Walmart, Inc.	32
Corona Regional Medical Center	22
Riverside Community Hospital	22
Kaiser Permanente	16
Desert Regional Medical Center	16
Temecula Valley Hospital	13
Arrowhead Regional Medical Center	11
<i>Total for all other employers</i>	<i>498</i>
Total	1,166

Source: Burning Glass – Labor Insights

Exhibit 6 displays a sample of specialized and employability skills that employers are seeking when looking for workers to fill *pharmacy technician* positions. Specialized skills are occupation-specific skills that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as “soft skills.” The skills requested in job postings may be utilized as a helpful guide for curriculum development.

Exhibit 6: Sample of in-demand skills from employer job ads for pharmacy technicians, Feb 2019 – Jan 2020

Occupation	Specialized Skills	Employability Skills
Pharmacy Technicians (n=979)	<ul style="list-style-type: none"> • Customer Service • Retail Industry Knowledge • Pharmacy Assistance • Prescription Filling • Customer Billing • Insurance Knowledge 	<ul style="list-style-type: none"> • Communication Skills • Typing • Problem Solving • Teamwork/Collaboration • English • Written Communication

Source: Burning Glass – Labor Insights

Exhibit 7 displays the entry-level education typically required to enter this occupation according to the Bureau of Labor Statistics (BLS), educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census (2016-17), and the minimum advertised education requirement from employer job ads for *pharmacy technicians*.

Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements for pharmacy technicians, Feb 2019 – Jan 2020

Occupation	Typical Entry-Level Education Requirement	Educational Attainment (Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework)	Minimum Advertised Education Requirement from Job Ads			
			Number of job postings	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Pharmacy Technicians	High school diploma or equivalent	56%	686	98%	2%	-

Source: EMSI 2020.1, Burning Glass – Labor Insights

Exhibit 8 displays the typical work experience required and real-time work experience requirements from employer job ads for *pharmacy technicians* over the last twelve months.

Exhibit 8: Typical work experience required and real-time work experience requirements, last 12 months

Occupation	Work Experience Typically Required	Real-Time Work Experience Required from Job Ads			
		Number of job postings	0 – 2 years	3 – 5 years	6+ years
Pharmacy Technicians	None	474	95%	5%	-

Source: EMSI 2020.1, Burning Glass – Labor Insights

The California State Board of Pharmacy is the regulatory agency that issues licenses for certified pharmacy technicians (CPhT). California requires that pharmacy technician applicants possess a high school degree or equivalent and have completed **a pharmacy technician training program**. California recognizes the following training pathways: an associate degree from an accredited training program, certification from the Pharmacy Technician Certification Board (PTCB), certificate of completion from the National Healthcare Association Pharmacy Technician Certification Program (ExCPT), and pharmacy technician training provided by a branch of the federal armed services. For more information about pharmacy technician requirements and training pathways, visit the California State Board of Pharmacy website (California State Board of Pharmacy, 2020).

Exhibit 9 displays the certifications required by employers posting job ads for *pharmacy technicians* in the IEDR. Of the 741 job postings, nearly 68% stated that desire for *pharmacy technicians* with PTCB certification.

Exhibit 9: Certifications required by employer job ads for pharmacy technicians, Feb 2019 – Jan 2020

Occupation	Certifications
Pharmacy Technicians (n=741)	<ul style="list-style-type: none"> Pharmacy Technician Certification Board (PTCB) (n=503) Certified Pharmacy Technician (CPhT) (n=404)

Source: Burning Glass – Labor Insights

Student Completions and Program Outcomes

Exhibit 10 displays completion data for the California Community College pharmacy technology (1221.00) program between 2015 and 2018, as well as enrollments in the 2016/17 academic year. The student completion and outcome methodology are available on page nine.

Exhibit 10: Annual average community college credentials and enrollments for the pharmacy technology program in the IEDR

1221.00 – Pharmacy Technology	18 to <30 Semester Units Certificate	Associate of Science (A.S.)	CCC Annual Average Credentials, Academic Years 2015-18	CCC Enrollments, Academic Year 2016-17
Chaffey	15	11	26	266
Moreno Valley	-	-	-	-
San Bernardino	8	16	24	175
Total	23	27	50	447

Source: LaunchBoard, MIS Data Mart

Community college student outcome information based on the selected TOP code and region is provided in Exhibit 11.

Exhibit 11: 1221.00 – Pharmacy technology strong workforce program outcomes

Strong Workforce Program Metrics: 1221.00 – Pharmacy Technology Academic Year 2016 -17, unless noted otherwise	Inland Empire/Desert Region	California
Course enrollments	477	5,492
Completed 9+ career education units in one year (2017-18)	57 (48%)	571 (29%)
Economically disadvantaged students	90%	83%
Students who attained a noncredit workforce milestone in a year	-	90%

Strong Workforce Program Metrics: 1221.00 – Pharmacy Technology Academic Year 2016 -17, unless noted otherwise	Inland Empire/Desert Region	California
Students who earned a degree, certificate, or attained apprenticeship (2017-18)	35	216
Transferred to a four-year institution (transfers)	-	78
Job closely related to the field of study (2015-16)	46%	59%
Median annual earnings (all exiters)	\$26,380	\$26,268
Median change in earnings (all exiters)	184%	42%
Attained a living wage (completers and skills-builders)	52%	34%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Credentials granted from other educational providers outside of the California Community College system are displayed in Exhibit 12 along with the relevant CIP code. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available.

Exhibit 12: Annual average community college credentials and enrollments for the pharmacy technician/assistant program in the IEDR

51.0805 – Pharmacy Technician/Assistant	Award <1 Academic Year	Award 1<2 Academic Years	Other Educational Providers Annual Average Credentials, Academic Years 2014-17
American Career College-Ontario	1	49	50
American College of Healthcare	-	21	21
Baldy View Regional Occupational Program	1	-	1
Brightwood College-Palm Springs	-	5	5
North-West College-Riverside	27	-	27
Riverside County Office of Education- School of Career Education	30	-	30
UEI College-Riverside	-	77	77
Total	59	152	211

Source: IPEDS

Recommendation

The community college pharmacy technology program prepares students for employment as pharmacy technicians by providing instruction on the principles and procedures used to assist in maintaining and dispensing pharmaceutical supplies and medications. Training provided by this program leads to the *pharmacy technician* occupation. This occupation is expected to have 393 annual job openings over the next five years, increasing overall employment by 10%. This occupation earns a 25th percentile hourly rate that exceeds the living wage standard for a two-adult household (both working) with one child. Most employers were seeking a candidate holding a level of education that may be obtained at the community colleges.

Three IEDR community colleges awarded 50 annual average credential awards to students in pharmacy technology programs over the last three academic years. Assuming that one credential is awarded to one student, the number of awards conferred is below the expected number of annual regional job openings (393 annual job openings). There appears to be an opportunity to create new or expand existing pharmacy technology programs. Please note that other educational providers are awarding 211 credentials annually.

Colleges considering pharmacy technology programs should meet with relevant employers to understand their demand for more workers and the specific skills, licensing, and credentials needed for gainful employment in this field. Colleges should also consult with the California State Board of Pharmacy to ensure their programs aligns with the requirements of the certified pharmacy technicians (CPhT) license.

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Appendix: Student Completions and Program Outcome Methodology

Exhibit 10 displays the average annual regional California Community College (CCC) credentials conferred during the three academic years between 2015 and 2018, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, along with the enrollments from the most recent year available on LaunchBoard. Credentials 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 variation that might be present in a single year. Enrollments are the count of enrollments in courses assigned to the TOP code in the selected 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 records provided by 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, 2020a). 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, 2017).