

Veterinary Technologists and Technicians

Inland Empire/Desert Region (Riverside and San Bernardino counties combined) & Los Angeles and Kern counties

Summary

- Employment for veterinary technologists and technicians is expected to increase by 20% between
 2018 and 2023 in the Inland Empire/Desert region (IEDR). A total of 378 job openings, or 76
 annual job openings will be available over the five-year timeframe.
- The entry-level wage for veterinary technologists and technicians is above the MIT Living Wage estimate of \$12.39 per hour for a single adult living in the IEDR.
- Caution should be used before starting a veterinary program in the region due to the number of relevant credentials conferred by educational institutions in the IEDR (no average annual community college credentials, 170 other educational institution credentials, 170 total) compared to the number of annual job openings for veterinary technologists and technicians (76 average annual openings).

Introduction

The California Community College veterinary technician (Licensed) (TOP 0102.10) program prepares students for employment as veterinary technologists and technicians by providing instruction on the laws and regulations, principles and practices, and licensure requirements that prepare individuals to assist the veterinarian, biological researcher or other scientist in applying knowledge of veterinary medical assisting procedures and techniques (Taxonomy of Programs, 2012). This report provides occupational and program data for Kern and Los Angeles counties, in addition to Riverside and San Bernardino counties (Inland Empire/Desert region). The combined four-county region will be referred to as the Greater Los Angeles region throughout this report. The occupational description for veterinary technologists and technicians is listed below:

Veterinary Technologists and Technicians (29-2056)

Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests, such as urinalysis and blood counts. Clean and sterilize instruments and materials and maintain equipment and machines. May assist a veterinarian during surgery.

Sample job titles: Certified Veterinary Technician (CVT), Emergency Veterinary Technician, Internal Medicine Veterinary Technician, Licensed Veterinary Technician (LVT), Medical Technologist, Registered Veterinary



Technician (RVT), Veterinary Assistant, Veterinary Laboratory Technician (Veterinary Lab Tech), Veterinary Nurse, Veterinary Technician (Vet Tech)

Entry-Level Educational Requirement: Associate degree

Training Requirement: None

Work Experience Required: None

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

Job Opportunities

In 2018, there were 609 veterinary technologists and technician jobs in the Inland Empire/Desert region. This occupation is projected to increase employment by 20% by 2023. Employers in the region will need to hire 378 workers 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 projections for veterinary technologists and technicians in the Inland Empire/Desert region and the Greater Los Angeles region.

Exhibit 1: Five-year projections for veterinary technologists and technicians

Region	2018 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Inland Empire/Desert	609	20%	378	76	8%
Greater Los Angeles	2,615	16%	1,515	303	8%

Source: EMSI 2019.2

Earnings

The entry-level wage for veterinary technologists and technicians is above the MIT Living Wage estimate of \$12.39 per hour for a single adult living in the Inland Empire/Desert region (Glasmeier, 2019). This wage is also sufficient for two working adults and one child (\$14.75 per hour, per adult, or \$30,680 annually for each adult). Hourly earnings for this occupation are higher in the Inland Empire/Desert region than in the Greater Los Angeles region as a whole. Exhibit 2 displays wage information for veterinary technologists and technicians in the Inland Empire/Desert region and the Greater Los Angeles region.



Exhibit 2: Earnings for veterinary technologists and technicians

Region	Entry to Experienced Hourly Wage Range (25 th to 75 th Percentile)	Median Wage (50 th Percentile)	Average Annual Earnings
Inland Empire/Desert	\$18.28 to \$26.93	\$22.66	\$47,000
Greater Los Angeles	\$15.73 to \$23.77	\$18.77	\$41,300

Source: EMSI 2019.2

Job Postings, Employers, Skills, Education, and Certifications

Exhibit 3 displays the number of job ads posted during the last 12 months along with the regional and statewide average time to fill for veterinary technologists and technicians in the Inland Empire/Desert region and the Greater Los Angeles region. On average, employers in the Greater Los Angeles region fill online job postings for veterinary technologists and technicians within 45 days. This regional average is the same as the statewide average, indicating that local employers fill open positions within a similar timeframe as other California employers.

Exhibit 3: Job ads and time to fill for veterinary technologists and technicians, May 2018 – Apr 2019

Region	Job Ads	Regional Average Time to Fill (Days)	California Average Time to Fill (Days)
Inland Empire/Desert	59	40	45
Greater Los Angeles	386	45	45

Source: Burning Glass - Labor Insights

Exhibit 4 displays the employers posting the most job ads for veterinary technologists and technicians during the last 12 months in the Inland Empire/Desert region and the Greater Los Angeles region. Banfield Pet Hospital frequently posted job ads in both regions.

Exhibit 4: Employers posting the most job ads, May 2018 - Apr2019

Region	Occupation	Sample of Employers
Inland Empire/Desert	Veterinary Technologists and Technicians (n=47)	 Banfield Pet Hospital VCA, Inc. Riverside County Department of Animal Services
Greater Los Angeles	Veterinary Technologists and Technicians (n=297)	Banfield Pet HospitalVCA, Inc.UCLA Health

Source: Burning Glass - Labor Insights



Exhibit 5 displays a sample of specialized and employability skills that employers are seeking when looking for workers to fill veterinary technologists and 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 5: Sample of in-demand skills from employer job ads, May 2018 - Apr 2019

Region	Occupation	Specialized Skills	Employability Skills
Inland Empire/Desert	Veterinary Technologists and Technicians (n=53)	AnesthesiologyCustomer ServiceMedical Records Maintenance	Communication SkillsOrganizational SkillsTeamwork/Collaboration
Greater Los Angeles	Veterinary Technologists and Technicians (n=322)	AnesthesiologyCustomer ServiceVenipuncture	Communication SkillsTeamwork/CollaborationOrganizational Skills

Source: Burning Glass - Labor Insights

Exhibit 6 displays the work experience and 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.

Exhibit 6: Work experience, typical entry-level education, educational attainment, and minimum advertised education requirements for veterinary technologists and technicians, May 2018 – Apr2019

Typical Entry-			Minimum Advertised Education Requirement from Job Ads			
Region	Level Education Requirement	Educational Attainment*	Number of Job Ads (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Inland Empire/ Desert	Associate degree	56%	11	64%	9%	27%
Greater Los Angeles	Associate degree	56%	67	69%	12%	19%

Source: EMSI 2019.2, Burning Glass – Labor Insights

^{*}Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework.



The statewide licensing agency for veterinary technologists and technicians is the California Veterinary Medical Board (VMB). The primary path to becoming a registered veterinary technician (RVT) requires that individuals graduate from a California VMB approved RVT program, then pass the RVT examination. For more information on RVT certifications, visit the California Veterinary Medical Associate website (CVMA) (2017). Exhibit 7 displays the certifications most frequently requested or required by employers posting job ads for the veterinary technologists and technicians in the Greater Los Angeles region. Please note that when posting job ads for veterinary technologists and technicians, employers often include a group of equivalent certifications and licenses that would satisfy their needs. For example, more than half of job postings containing certifications stated that they were searching for a veterinary technician with a certificate or licensure (Certified Veterinary Technician (CVT), Registered Veterinary Technician (RVT), Licensed Veterinary Technician (LVT), or a Licensed Veterinary Medical Technician (LVMT)). For simplicity, this cluster of certifications is represented by the RVT certification in the table below.

Exhibit 7: Certification requirements mentioned in employer job ads, May 2018 – Apr2019

Region	Occupation	Certifications
Inland Empire/ Desert	Veterinary Technologists and Technicians (n=30)	 Registered Veterinary Technician (RVT)
Greater Los Angeles	Veterinary Technologists and Technicians (n=151)	 Registered Veterinary Technician (RVT)

Source: Burning Glass - Labor Insights



Student Completions in the Inland Empire/Desert Region

There are currently no community college completions for the veterinary technician (licensed) program in the Inland Empire/Desert region. Credentials granted from other educational providers outside of the California Community College system are displayed in Exhibit 8, along with the relevant CIP code. This is final release data compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available.

Exhibit 8: Annual average other educational institution completions for the veterinary/animal health technology/technician and veterinary assistant program in the Inland Empire/Desert Region

51.0808 - Veterinary/Animal Health Technology/Technician and Veterinary Assistant	Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)
Platt College-Ontario	
Associate Degree	31
Award 1 < 2 academic yrs	3
Platt College-Riverside	
Associate Degree	21
Westech College	
Award 1 < 2 academic yrs	115
Total annual average other awards, Academic Years 2013-16	170

Source: IPEDS

Student Completions and Program Outcomes in the Greater Los Angeles Region

Exhibit 9 displays the average annual regional California Community College (CCC) credentials conferred during the three academic years between 2014 and 2017, from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, along with 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 order 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. The relevant TOP code is from the Taxonomy of Programs manual, and the corresponding program titles used at each college (in *italics*) are sourced from the Chancellor's Office Curriculum Inventory (COCI). Please note, a credential is not always equal to a single person in search of a job opening since a student may earn more than one credential, such as an associate degree in addition to a certificate.



Exhibit 9: Annual average community college credentials and enrollments for the veterinary technician (licensed) program in the Greater Los Angeles region

0102.10 - Veterinary Technician (Licensed)	CCC Enrollments, Academic Year 2016-17	CCC Annual Average Credentials, Academic Years 2014-17
Los Angeles Pierce – Veterinary Technology/Pre- Veterinary Medicine	39	
Associate Degree		31
Mt. San Antonio – Registered Veterinary Technology	2,546	
Associate Degree		39
Total CCC Enrollments, Academic Year 2016-17	2,585	
Total Annual Average CCC Credentials, Academic Years 2014-17		70

Source: LaunchBoard, MIS Data Mart, COCI

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 comes 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 in order 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, 2019a). 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). Data from the latest academic year for each metric is provided in Exhibit 10. Los Angeles Pierce and Mt. San Antonio were the only colleges reporting enrollments for the veterinary technician program, so these metrics are based on students from these two programs.



Exhibit 10: Veterinary technician (licensed) strong workforce program outcomes

Strong Workforce Program Metrics: 0102.10 - Veterinary Technician (Licensed) Academic Year 2015-16, unless noted otherwise	Greater Los Angeles Region	California Median
Course enrollments (2016-17)	2,585	485
Completed 12+ units in one year (2016-17)	282	47
Economically disadvantaged students* (2016-17)	76%	75%
Employed in the fourth fiscal quarter after exit (completers)	94%	90%
Transferred to a four-year institution (transfers)	43	12
Median annual earnings* (completers)	\$28,955	\$28,406
Job closely related to the field of study (2014-15)	91%	87%
Median change in earnings (completers)	160%	129%
Attained a living wage (completers and skills-builders)	40%	45%

Source: LaunchBoard

Credentials granted from other educational providers outside of the California Community College system are displayed in Exhibit 11, along with the relevant CIP code. This is final release data compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available.

Exhibit 11: Annual average other educational institution completions in the Greater Los Angeles region

51.0808 - Veterinary/Animal Health Technology/Technician and Veterinary Assistant	Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)
California Healing Arts College	
Award 1 < 2 academic yrs	13
Carrington College-Pomona	
Associate Degree	69
Platt College-Los Angeles	
Associate Degree	30
Award < 1 academic yr	38
Platt College-Ontario	
Associate Degree	31
Award 1 < 2 academic yrs	3
Platt College-Riverside	_
Associate Degree	21

^{*}Data for these metrics is available in Community College Pipeline. All others are available in Strong Program Workforce Metrics.



51.0808 - Veterinary/Animal Health Technology/Technician and Veterinary Assistant	Other Educational Institutions Annual Average Certificates or Other Credit Credentials (2013-16)
Westech College	
Award 1 < 2 academic yrs	115
Total annual average other awards, Academic Years 2013-16	319

Source: IPEDS

Recommendation

Caution should be used before starting or expanding veterinary technician programs. More annual average credentials are issued from veterinary programs than the annual openings for veterinary technologists and technicians. In the IEDR, there are 170 annual average credentials awarded, but only 76 annual openings. In the Greater Los Angeles region (includes the IEDR), there are 389 annual average credentials awarded, but only 303 annual openings for veterinary technologists and technicians. It is worth noting that educational institutions outside the community college system issued 319 of these credentials. Colleges should contact employers hiring veterinary technologists and technicians to further explore the demand for this occupation before starting or expanding programs.



References

- Burning Glass Technologies. (2019). Labor Insights/Jobs. Retrieved from https://www.burning-glass.com/
- California Community Colleges Chancellor's Office. LaunchBoard. (2019). California Community Colleges LaunchBoard. Retrieved from https://www.calpassplus.org/Launchboard/Home.aspx
- California Community Colleges Chancellor's Office. (2019). Chancellor's Office Curriculum Inventory, version 3.0. Retrieved from https://coci2.ccctechcenter.org/programs
- California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. (2019). Data Mart. Retrieved from https://datamart.cccco.edu/datamart.aspx
- California Community Colleges Chancellor's Office, Curriculum and Instructional Unit, Academic Affairs Division. (2012). Taxonomy of Programs, 6th Edition, Corrected Version. Retrieved from http://extranet.cccco.edu/Portals/1/AA/Credit/2013Files/TOPmanual6 2009 09corrected 12. 5.13.pdf
- California Department of Consumer Affairs Veterinary Medical Board. (2019). About the Board. Retrieved from https://www.vmb.ca.gov/about_us/board_staff.shtml
- California Veterinary Medical Association. (2017). Requirements For RVT Certification In California.

 Retrieved from https://cvma.net/membership/registered-veterinary-technicians/requirements-for-rvt-certification-in-california/
- Economic Modeling Specialists International (EMSI) (2019). *Datarun 2019.2*. Retrieved from https://www.economicmodeling.com/
- Glasmeier, A. Massachusetts Institute of Technology (MIT). (2019). Retrieved from http://livingwage.mit.edu/
- National Center for O*NET Development. (2019). O*NET OnLine. Retrieved from https://www.onetonline.org/

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