



LABOR MARKET REPORT

**ANIMAL HEALTH TECHNOLOGY
HARTNELL COLLEGE**

Monterey County

MAY 5, 2009



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An Initiative of





Mission: The Centers of Excellence, in partnership with business and industry, deliver regional workforce research customized for community college decision making and resource development.

Vision: We aspire to be the premier source of regional economic and workforce information and insight for community colleges.

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Centers of Excellence, Economic and Workforce Development Program

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Although job openings for veterinary technicians and assistants are projected to increase by 29% in the next five years in the Hartnell College area, these job openings only translate into 6-7 positions each year.

– Source: EMSI Complete Data

Report Scope

This report provides labor market information for occupation related to the Animal Health Technology Program at Hartnell College. Based on education and training provided in the program, the following occupations were included in this report:

- Veterinary technologists and technicians (SOC 29-2056)
- Veterinary assistants and laboratory animal caretakers (SOC 31-9096)

In order to extract complete labor market data for the identified occupations, two industries were identified which employ the above mentioned occupations:

- Veterinary services (NAICS 541940)
- Veterinary medicine manufacturing (NAICS 325412)
- Animal shelters (NAICS 812910)

Labor market data for this report covers the period of 2008-2014, and covers the geographical area of Monterey County and the Hartnell College service area. The Hartnell College service area used in this report is listed in the table below:

Table 1 –Hartnell College Service Area by Zip Code

Zip Code	City
95012	Castroville
95039	Moss Landing
93907	Prunedale
95076	Watsonville ¹
93905 93907 93902 93912 93906 93901 93903 93915	Salinas
93962	Spreckels
93925	Chualar
93926	Gonzales
93927	Greenfield
93928	Jolon
93930	King City
93932	Lockwood
93450	San Ardo
93954	San Lucas
93960	Soledad

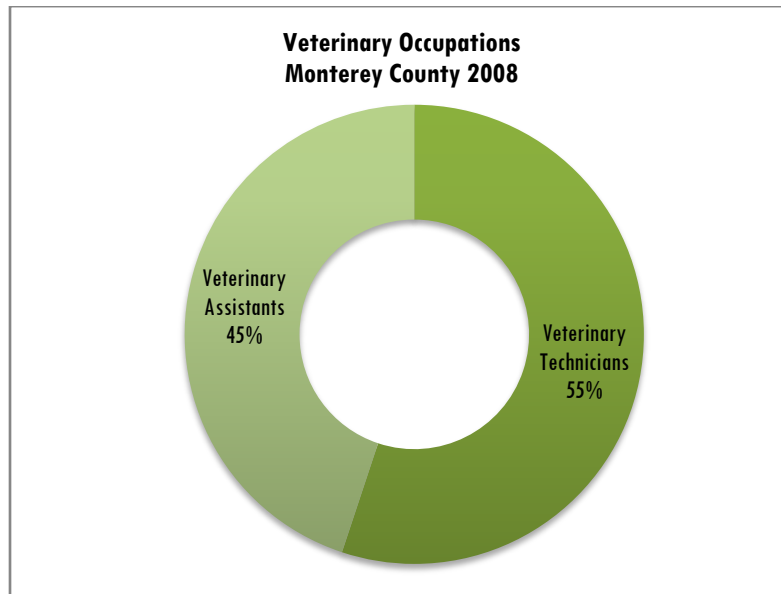
Note: This customized report contains data from various publicly and privately available secondary sources. Unlike Centers of Excellence Environmental Scans, the information contained in customized reports has not been independently validated by employers, nor does it contain information on other community college and external programs. Please see Appendix A for further information on how to use this report.

¹ Note: Only a small portion of southern Watsonville is included in the Hartnell service area.

Summary

According to the 2008/2009 Hartnell College Catalog, the Animal Health Technology Associate of Science Degree prepares students for work as a Registered Veterinary Technician. In order to provide information to the college regarding the Animal Health Technology program, labor market data was compiled for industries where a registered veterinary technician or entry-level veterinary assistant may work. According to labor market data², in 2008 there were a total of 110 jobs in these two occupational areas in the Hartnell service area and 196 total jobs in Monterey County. More than half of the jobs (108) are for veterinary technicians. Exhibit 1 below indicates the percentage of jobs in each of the occupations for Monterey County.

Exhibit 1 – Percentage of Jobs for Veterinary Assistance and Technicians



Industry Summary

Veterinary technicians and assistants typically work in three types of industries: Veterinary services (NAICS 541940), veterinary medicine manufacturing (NAICS 325412), or animal shelters (NAICS 812910). Veterinary services refers to establishments of licensed veterinary practitioners primarily engaged in the practice of veterinary medicine, dentistry, or surgery for animals; and establishments primarily engaged in providing testing services for licensed veterinary practitioners. Veterinary medicine manufacturing refers to establishments primarily manufacturing in-vivo diagnostic substances and pharmaceuticals intended for internal and external consumption in dose forms³. Animal shelters refers to establishments primarily engaged in providing pet care services (except veterinary), such as boarding, grooming, sitting, and training pets. According to the Bureau of Labor Statistics, 90% of veterinary technicians work in the veterinary services industry⁴. In the Hartnell service area there were a total of 301 jobs between these three industries in 2008, and 571 jobs in Monterey County. During the next five years, these industries are projected to grow by 13%, or 77 new jobs in Monterey County. The Hartnell College service area is projected to grow by 21%, or 62 new jobs. Tables 2 and 3 below demonstrate industry projections through 2014 for veterinary services and veterinary medicine manufacturing.

² Source: EMSI Complete Data

³ Source: North American Classification System (NAICS) <http://www.census.gov/eos/www/naics/index.html>

⁴ Source: Bureau of Labor Statistics (BLS) <http://www.bls.gov/oco/ocos183.htm>

Table 2 – Veterinary Industries, Hartnell College Service Area

NAICS	NAICS Description	2008 Jobs	1 year job projection (new jobs)	3 year job projection (new jobs)	5 year job projections (new jobs)	% Growth of new jobs	Average annual earnings per worker
541940	Veterinary Services	219	230 (11)	244 (25)	256 (37)	17%	\$33,044
325412	Veterinary Medicine Manufacturing	70	82 (12)	91(21)	98 (28)	40%	\$51,361
812910	Animal Shelters	12	11 (-1)	10 (-2)	<10 ⁵	.5	.5
Totals		301	323 (22)	345 (44)	363 (62)	21%	\$37,711

Table 3 – Veterinary Industries, Monterey County

NAICS	NAICS Description	2008 Jobs	1 year job projection (new jobs)	3 year job projection (new jobs)	5 year job projections (new jobs)	% Growth of new jobs	Average annual earnings per worker
541940	Veterinary Services	410	429 (19)	453 (43)	473 (63)	15%	\$32,497
325412	Veterinary Medicine Manufacturing	71	84 (13)	93 (22)	100 (29)	41%	\$51,962
812910	Animal Shelters	89	85 (-4)	79 (-10)	74 (-15)	-17%	\$36,395
Totals		481	598 (117)	625 (144)	647 (166)	13%	\$35,497

In order to obtain a more comprehensive understanding of the veterinary industries in Monterey County, an analysis was conducted using a geographic information system (GIS)⁶. The analysis indicated there are a total of 71 employers for the three industries identified for this study. The largest numbers of firms are veterinarians (veterinary services), with 41 establishments. Animal shelters are the second largest industry with 29 establishments, and there is one veterinary medicine manufacturing establishment. An interesting finding from the analysis is that most of the veterinary employers are clustered around Hartnell College in the northern portion of Monterey County. Exhibit 2 below is a map which displays the veterinary industry distribution in Monterey County.

⁵ Note: There are too few jobs to obtain specific labor market data

⁶ Source: Info USA

Exhibit 2 – Veterinary Employers, Monterey County⁷



Occupation Summary

The animal health technician program at Hartnell College prepares students to become a registered veterinary technician. There are two occupations classified in the Standard Occupation Code (SOC) system which students completing the program could become employed in: veterinary technicians and veterinary assistants.

Veterinary Assistants

According to the Bureau of Labor Statistics (BLS), veterinary assistants⁸:

Feed, water, and examine pets and other nonfarm animals for signs of illness, disease, or injury in laboratories and animal hospitals and clinics. Clean and disinfect cages and work areas, and sterilize laboratory and surgical equipment. May provide routine postoperative care, administer medication orally or topically, or prepare samples for

⁷ Source: ESRI Business Analyst Software

⁸ Source: Bureau of Labor Statistics, <http://www.bls.gov/oco/oco20055.htm#K547>

laboratory examination under the supervision of veterinary or laboratory animal technologists or technicians, veterinarians, or scientists.

In Monterey County, job projections indicate an increase of 18% in job openings in the next five years. This projection factors in the need to fill replacement positions due to retirements or attrition. In the Hartnell service area, there is an 18% increase, or 32 positions.

Veterinary Technicians

According to the Bureau of Labor Statistics (BLS), veterinary technicians⁹:

Veterinary technologists and technicians typically conduct clinical work in a private practice under the supervision of a licensed veterinarian. They often perform various medical tests and treat and diagnose medical conditions and diseases in animals. For example, they may perform laboratory tests such as urinalysis and blood counts, assist with dental prophylaxis, prepare tissue samples, take blood samples, or assist Veterinarians in a variety of tests and analyses in which they often use various items of medical equipment, such as test tubes and diagnostic equipment. While most of these duties are performed in a laboratory setting, many are not. For example, some veterinary technicians obtain and record patients' case histories, expose and develop x rays and radiographs, and provide specialized nursing care. In addition, experienced veterinary technicians may discuss a pet's condition with its owners and train new clinic personnel. Veterinary technologists and technicians assisting small-animal practitioners usually care for companion animals, such as cats and dogs, but can perform a variety of duties with mice, rats, sheep, pigs, cattle, monkeys, birds, fish, and frogs. Very few veterinary technologists work in mixed animal practices where they care for both small companion animals and larger, nondomestic animals.



In Monterey County, job projections indicate an increase of 41% in job openings in the next five years. This projection factors in the need to fill replacement positions due to retirements or attrition. In the Hartnell service area, there is a 41% increase, or 46 positions. Five year projections, including replacement jobs, indicate an average of 6-7 job openings a year. Tables 4 and 5 below illustrate job projection data for the Hartnell College and Monterey County service areas:

⁹ Source: Bureau of Labor Statistics, <http://www.bls.gov/oco/ocos183.htm>

Table 4 – Veterinary Occupations, Hartnell College Service Area

SOC Code	SOC Description	2008 Jobs	1 year job openings ¹⁰	3 year job openings ⁷	5 year job openings ⁷	% Change (5 year job need)	2009 Median Hourly Earnings
29-2056	Veterinary technicians	54	7	16	22	41%	\$15.17
31-9096	Veterinary assistants	56	3	7	10	18%	\$14.59
Totals		110	11	23	32	29%	\$14.88

Table 5 – Veterinary Occupations, Monterey County

SOC Code	SOC Description	2008 Jobs	1 year job openings ¹¹	3 year job openings ⁷	5 year job openings ⁷	% Change (5 year job need)	2009 Median Hourly Earnings
29-2056	Veterinary technicians	112	15	31	46	41%	\$15.10
31-9096	Veterinary assistants	102	7	13	19	18%	\$15.06
Totals		214	22	44	64	30%	\$15.08

Wage Data

According to research conducted by Pennsylvania State University¹², in order to earn a living wage in Monterey County an individual must earn \$25.55 an hour for a family of three¹³. Wages for the occupations included vary between entry level and more experienced trained workers. Based on wage data provided through EMSI, the occupations studied in this report do not provide a living wage for employees. Wages earned in this occupation could sustain a single adult, but not a household. Tables 6 and 7 provide wage information for the occupations studied in this report.

Table 6 – Veterinary Occupation Wages, Monterey County

Occupation	Average hourly earnings	10 percentile wages (entry level, no training)	25 percentile wages	75 percentile wages	90 percentile wages
Veterinary technicians	\$16.13	\$12.16	\$13.27	\$19.06	\$22.29
Veterinary assistants	\$15.38	\$9.48	\$12.39	\$18.73	\$21.57
Totals	\$15.77	\$10.90	\$12.85	\$18.90	\$21.95

¹⁰ Includes both new and replacement jobs

¹¹ Includes both new and replacement jobs

¹² Source: The Living Wage Calculator, Pennsylvania State University, <http://www.livingwage.geog.psu.edu/counties/06053>

¹³ A family of three includes 2 adults and 1 child

Table 7 – Living Wage Calculations¹⁰, Monterey County

Hourly Wages	One Adult	One Adult, One Child	Two Adults	Two Adults, One Child	Two Adults, Two Children
Living Wage	\$11.49	\$20.42	\$16.60	\$25.55	\$32.66
Poverty Wage	\$5.04	\$6.68	\$6.49	\$7.81	\$9.83
Minimum Wage	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00

References

Bureau of Labor Statistics

Economic Modeling Specialists, Inc

Environmental Systems Research Institute

Info USA

North American Classification System

The Living Wage Calculator, Pennsylvania State University

Appendix A: How to Use this Report

About the Centers of Excellence

The Centers of Excellence (COE), in partnership with business and industry, deliver regional workforce research customized for community college decision making and resource development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Technical Education (CTE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the premier source of regional economic and workforce information and insight for California's community colleges.

More information about the Centers of Excellence is available at www.coecc.net.

How to Use This Report

This report is designed to provide current industry data specific to your college for:

- Defining potential strategic opportunities relative to an industry's emerging trends and workforce needs
- Influencing and informing local college program planning and resource development
- Promoting a future-oriented and market responsive way of thinking among college and community stakeholders
- Assisting college faculty, Economic Development and CTE administrators, and Community and Contract Education programs in connecting with industry partners.

The information in this report has been generated using software customized for the Centers of Excellence, including Environmental System Research Institute's (ESRI) GIS Business Analyst application and Economic Modeling Specialists, Inc (EMSI) economic modeling system. In some instances, the labor market information and industry validation will suggest that colleges might not want to begin or add programs, thereby avoiding needless replication and low enrollments.

Important Disclaimer

All representations included in this report have been produced from a secondary review of publicly and/or privately available data. Efforts have been made to confirm the accuracy of the data and the reported findings; however, neither the Centers of Excellence, COE Host College, or California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon this report.