

Public Health Occupations Labor Market Information Report

Prepared by the San Francisco Bay Center of Excellence
for Labor Market Research
December 2018

Recommendation

Based on all available data, there appears to be a significant undersupply of Public Health workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda and Contra Costa Counties). The annual gap is about 2,495 students annually in the Bay region and 745 in the East Bay. However, if Bachelor's degrees are included on CIP codes offering potentially similar programs, the gap drops to about 2,160 in the region and 410 in the East Bay.

This report also provides student outcomes data on employment and earnings for programs on TOP 1201.00 - Health Occupations, General in the state and region. It is recommended that this data be reviewed to better understand how outcomes for Contra Costa College students taking courses on this TOP code compare to potentially similar programs at colleges in the sub-region, region and state, as well as to outcomes across all CTE programs at Contra Costa College and in the region.

Introduction

This report profiles Public Health Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new Associate of Science Transfer Degree at Contra Costa College.

- **Health Educators (SOC 21-1091):** Provide and manage health education programs that help individuals, families, and their communities maximize and maintain healthy lifestyles. Collect and analyze data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies, and environments. May serve as resource to assist individuals, other health professionals, or the community, and may administer fiscal resources for health education programs.

Entry-Level Educational Requirement: Bachelor's Degree
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 29%
- **Social and Human Service Assistants (SOC 21-1093):** Assist in providing client services in a wide variety of fields, such as psychology, rehabilitation, or social work, including support for families. May assist clients in identifying and obtaining available benefits and social and community services. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or dependent care.

Entry-Level Educational Requirement: High school diploma or equivalent
Training Requirement: Short-term on-the-job training
Percentage of Community College Award Holders or Some Postsecondary Coursework: 36%
- **Healthcare Support Workers, All Other (SOC 31-9099):** All healthcare support workers not listed separately

Entry-Level Educational Requirement: High school diploma or equivalent
Training Requirement: None
Percentage of Community College Award Holders or Some Postsecondary Coursework: 40%

Occupational Demand

Table 1. Employment Outlook for Public Health Occupations in Bay Region

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Annual Openings	10% Hourly Wage	Median Hourly Wage
Health Educators	2,475	2,767	292	12%	1,848	370	\$15.91	\$29.62
Social and Human Service Assistants	10,679	12,494	1,815	17%	8,526	1,705	\$12.77	\$18.92
Healthcare Support Workers, All Other	2,904	3,187	284	10%	2,136	427	\$13.37	\$24.27
Total	16,058	18,448	2,390	15%	12,510	2,502	\$13.37	\$21.54

Source: EMSI 2018.2

Bay Region includes Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Public Health Occupations in East Bay Sub-Region

Occupation	2017 Jobs	2022 Jobs	5-Yr Change	5-Yr % Change	5-Yr Openings	Annual Openings	10% Hourly Wage	Median Hourly Wage
Health Educators	803	906	103	13%	610	122	\$16.81	\$26.57
Social and Human Service Assistants	2,815	3,336	521	19%	2,301	460	\$13.05	\$18.49
Healthcare Support Workers, All Other	1,214	1,307	94	8%	861	172	\$13.44	\$30.81
TOTAL	4,832	5,550	718	15%	3,773	754	\$13.77	\$22.93

Source: EMSI 2018.2

East Bay Sub-Region includes Alameda and Contra Costa Counties

Job Postings in Bay Region and East Bay Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (May 2017 - April 2018)

Occupation	Bay Region	East Bay
Health Educators (21-1091.00)	806	201
Social and Human Service Assistants (21-1093.00)	480	110
Healthcare Support Workers, All Other (31-9099.00)	89	23
Endoscopy Technicians (31-9099.02)	31	10
Speech-Language Pathology Assistants (31-9099.01)	28	18
Total	1,434	362

Source: Burning Glass

Table 4. Top Job Titles for Public Health Occupations for latest 12 months (May 2017 - April 2018)

Common Title	Bay	East Bay	Common Title	Bay	East Bay
Registered Nurse	107	26	Coordinator	22	0
Nurse Educator	99	22	Slpa	22	13
Clinical Nurse Educator	57	11	Resident Care Coordinator	21	6
Educator	41	9	Outreach Specialist	19	7
Health Educator	32	11	Diabetes Educator	17	2
Lactation Consultant	32	1	Health Coach	17	5
Social Work	31	15	Community Coordinator	16	3
Advocate	30	11	Education Specialist	15	5

Source: Burning Glass

Industry Concentration

Table 5. Industries hiring Public Health Workers in Bay Region

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2017)	Jobs in Industry (2022)	% Change (2017-22)	% in Industry (2017)
---	-------------------------	-------------------------	--------------------	----------------------

Services for the Elderly and Persons with Disabilities (624120)	5,610	6,757	20%	34.9%
Local Government, Excluding Education and Hospitals (903999)	948	1,016	7%	5.9%
General Medical and Surgical Hospitals (622110)	936	901	(4%)	5.8%
Other Individual and Family Services (624190)	863	952	10%	5.4%
HMO Medical Centers (621491)	682	952	40%	4.2%
Residential Mental Health and Substance Abuse Facilities (623220)	504	566	12%	3.1%
Child and Youth Services (624110)	406	431	6%	2.5%
Hospitals (Local Government) (903622)	337	364	8%	2.1%
Federal Government, Civilian, Excluding Postal Service (901199)	305	299	(2%)	1.9%
Vocational Rehabilitation Services (624310)	302	292	(3%)	1.9%
State Government, Excluding Education and Hospitals (902999)	284	304	7%	1.8%
Residential Intellectual and Developmental Disability Facilities (623210)	253	255	1%	1.6%
Outpatient Mental Health and Substance Abuse Centers (621420)	214	264	23%	1.3%
Environment, Conservation and Wildlife Organizations (813312)	200	245	23%	1.2%
Offices of Physicians (except Mental Health Specialists) (621111)	198	203	3%	1.2%
Nursing Care Facilities (Skilled Nursing Facilities) (623110)	194	215	11%	1.2%
Elementary and Secondary Schools (Local Government) (903611)	188	206	10%	1.2%
Temporary Shelters (624221)	181	201	11%	1.1%
Hospitals (State Government) (902622)	169	218	29%	1.1%

Source: EMSI 2018.2

Table 6. Top Employers Posting Public Health Occupations in Bay and East Bay (May 2017 - April 2018)

Employer	Bay	Employer	Bay	Employer	East Bay
Dignity Health	55	Hospital Corporation of America	23	Star Nursing, Inc	20
Sutter Health	50	Lululemon Athletica	21	Sutter Health	19
Sutter Medical Center	31	Department of Veterans Affairs	17	Uc San Diego	16
Star Nursing, Inc	30	Sfmta	16	Kaiser Permanente	8
Deloitte	29	Sutter Health Sacramento Sierra Region	16	Lululemon Athletica	8
Kaiser Permanente	28	UC San Diego	16	Sutter Medical Center	8

Source: Burning Glass

Educational Supply

There is one community college (Contra Costa College) issuing six certificates annually on TOP 1201.00 – Health Occupations, General. In addition, two postsecondary institutions are issuing two Associate degrees and two other postsecondary institutions are issuing 336 Bachelor’s degrees on CIP codes potentially offering similar programs. The total annual supply is 344 awards for the region and the sub-region.

Table 7. Awards on TOP 1201.00 - Health Occupations, General or on CIP 51.0701 – Health/Health Care Administration Management or on CIP 51.0000 Health Services/Allied Health/Health Sciences, General or on 51.9999 Health Professions and Related Clinical Sciences, Other

College	Sub-Region	Head-count	No. of Transfer Students	Bachelor’s	Associates	Certificates	Total
Cabrillo	SC-Monterey	141	n<10	0	0	0	0
Contra Costa	East Bay	196	n<10	0	0	6	6
Foothill	Silicon Valley	869	14	0	0	0	0
Hartnell	SC-Monterey	286	41	0	0	0	0
Las Positas	East Bay	103	n<10	0	0	0	0
Ohlone	East Bay	91	n<10	0	0	0	0
San Francisco	Mid-Peninsula	225	n<10	0	0	0	0
San Jose City	Silicon Valley	173	13	0	0	0	0

Santa Rosa	North Bay	615	34	0	0	0	0
West Valley	Silicon Valley	162	n<10	0	0	0	0
Carrington College-Pleasant Hill	East Bay	n/a	n/a	0	1	0	1
Carrington College-San Leandro	East Bay	n/a	n/a	0	1	0	1
CA State University East Bay	East Bay	n/a	n/a	311	0	0	311
Saint Mary's College of CA	East Bay	n/a	n/a	25	0	0	25
Total Bay Region			140	336	2	6	344
Total East Bay			20	336	2	6	344

Source: IPEDS, Data Mart and Launchboard

NOTE: Headcount of students who took one or more courses is for 2016-17. Transfer students is for 2015-16. The annual average for awards is 2014-17. The annual average for other postsecondary is for 2013-16.

Gap Analysis

Based on the data included in this report, there is a large labor market gap in the Bay region with 2,502 annual openings for the Public Health occupational cluster and eight annual awards for an annual gap of 2,494. In the East Bay, there is also a gap with 754 annual openings and eight annual awards for an annual gap of 746. However, when including Bachelor's degrees issued on CIP codes potentially offering similar programs, then the gap drops to 2,158 in the region and 410 in the sub-region.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1201.00 - Health Occupations, General

2015-16	Bay (All CTE Programs)	Contra Costa (All CTE Programs)	State (120100)	Bay (120100)	East Bay (120100)	Contra Costa (120100)	Top College on 120100 in the region	
% Employed Four Quarters After Exit	74%	72%	71%	78%	50%	49%	Mission	94% (15 out of 16 students)
Median Earnings Two Quarters After Exit	\$10,310	\$7,760	\$6,400	\$7,450	\$5,400	\$7,400	Foothill	\$8,525 (no of students n./a)
Median % Change in Earnings	46%	60%	50%	61%	71%	118%	Contra Costa	118% (16 students)
% of Students Earning a Living Wage	63%	49%	43%	44%	39%	45%	Santa Rosa	53% (36 out of 68 students)

Source: Launchboard Pipeline (version available on 5/23/18)

Skills, Certificates and Education

Table 9. Top Skills for Public Health Occupations in Bay Region (May 2017 - April 2018)

Skill	Postings	Skill	Postings	Skill	Postings
Teamwork/Collaboration	292	Health and Human Services	84	Data Entry	62
Teaching	286	Budgeting	82	Project Management	60
Patient Care	217	Mental Health	80	Health Promotion Programs	56
Customer Service	159	Educational Programs	79	Social Work	56
Social Services	146	Staff Development	76	Trauma	54
Case Management	144	Quality Assurance & Control	74	Training Programs	53
Cardiopulmonary Resuscitation (CPR)	136	Life Support	72	Treatment Planning	51
Advanced Cardiac Life Support (ACLS)	119	Community Health	68	Appointment Setting	47
Scheduling	109	Critical Care	67	Spreadsheets	46

Health Education	108	Clinical Experience	65	Diabetes Diagnosis/Treatment	45
Staff Management	108	Patient/Family Education and Instruction	65	Program Development	45
Acute Care	103	Quality Management	64	Psychology	45
Public Health and Safety	102	Customer Contact	63	Rehabilitation	45

Source: Burning Glass

Table 10. Certifications for Public Health Occupations in the Bay Region (May 2017 - April 2018)

Note: 51% of records have been excluded because they do not include a certification. As a result, the chart below may not be representative of the full sample.

Certification	Postings	Certification	Postings
Registered Nurse	361	Certified Lactation Consultant	37
Basic Life Saving (BLS)	182	Critical Care Registered Nurse (CCRN)	33
Driver's License	176	Clinical Nurse Specialist (CNS) License	32
First Aid CPR AED	98	American Heart Association Certification	28
Basic Cardiac Life Support Certification	71	Nurse Practitioner	28
Social Work License	43	Certified Nurse Educator	26

Source: Burning Glass

Table 11. Education Requirements for Public Health Occupations in Bay Region

Note: 41% of records have been excluded because they do not include a degree level. As a result, the chart below may not be representative of the full sample.

Education (minimum advertised)	Latest 12 Mos. Postings
High school or vocational training	115 (13%)
Associate Degree	94 (11%)
Bachelor's Degree	504 (59%)
Master's or Doctoral Degree	139 (16%)

Source: Burning Glass

Methodology

Occupations for this report were identified by use of skills listed in O*Net descriptions and job descriptions in Burning Glass. Labor demand data is sourced from Economic Modeling Specialists International (EMSI) occupation data and Burning Glass job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CTE Launchboard and CCCCCO Data Mart.

Sources

O*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard www.calpassplus.org/Launchboard/

Statewide CTE Outcomes Survey

Employment Development Department Unemployment Insurance Dataset

Living Insight Center for Community Economic Development

Chancellor's Office MIS system

Contacts

For more information, please contact:

- Karen Beltramo, Data Research Analyst, for Bay Area Community College Consortium (BACCC) and Centers of Excellence (CoE), karen@baccc.net or (831) 332-1253
- John Carrese, Director, San Francisco Bay Center of Excellence for Labor Market Research, jcarrese@ccsf.edu or (415) 452-5529