



# Labor Market Analysis for Program Recommendation

## Respiratory Therapists

### Hartnell College

**Prepared by the San Francisco Bay Center of Excellence for Labor Market Research**  
**December 2021**

#### Recommendation

Based on all available data, there appears to be an “undersupply” of Respiratory Therapists compared to the demand for this cluster of occupations in the Bay region, the SC-Monterey sub-region (Monterey, San Benito, Santa Cruz counties) and the five (5) county region comprised of Monterey, San Benito, Santa Cruz, San Luis Obispo and Santa Barbara counties. There is a projected annual gap of about 110 students in the Bay region, 2 students in the SC-Monterey sub-region and 24 students in the “five county” region.

#### Introduction

This report provides student outcomes data on employment and earnings for TOP 1210.00 Respiratory Care/Therapy programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Hartnell College and in the region.

This report profiles Respiratory Therapists in the 12 county Bay region and in the SC-Monterey sub-region for a proposed new Baccalaureate Degree program at Hartnell College.

- **Respiratory Therapists (29-1126):** Assess, treat, and care for patients with breathing disorders. Assume primary responsibility for all respiratory care modalities, including the supervision of respiratory therapy technicians. Initiate and conduct therapeutic procedures; maintain patient records; and select, assemble, check, and operate equipment.  
 Entry-Level Educational Requirement: Associate’s degree  
 Training Requirement: None  
 Percentage of Community College Award Holders or Some Postsecondary Coursework: 66%

#### Occupational Demand

**Table 1. Employment Outlook for Respiratory Therapists in Bay Region**

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Respiratory Therapists	3,106	3,390	283	9%	1,193	239	\$44	\$77
<b>Total</b>	<b>3,106</b>	<b>3,390</b>	<b>284</b>	<b>9%</b>	<b>1,193</b>	<b>239</b>	<b>\$44</b>	<b>\$77</b>

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
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Source: EMSI 2021.3

**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 Respiratory Therapists in SC-Monterey Sub-region**

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Respiratory Therapists	235	249	14	6%	81	16	\$48	\$80
<b>Total</b>	<b>235</b>	<b>249</b>	<b>14</b>	<b>6%</b>	<b>81</b>	<b>16</b>	<b>\$48</b>	<b>\$80</b>

Source: EMSI 2021.3

**SC-Monterey Sub-Region includes:** Monterey, San Benito, Santa Cruz Counties

**Table 3. Employment Outlook for Respiratory Therapists in San Luis Obispo County**

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Respiratory Therapists	85	97	12	15%	34	7	\$34	\$42
<b>Total</b>	<b>85</b>	<b>97</b>	<b>12</b>	<b>15%</b>	<b>34</b>	<b>7</b>	<b>\$34</b>	<b>\$42</b>

Source: EMSI 2021.3

**Table 4. Employment Outlook for Respiratory Therapists in Santa Barbara County**

Occupation	2020 Jobs	2025 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
Respiratory Therapists	162	195	33	20%	75	15	\$35	\$41
<b>Total</b>	<b>162</b>	<b>195</b>	<b>33</b>	<b>20%</b>	<b>75</b>	<b>15</b>	<b>\$35</b>	<b>\$41</b>

Source: EMSI 2021.3

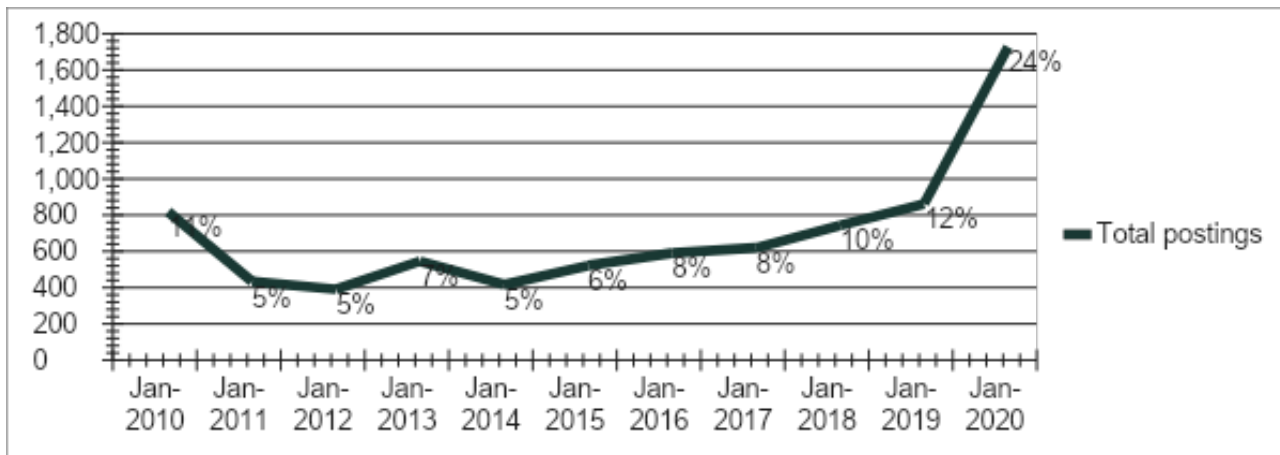
**Job Postings in California, Bay Region and Silicon Valley Sub-Region**

**Table 5. Number of Job Postings for Respiratory Therapists for latest 12 months (Nov 2020 - Oct 2021)**

Occupation	California	Bay Region	SC-Monterey	Five Counties
Respiratory Therapists	6,122	1,435	104	289

Source: Burning Glass

**Chart 1. Time Series Analysis – Job Postings for Respiratory Therapists in Bay Region, 2010-2020**



Source: Burning Glass

**Table 6a. Top Job Titles for Respiratory Therapists for latest 12 months (Nov 2020 - Oct 2021) Bay Region**

Title	Bay	Title	Bay
Travel Respiratory Therapist	149	Rrt	26
Respiratory Therapist	114	Respiratory Therapist - Rt	25
Respiratory Therapist/Rrt	83	Certified Respiratory Therapist	19
Respiratory Care Practitioner	73	Registered Respiratory Therapist - Neonatal Intensive Care	19
Rrt/Crt Respiratory Therapist	67	Registered Respiratory Therapist Rrt	18
Respiratory Therapist Travel Positions	62	Travel Rrt - Respiratory Therapist	18
Travel Registered Respiratory Therapist Rrt	60	Respiratory Care Practitioner I Registered	15
Registered Respiratory Therapist	39	Respiratory Care Practitioner II Registered	13
Respiratory Care Practitioner II	32		

Source: Burning Glass

**Table 6b. Top Job Titles for Respiratory Therapists for latest 12 months (Nov 2020 - Oct 2021) SC-Monterey Sub-Region**

Title	SC-Monterey	Title	SC-Monterey
Travel Respiratory Therapist	17	Acute Care Travel Respiratory Therapist Rrt	2
Respiratory Care Practitioner	6	Registered Respiratory Care Practitioner	2
Respiratory Therapist Travel Positions	6	Registered Respiratory Care Practitioner-Per Diem	2
Respiratory Therapist Per Diem	5	Registered Respiratory Therapist - Rrt	2
Travel Registered Respiratory Therapist Rrt	5	Registered Respiratory Therapist Rrt /Respiratory	2
Registered Respiratory Therapist	4	Respiratory Care Practitioner Registered	2
Respiratory Therapist	4	Respiratory Care Practitioner Registered - Pd	2
Respiratory Therapist/Rrt	4	Respiratory Therapist II	2
Respiratory Therapist - Rt	3	Respiratory Therapist III	2

Source: Burning Glass

## Industry Concentration

**Table 7. Industries hiring Respiratory Therapists in Bay Region**

Industry – 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2020)	Jobs in Industry (2025)	% Change (2020-25)	% Occupation Group in Industry (2020)
General Medical and Surgical Hospitals	1,651	1,691	2%	54%
Hospitals (Local Government)	512	596	16%	17%
Hospitals (State Government)	159	209	31%	5%
HMO Medical Centers	148	200	35%	5%
Specialty (except Psychiatric & Substance Abuse) Hospitals	101	142	41%	3%
Nursing Care Facilities (Skilled Nursing Facilities)	100	110	9%	3%
Offices of Physicians (except Mental Health Specialists)	44	45	4%	1%
Home Health Care Services	22	27	23%	1%
Freestanding Ambulatory Surgical and Emergency Centers	19	27	41%	1%
All Other Outpatient Care Centers	19	26	37%	1%

Source: EMSI 2021.3

**Table 8. Top Employers Posting Jobs for Respiratory Therapists in Bay Region and SC-Monterey Sub-Region (Nov 2020 - Oct 2021)**

Employer	Bay	Employer	SC-Monterey
Healthcare Traveler Allied Health	221	Healthcare Traveler Allied Health	12
Lucile Packard Childrens Hospital	63	Dignity Health	10
Kaiser Permanente	55	Sutter Health	6
Asante	42	Montage Health	3
Sutter Health	37	Allied Health Travel	3

Employer	Bay	Employer	SC-Monterey
Apria	29	Therapeutic Resources	2
University Of California	24	Sutter Medical Center	2
Kindred Healthcare Incorporated	21	Sutter Health Sacramento Sierra Region	2
Allied Health Travel	21	Salinas Valley Memorial Hospital	2
Dignity Health	18	Salinas Valley Memorial Healthcare	2

Source: Burning Glass

The top five cities in the Bay region with the most job postings (that list an employer) are San Francisco (41), Palo Alto (38) and Santa Rosa (26), Santa Cruz (24), San Jose (23).

### Educational Supply

There are five (5) community colleges in the Bay Region issuing 104 awards on average annually (last 3 years ending 2018-19) on TOP 1210.00 - Respiratory Care/Therapy. Of these 104 annual awards, 97 are Associate Degree awards and 7 are Bachelor's Degree awards. In the SC-Monterey Sub-Region, there is one (1) community college that issued 14 awards on average annually (last 3 years) on this TOP code.

There is one (1) other CTE educational institution in the Bay Region issuing 25 awards on average annually (last 3 years ending 2016-17) on TOP 1210.00 - Respiratory Care/Therapy. There are no other CTE educational institutions in the SC-Monterey Sub-Region issuing awards on average annually (last 3 years) on this TOP code.

There are no community colleges or other CTE educational institutions in either San Luis Obispo or Santa Barbara counties that issued awards on TOP 1210.00 Respiratory Care/Therapy.

There are no four-year institutions in the Bay Region, SC-Monterey Sub-region, San Luis Obispo or Santa Barbara counties issuing Bachelor's degrees on average annually (last 3 years ending 2016-17) on TOP 1210.00 - Respiratory Care/Therapy.

**Table 9a. Community College Awards on TOP 1210.00 Respiratory Care/Therapy in Bay Region**

College	Subregion	Associate	Bachelor's	Total
Foothill	Silicon Valley	24	0	24
Hartnell	SC-Monterey	14	0	14
Napa	North Bay	20	0	20
Ohlone	East Bay	18	0	18
Skyline	Mid-Peninsula	21	7	28
<b>Total</b>		<b>97</b>	<b>7</b>	<b>104</b>

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

**Table 9b. Other CTE Institutions Awards on TOP 1210.00 Respiratory Care/Therapy in Bay Region**

College	Subregion	Associate Degree	Total
Carrington College-Pleasant Hill	East Bay	25	25
<b>Total</b>		<b>25</b>	<b>25</b>

Source: Data Mart

Note: The annual average for awards is 2016-17 to 2018-19.

## Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 239 annual openings for Respiratory Therapists and 129 annual (3-year average) awards for an annual undersupply of 110 students. In the SC-Monterey Sub-Region, there is a small gap with 16 annual openings and 14 annual (3-year average) awards for an annual undersupply of 2 students.

When the 22 annual openings for San Luis Obispo and Santa Barbara counties is added to the 16 annual openings for the SC-Monterey Sub-Region, the total for this five (5) county region is 38 annual openings for Respiratory Therapists. Therefore, there is an annual undersupply of 24 students in the five (5) county region (38 annual openings minus 14 annual awards).

## Student Outcomes

**Table 10. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 1210.00 Respiratory Care/Therapy**

Metric Outcomes	Bay All CTE Programs	Hartnell All CTE Programs	State 1210.00	Bay 1210.00	SC-Monterey 1210.00	Hartnell 1210.00
Students with a Job Closely Related to Their Field of Study	73%	67%	92%	94%	100%	100%
Median Annual Earnings for SWP Exiting Students	\$44,575	\$88,711	\$38,211	\$68,527	N/A	N/A
Median Change in Earnings for SWP Exiting Students	30.40%	8%	49%	40%	N/A	N/A
Exiting Students Who Attained the Living Wage	52.7%	72%	54%	66%	N/A	N/A

Source: Launchboard Strong Workforce Program Median of 2016-18.

## Skills, Certifications and Education

**Table 11. Top Skills for Respiratory Therapists in Bay Region (Nov 2020 - Oct 2021)**

Skill	Posting	Skill	Posting
Respiratory Therapy	1,371	Pediatric Advanced Life Support	130
Patient Care	653	Neonatal Intensive Care Unit (NICU)	129
Advanced Cardiac Life Support (ACLS)	507	Clinical Experience	127
Treatment Planning	411	Scheduling	117
Life Support	337	Physiology	115
Ventilation	268	Repair	111
Critical Care	257	Electrocardiogram (EKG/ECG)	110

Skill	Posting	Skill	Posting
Cardiopulmonary Resuscitation (CPR)	254	Patient Treatment	110
Therapy	195	Bronchoscopy	101
Acute Care	173	Therapeutic Procedures	101
Patient/Family Education and Instruction	161	Quality Assurance and Control	99
Spirometry	147	Pediatrics	92
Neonatal Resuscitation	133	Pathology	90
Respiratory Care Procedures	133	Continuous Positive Airway Pressure (CPAP)	89

Source: Burning Glass

**Table 12. Certifications for Respiratory Therapists in Bay Region (Nov 2020 - Oct 2021)**

Certification	Posting	Certification	Posting
Registered Respiratory Therapist	789	First Aid Cpr Aed	77
Respiratory Care Practitioner (RCP)	552	Driver's License	55
Advanced Cardiac Life Support (ACLS) Certification	492	Certified Occupational Therapy Assistant (COTA)	34
Certified Respiratory Therapist	365	CA License	19
Basic Life Saving (BLS)	327	Certified Pulmonary Function Technologist	14
Neonatal Resuscitation Program (NRP)	261	Certified Respiratory Therapy Assistant	11
Basic Cardiac Life Support Certification	217	Care License	4
American Heart Association Certification	139	Licensed Practical Nurse (LPN)	3
Pediatric Advanced Life Support (PALS) Certification	91	Emergency Medical Technician (EMT)	3
Registered Pulmonary Function Technologist	78	Licensed Vocational Nurse (LVN)	2

Source: Burning Glass

As shown in Table 13 below, employers in the Bay Region have consistently listed a Bachelor's degree or higher as the minimum education required for Respiratory Therapists since 2016, with the exception of 2018.

**Table 13: Education Requirements for Respiratory Therapists in Bay Region, 2016 – 2021\***

Education (minimum advertised)	2016	2017	2018	2019	2020	2021*
Associate's degree	32%	45%	61%	41%	37%	40%
Bachelor's or higher	68%	55%	39%	59%	63%	60%

Source: Burning Glass \* Job postings are from January 2021 – November 2021

### Proposed Change to Educational Requirements for Respiratory Therapists

Currently, to qualify for licensure in California, Respiratory Therapists must attend an education program accredited by the Commission on Accreditation for Respiratory Care ([CoARC](#)) and been awarded a minimum of an **associate degree**.

In 2019, the American Association for Respiratory Care ([AARC](#)) published their support to advance educational requirements for RTs from an **associate degree** to a **bachelor's degree**. This recommendation is based on their understanding that the role of the Respiratory Therapist has advanced significantly - experiencing growth in scope of practice, complexity of clinical skills, and diversity of care sites.

If successful, the degree requirement would change for new Respiratory Therapists beginning in 2030 and thereafter.

## 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/](http://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

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