

# **SALARY SURVEY**

**FALL 2005**

## **Southern California, Orange County and San Diego Sections of AIHA**

**(Analysis conducted by Dr. Peter Bellin, Department of EOH, CSU  
Northridge)**

## INTRODUCTION

A salary survey was administered in the Fall of 2005. An email message was sent to all members of the San Diego, Orange County and Southern California sections of the American Industrial Hygiene Association to complete an on-line questionnaire. A total of eighty eight valid responses were received. The response rate could not be calculated, since an unknown number of respondents hold membership in more than one of these local sections of the AIHA.

The overall average salary (including bonuses) was \$89,000, with a range from \$22,000 to \$250,000.

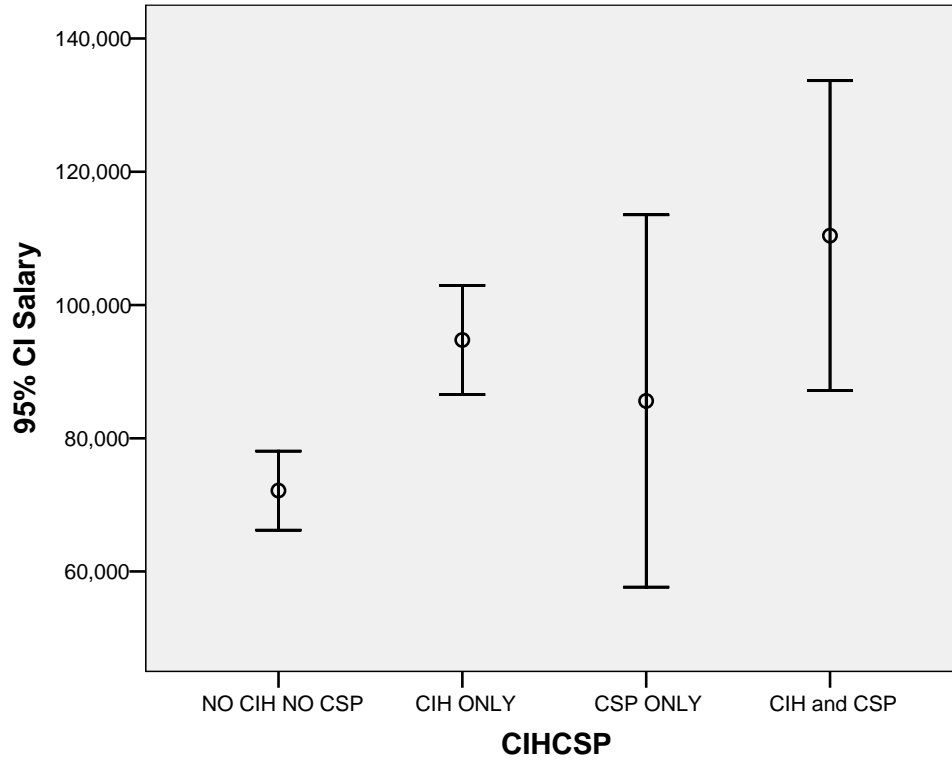
The following sections provide some comparisons of reported salary by a variety of factors. Most of the differences are not statistically significant.

### Professional Certification (CIH and/or CSP)

More than 60 % of respondents reported a professional certification; the vast majority CIH and/or CSP. One person held a PE, five a CHMM and six an REHS. The statistical analysis was conducted for the combination of CIH and CSP, presented in the table below.

| Certifications held | Table 1: Professional Certification (CIH , CSP) |         |                   |                 |         |         |
|---------------------|---|---------|-------------------|-----------------|---------|---------|
|                     | Responses                                       |         | Salary, thousands |                 |         |         |
|                     | N   | Percent | Mean / Median     | 95 % CI on Mean | Minimum | Maximum |
| NO CIH NO CSP       | 37  | 42      | 73 / 73           | 66 – 78         | 22      | 110     |
| CIH ONLY            | 30  | 34      | 95 / 93           | 87 – 103        | 67      | 155     |
| CSP ONLY            | 5   | 6       | 86 / 87           | 58 – 114        | 56      | 110     |
| BOTH CIH & CSP      | 16  | 18      | 110 / 100         | 87 - 134        | 75      | 250     |

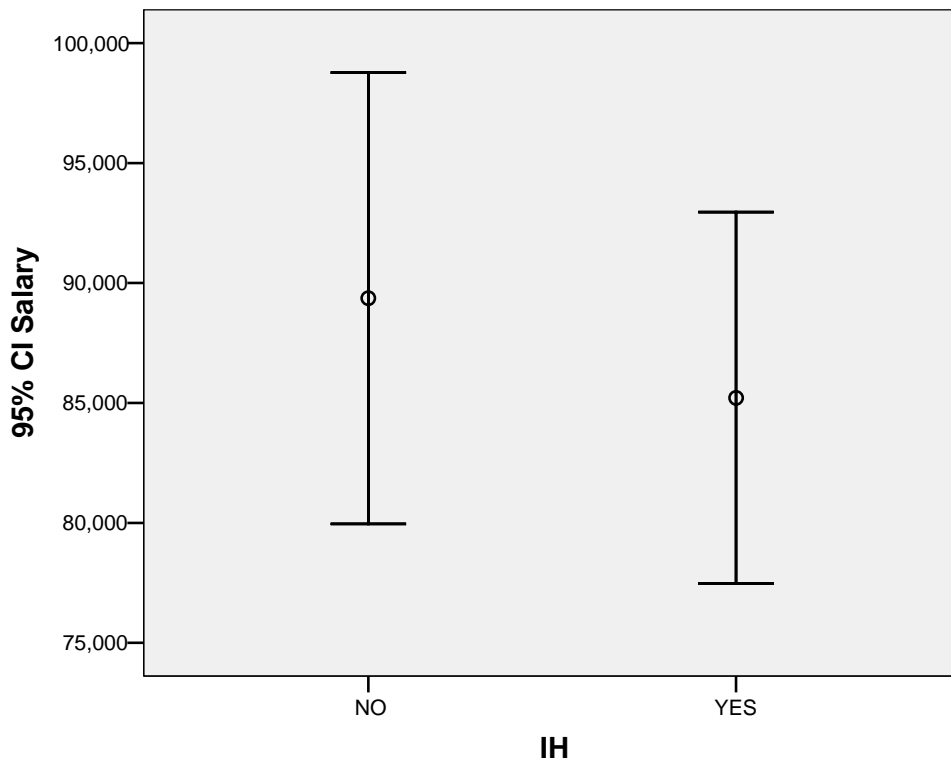
**Plot 1: Salary and Certification**



## IH Degree

The effect of education was evaluated in the survey. One question asked if the respondents had a degree in Industrial Hygiene. Thirty eight of eighty eight (43 %) respondents answered yes. However, there was no significant difference in salary with or without the degree in Industrial Hygiene. Those with the IH degree reported an average salary of \$85,000, and those without such a degree reported an average salary of \$89,000. This difference is not statistically significant.

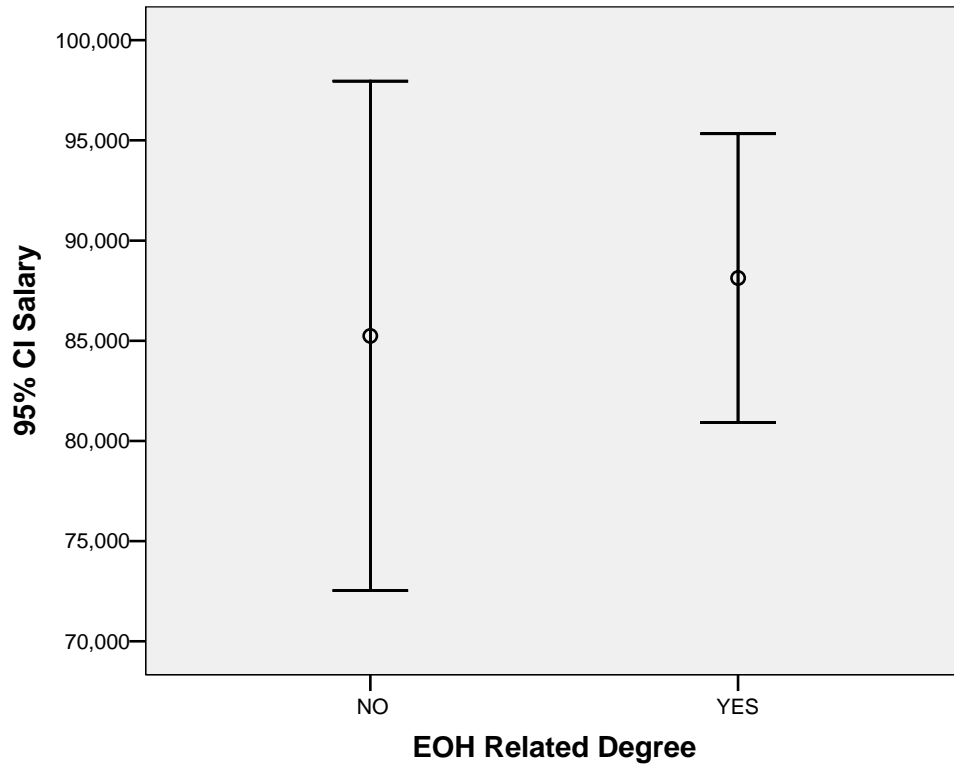
**Plot 2: Salary and IH Degree**



A related question is if there is a difference in reported salary associated with holding an EOH-related degree. All respondents had either an EOH-related degree or a science degree. Several reported holding a non-science degree as well as an EOH-related degree.

Seventeen of eighty eight (19 %) respondents reported having no EOH-related degree (but did hold a science degree). Average salary was \$85,000 (95 % CI: 73,000 – 99,000), compared to an average salary of \$88,000 (95 % CI: 81,000 – 95,000) among those reporting having an EOH-related degree.

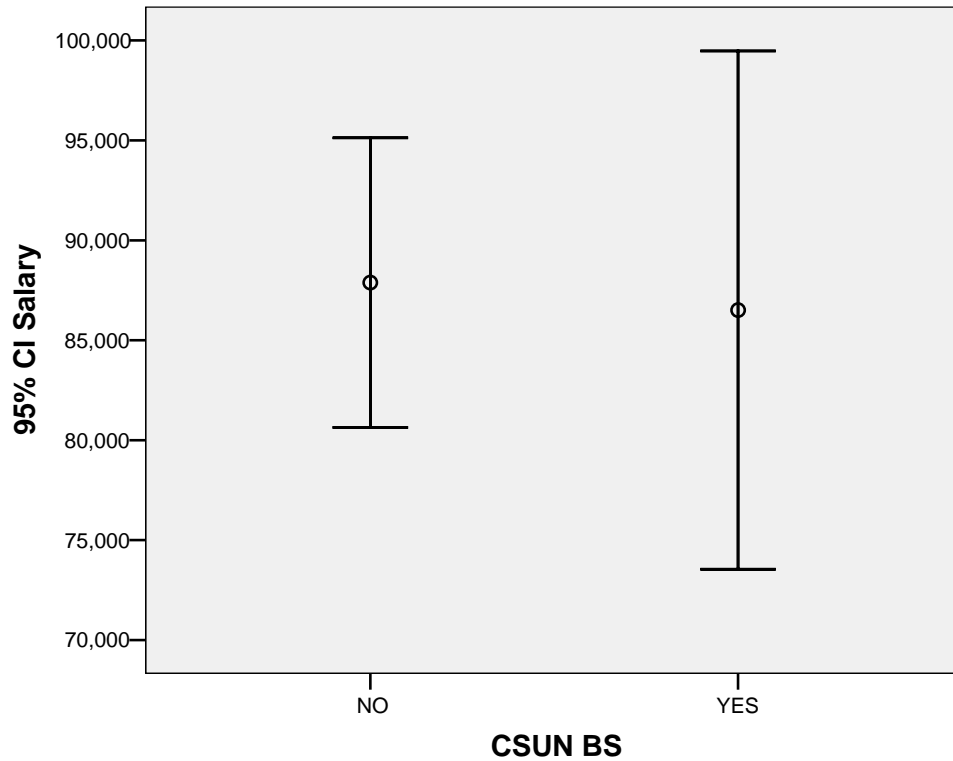
**Plot 3: Salary and EOH-related degree**



## CSUN BS

Twenty of eighty eight respondents (23 %) received a BS in EOH from California State University, Northridge. Again, there was little effect on salary: those reporting a BS from the CSUN Department of EOH reported an average salary of \$87,000; those without the degree from CSUN reported an average salary of \$88,000.

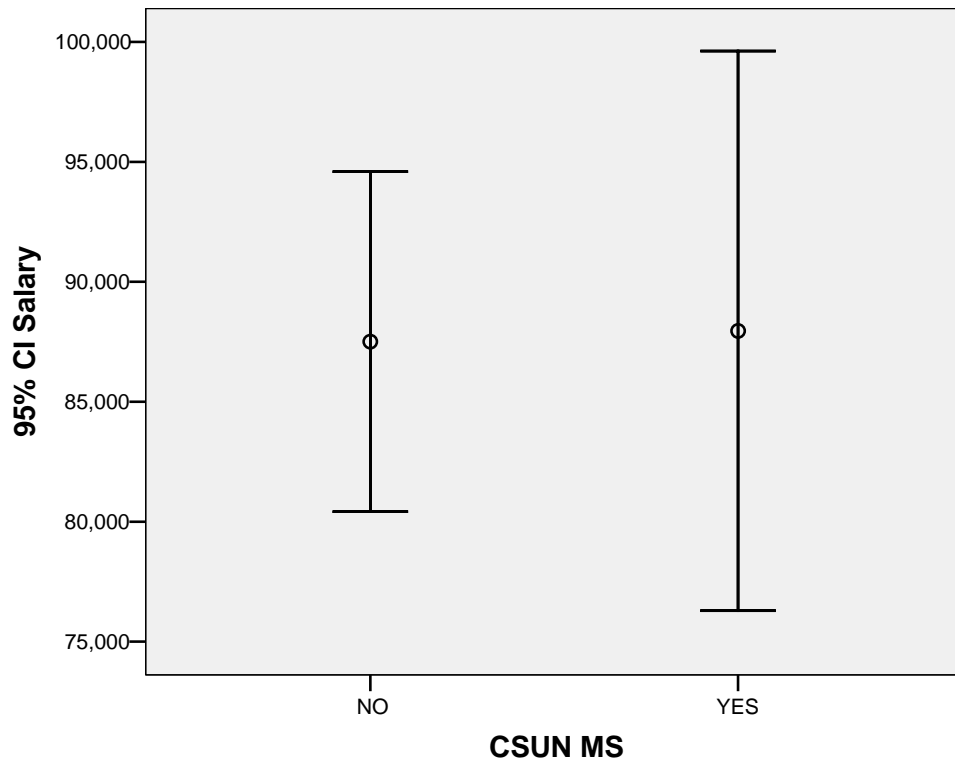
**Plot 4: Salary and CSUN BS**



## CSUN MS

Thirteen of eighty eight (15 %) respondents reported receiving an MS in EOH from CSU Northridge; again there was no significant difference in salary between those with and those without a degree from CSUN. Average salary for CSUN MS was \$88,000; for those without the MS degree from CSUN, the average salary was \$88,000.

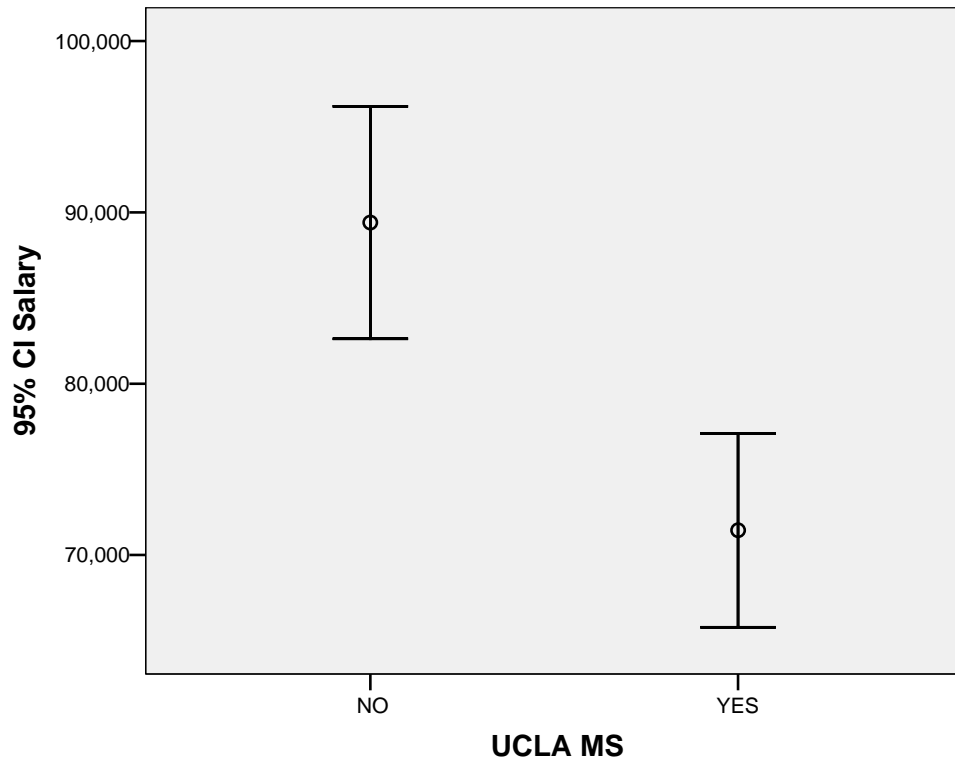
**Plot 5: Salary and CSUN MS**



## UCLA MS

Nine of eighty eight (10 %) respondents indicated they received an MS degree from UCLA. The average salary they reported was \$71,000, compared to \$91,000 for the other survey respondents. Although this difference is significant, the number of UCLA respondents is too low for further analysis.

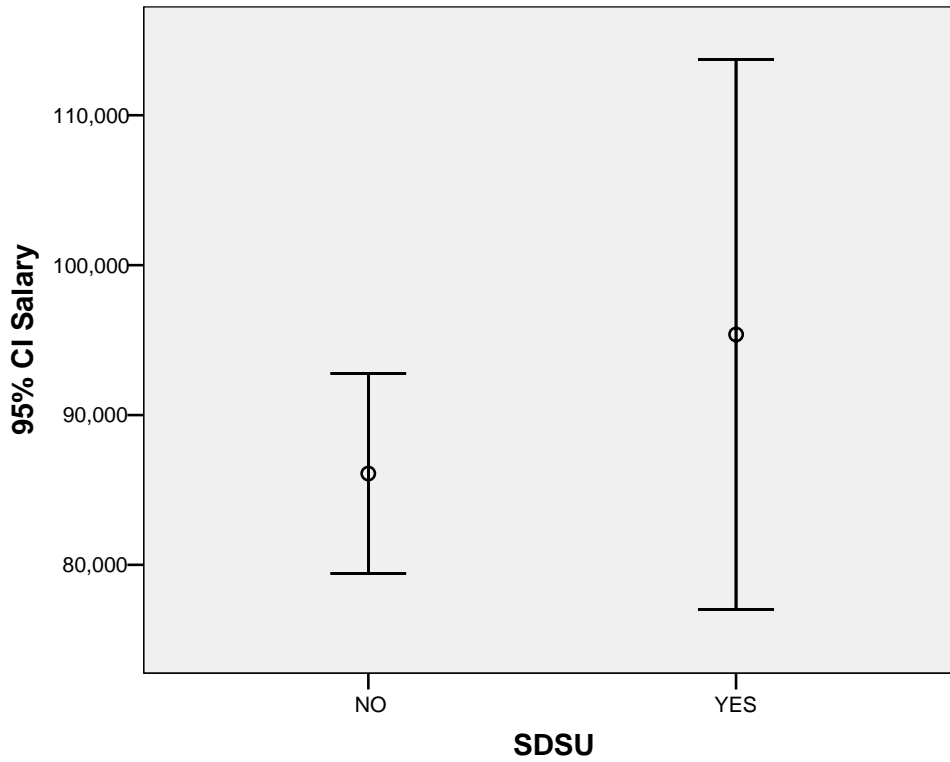
**Plot 6: Salary and UCLA MS**



## SDSU MS

Fourteen of 88 respondents reported receiving an MS from SDSU. Average salary for this group was \$95,000 (95 % CI \$77,000 - \$114,000). The average salary for the rest of the respondents was \$86,000 (95 % CI \$79,000 - \$93,000)

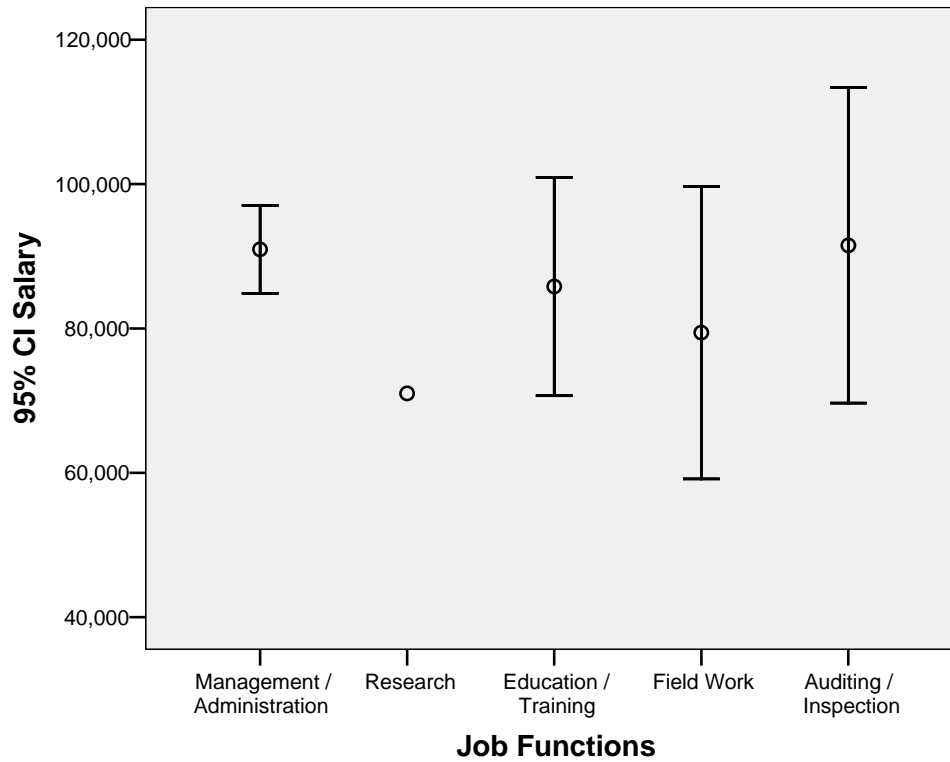
**Plot 7: Salary and SDSU MS**



## Job Functions

| Job Functions               | Table 2: Salary Distribution by Job Functions |         |                   |                 |         |         |
|-----------------------------|---|---------|-------------------|-----------------|---------|---------|
|                             | Responses                                     |         | Salary, thousands |                 |         |         |
|                             | N   | Percent | Mean / Median     | 95 % CI on mean | Minimum | Maximum |
| Management / Administration | 47  | 53      | 91 / 89           | 85 – 97         | 45      | 176     |
| Research                    | 1   | 1       | n/a               | n/a             | n/a     | n/a     |
| Education / Training        | 8   | 9       | 86 / 91           | 71 – 101        | 60      | 110     |
| Field Work                  | 21  | 24      | 79 / 75           | 59 – 99         | 22      | 250     |
| Auditing / Inspection       | 11  | 13      | 92 / 86           | 70 - 113        | 59      | 155     |

**Plot 8: Salary and Job Functions**

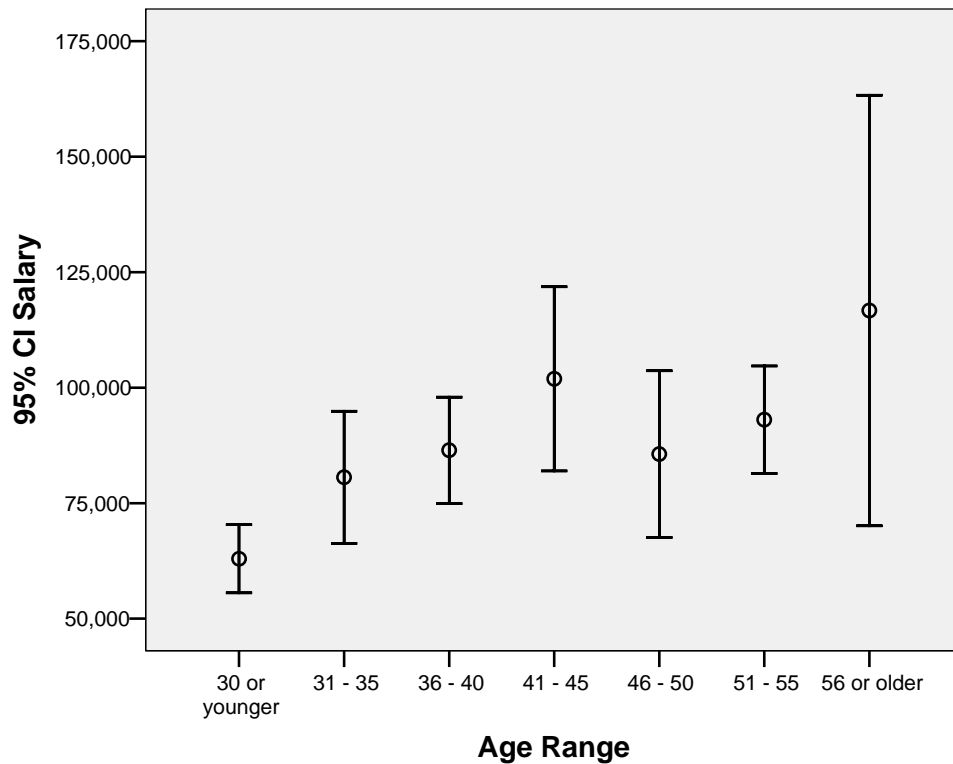


## Age Range

Salary has a weak association with age, as can be seen from the following Plot and table. The average age was 44 years (median was 43 years.) Note that several respondents did not report their year of birth in this survey. Four respondents did not reveal their age; thus are not included in the analysis below.

| Age Range     | Table 3: Salary by Age |         |                  |                 |         |         |
|---------------|------------------------|---------|------------------|-----------------|---------|---------|
|               | Respondents            |         | Salary in 1000\$ |                 |         |         |
|               | Number                 | Percent | Mean / Median    | 95 % CI of Mean | Minimum | Maximum |
| 30 or younger | 12                     | 14      | 63 / 64          | 55 – 70         | 38      | 80      |
| 31 to 35      | 14                     | 17      | 81 / 75          | 66 – 75         | 45      | 155     |
| 36 to 40      | 16                     | 19      | 86 / 86          | 75 – 98         | 22      | 120     |
| 41 to 45      | 11                     | 13      | 102 / 99         | 82 – 122        | 67      | 176     |
| 46 to 50      | 9                      | 11      | 86 / 90          | 68 – 104        | 45      | 120     |
| 51 to 55      | 14                     | 17      | 93 / 90          | 81 – 105        | 67      | 150     |
| 55 and older  | 8                      | 10      | 116 / 99         | 70 - 163        | 71      | 250     |

**Plot 9: Salary by Age**



## Gender

The difference in salary between males and females is statistically significant. This effect is consistent across years of experience in EOH. Note that several respondents did not report their gender in this survey.

| Gender | Table 4: Salary Distribution by Gender |         |                     |                 |         |         |
|--------|--|---------|---------------------|-----------------|---------|---------|
|        | Respondents                            |         | Salary in thousands |                 |         |         |
|        | Number                                 | Percent | Mean / Median       | 95 % CI on Mean | Minimum | Maximum |
| Male   | 52                                     | 60      | 94 / 88             | 84 – 103        | 22      | 250     |
| Female | 35                                     | 40      | 78 / 78             | 72 – 85         | 38      | 125     |

**Plot 10: Salary and Gender**

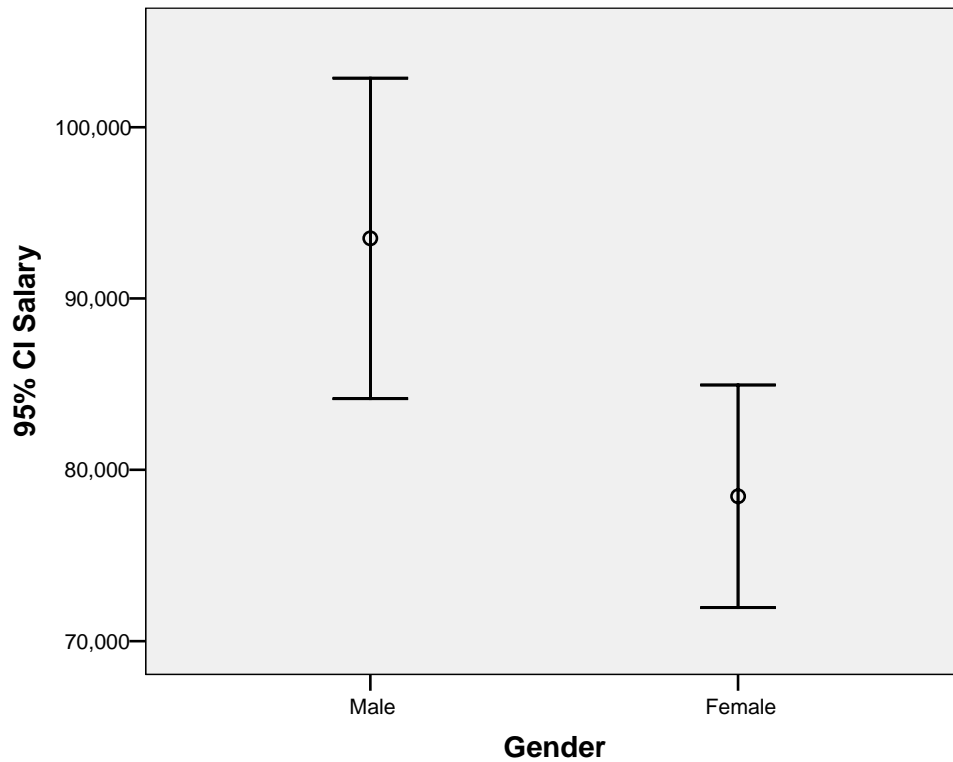
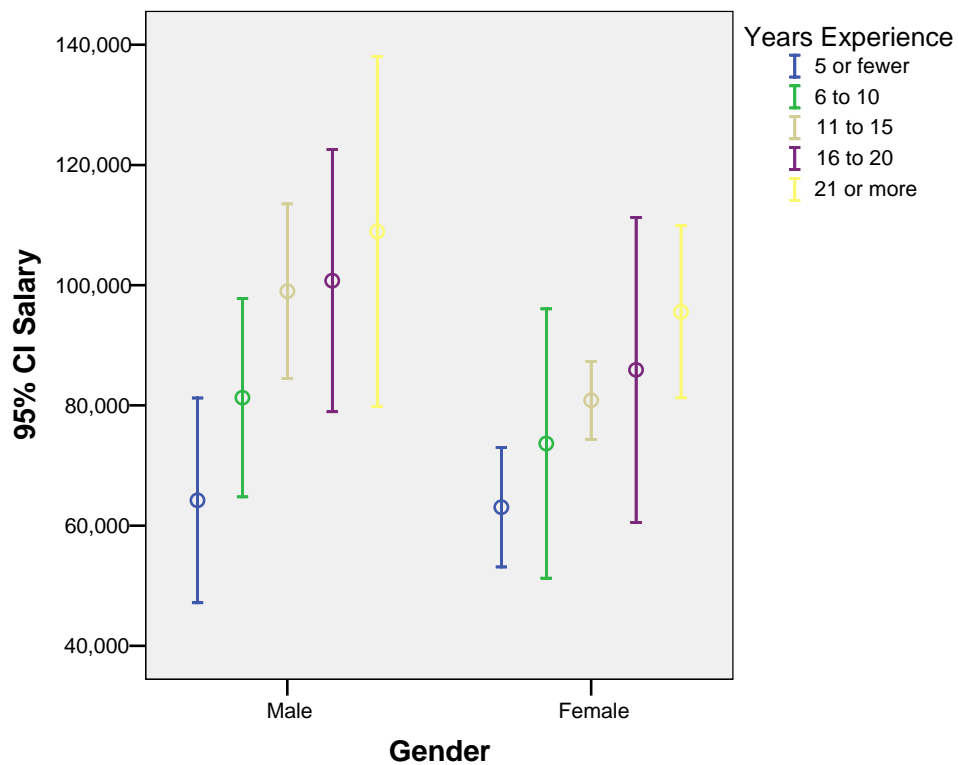


Table 4: Gender, Years of Experience, Salary

| Gender | Experience range | Mean      | N  | Std. Deviation |
|--------|------------------|-----------|----|----------------|
| Male   | 5 years or less  | \$64,000  | 5  | \$14,000       |
|        | 6 to 10 years    | \$81,000  | 14 | \$29,000       |
|        | 11 to 15 years   | \$99,000  | 11 | \$22,000       |
|        | 16 to 20 years   | \$101,000 | 10 | \$30,000       |
|        | 21 or more years | \$109,000 | 12 | \$46,000       |
|        | Total            | \$94,000  | 52 | \$34,000       |
| Female | 5 years or less  | \$63,000  | 9  | \$13,000       |
|        | 6 to 10 years    | \$74,000  | 3  | \$9,000        |
|        | 11 to 15 years   | \$81,000  | 9  | \$8,000        |
|        | 16 to 20 years   | \$86,000  | 6  | \$24,000       |
|        | 21 or more years | \$96,000  | 7  | \$15,000       |
|        | Total            | \$79,000  | 34 | \$15,000       |

Plot 11: Salary and Gender by Years of Experience

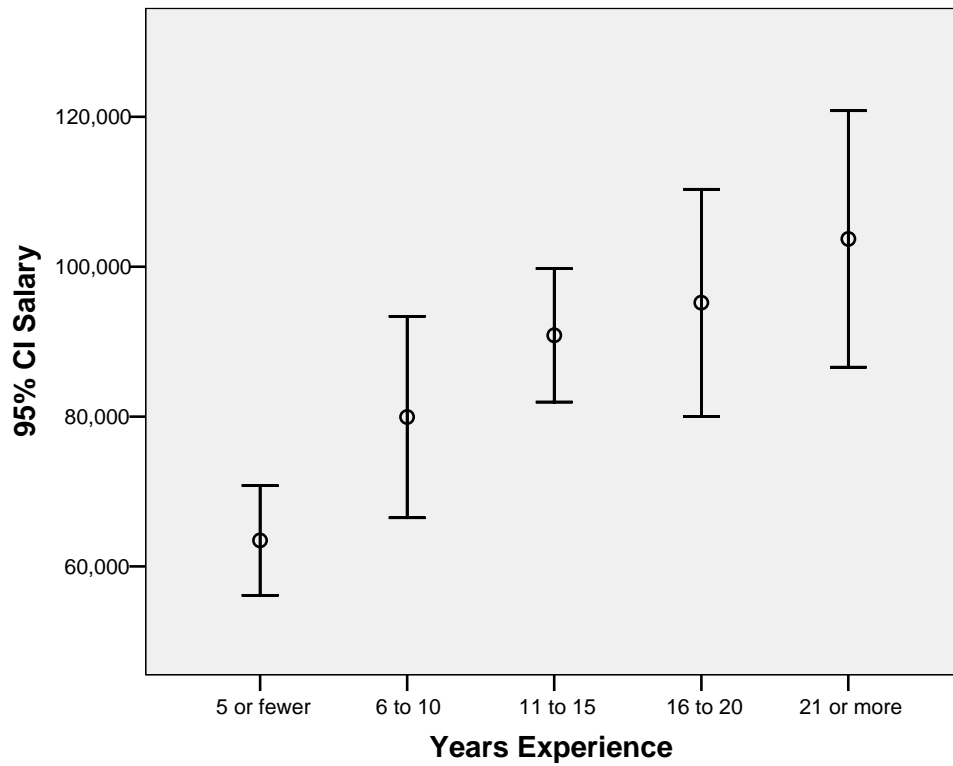


## Years of Experience in EOH

Years of experience in EOH was associated with salary, with a trend for increase in pay as experience increased. However, a regression on these data returned an r-squared of 0.27.

| Years of Experience | Table 5: Salary by years of experience |         |                                |                 |         |         |
|---------------------|--|---------|--------------------------------|-----------------|---------|---------|
|                     | Respondents                            |         | Salary in thousands of dollars |                 |         |         |
|                     | N                                      | Percent | Mean / Median                  | 95 % CI on Mean | Minimum | Maximum |
| 5 years or less     | 14                                     | 16      | 63 / 69                        | 56 – 71         | 38      | 80      |
| 6 to 10 years       | 17                                     | 20      | 80 / 75                        | 66 – 93         | 22      | 155     |
| 11 to 15 years      | 20                                     | 23      | 91 / 85                        | 82 – 100        | 67      | 150     |
| 16 to 20 years      | 16                                     | 18      | 95 / 93                        | 80 – 110        | 63      | 176     |
| 21 or more years    | 20                                     | 23      | 104 / 99                       | 87 – 121        | 71      | 250     |

**Plot 12: Salary by Years of Experience**

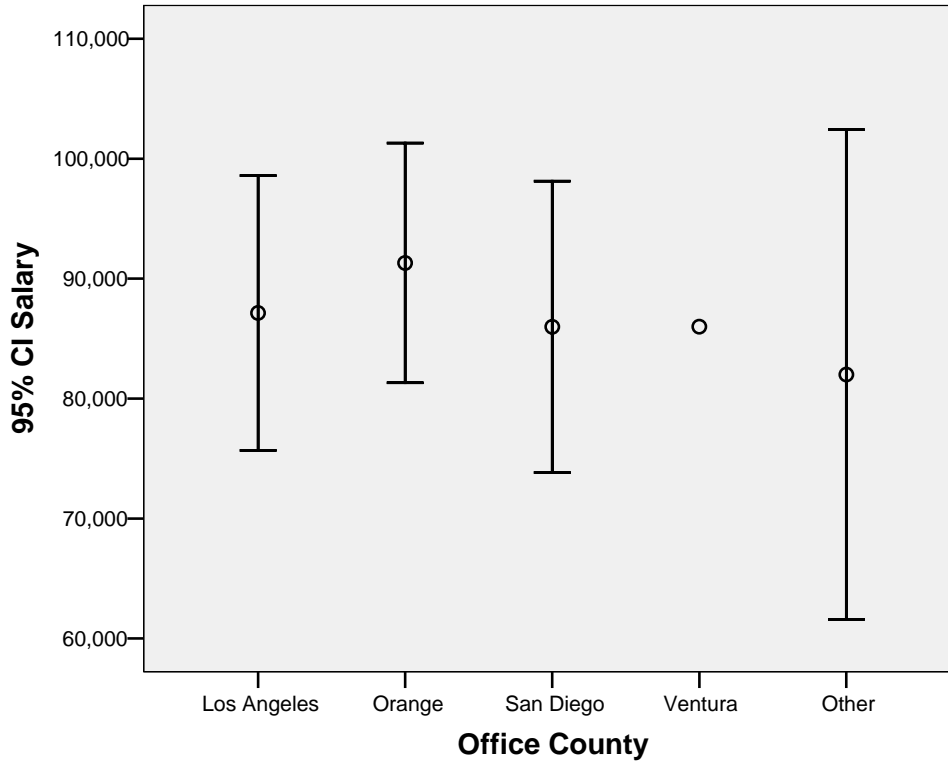


## County

The comparison of salary across counties shows that the average pay scale is similar in San Diego, Los Angeles and Orange Counties.

| County      | Table 6: Salary Distribution by County of Employment |         |                       |                 |         |         |
|-------------|--|---------|-----------------------|-----------------|---------|---------|
|             | Respondents  |         | Salary in thousand \$ |                 |         |         |
|             | Number   | Percent | Mean / Median         | 95 % CI on Mean | Minimum | Maximum |
| Los Angeles | 38   | 43      | 87 / 82               | 76 – 99         | 38      | 250     |
| Orange      | 21   | 24      | 91 / 97               | 81 – 101        | 22      | 125     |
| San Diego   | 24   | 27      | 86 / 78               | 74 – 98         | 45      | 176     |
| Ventura     | 1  | 1       | n/a                   | n/a             | n/a     | n/a     |
| Other       | 4  | 5       | 82 / 79               | 62 - 102        | 71      | 100     |

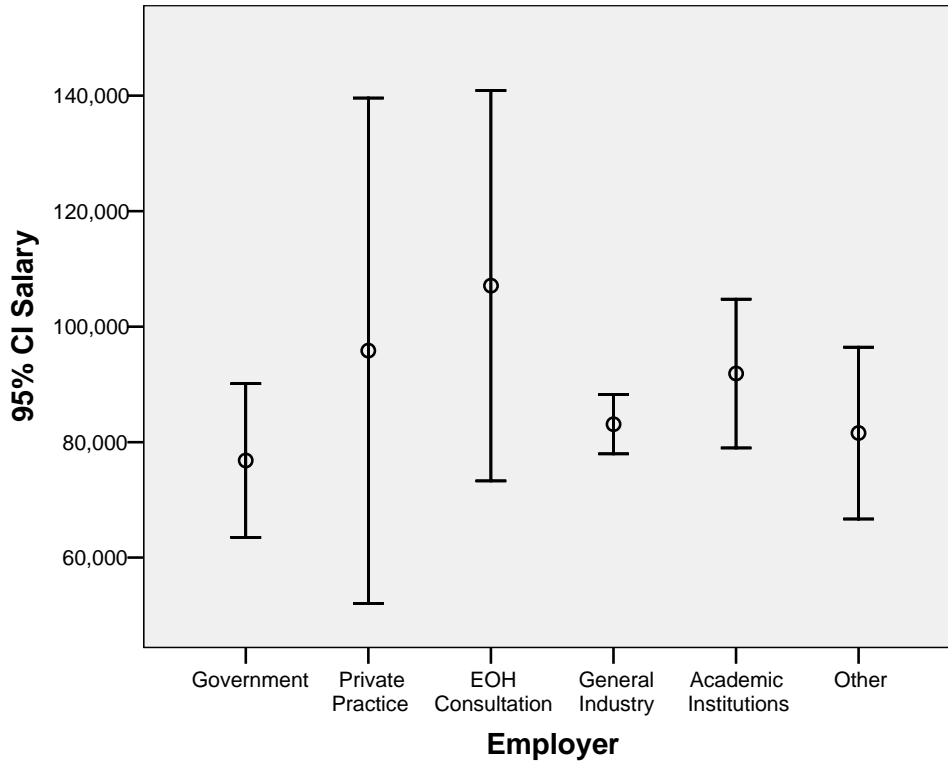
**Plot 13: Salary by County of Employment**



## Current Employer

| Current Employer     | Table 7: Salary by type of employer |         |                  |                 |         |         |
|----------------------|-------------------------------------|---------|------------------|-----------------|---------|---------|
|                      | Respondents                         |         | Salary in 1000\$ |                 |         |         |
|                      | N                                   | Percent | Mean / Median    | 95 % CI on mean | Minimum | Maximum |
| Government           | 12                                  | 14      | 77 / 78          | 64 – 90         | 38      | 101     |
| Private Practice     | 6                                   | 7       | 96 / 102         | 52 – 140        | 22      | 150     |
| EOH Consultation     | 13                                  | 15      | 107 / 80         | 73 – 141        | 60      | 250     |
| General Industry     | 36                                  | 41      | 83 / 82          | 78 – 88         | 50      | 120     |
| Academic Institution | 11                                  | 13      | 92 / 97          | 80 – 105        | 63      | 120     |
| Other                | 10                                  | 11      | 82 / 78          | 66 – 96         | 45      | 110     |

**Plot 14: Salary by Current Employer**



## Current Industry

| Current Industry        | Table 8: Salary by Industry Sector |         |                  |                 |         |         |
|-------------------------|------------------------------------|---------|------------------|-----------------|---------|---------|
|                         | Respondents                        |         | Salary in 1000\$ |                 |         |         |
|                         | N                                  | Percent | Mean / Median    | 95 % CI on Mean | Minimum | Maximum |
| Manufacturing           | 20                                 | 23      | 89 / 87          | 83 – 95         | 70      | 120     |
| Health Services         | 4                                  | 5       | 77 / 72          | 25 – 130        | 45      | 120     |
| Service (non-insurance) | 10                                 | 11      | 99 / 88          | 52 – 146        | 22      | 250     |
| Insurance               | 4                                  | 5       | 88 / 88          | 69 – 106        | 75      | 100     |
| Regulatory compliance   | 8                                  | 9       | 87 / 75          | 56 – 117        | 65      | 176     |
| Retail                  | 2                                  | 2       | 69 / 69          | 56 – 82         | 68      | 70      |
| Construction            | 2                                  | 2       | 93 / 93          | 66 – 251        | 80      | 105     |
| Other                   | 38                                 | 43      | 86 / 83          | 79 – 93         | 45      | 155     |

**Plot 15: Salary by Industry Type**

