**The Jackson Heart Study**

**Steps to Code Exam 1 and Exam 3 Industry and Occupation (I&O) Data**

Coding of the industry and occupation data was a joint effort between the Jackson Heart Study, the NIOSH Vanguard Center and the NIOSH Industry and Occupation Coding Team. This document provides an overview of industry and occupation coding and outlines the specific steps to code the data.

**Background**

Classification of industry and occupation provides a common basis for the collection, presentation and comparison of U.S. labor statistics. Industry classifications group individuals on the sector of economic activity in which they are employed; occupation classifications group individuals based on jobs and tasks performed. Information used to classify industry and occupation typically comes from employment history questions, such as job title, name of the business and job tasks (Mannetje & Kromhout, 2003).

Occupation data has previously been used as a proxy for exposure to a substance on the job or other workplace characteristics. In occupational epidemiology the risk for a disease has been analyzed using occupation or industry information resulting in useful hypotheses with respect to more specific hypotheses (Mannetje & Kromhout, 2003).

Industry and occupation data are collected for a variety of purposes including: 1) to estimate the burden of illness by industry and occupation, 2) to identify industries and occupations at high risk for disease, 3) to generate hypotheses about occupational risk factors for further study, 4) to guide etiologic and intervention research and practices, 5) to service as additional measures of socioeconomic status (SES), and 6) to help identify industrial groups or worksite-related groups where screening or prevention activities may be beneficial (Luckhaupt and Schumacher, presentation at the Los Angeles Cancer Surveillance Program Annual Symposium, 2011).

Collecting and coding both industry and occupation data results in a more accurate classification of the individual’s job and job duties. Below are a few examples where it is important to not only know the individual’s occupation but also their industry as each industry can have unique exposures.

* A clerk working at the University of Mississippi would have an occupation code of 5860 ‘Office and Administrative Support’, while a clerk at Handcock Crystal would be coded as 8320 ‘Production’ and a clerk at JCPenney Department Store would be coded as 4760 ‘Sales and Related’.
* An engineer working for the Mississippi state government would have an occupation code of 1360 ‘Architecture and Engineering’ while an engineer for the railroad would be coded as 9200 ‘Transportation and Material Moving’.
* A supervisor working for the Jackson Police Department would have an occupation coded of 3710 ‘Protective Services’ while a supervisor working for Valley Food Service would be coded as 4010 ‘Food Preparation’.

**Helpful Tips for Using the I&O Data**

1. Be sure to consider employment status. Approximately, 62.5% of participants were currently working at the time of their Exam 1 visit based on responses to question 3. This includes 49.7% who were working full-time, 7.5% working part-time and 5.3% who were retired from their usual job but working for pay. The remaining 37.5% were laid-off (0.3%), sick or on leave for health reasons (6.3%), unemployed and seeking work (2.2%), unemployed and not seeking work (1.7%), or retired (25.2%). An additional 1.9% were homemakers.
   1. Individuals in a current ‘non-work’ status (as indicated with responses of ‘C: employed, but temporarily laid off’, ‘D: sick or on leave for health reasons’, ‘E: unemployed, looking for work’, ‘F: unemployed, not looking for work’, ‘G: homemaker, not working outside the home’, and ‘H: retired from my usual job and not working’) may have provided responses to the employment history questions based on their last paid job.
   2. It is also important to note that the industry and occupation provided may not represent the individual’s greatest occupational exposure (i.e. time and dose).
2. It may be desirable to collapse some of the industry and occupation groups provided in Tables 1-4. Several of the specific industry and occupation subcategories have few (<5) participants and therefore, caution should be used when reporting these data. Some options for collapsing include: using the bolded categories, or creating groups of blue collar vs. white collar workers.

**References**

Luckhaupt S, Schumacher P. Collection and use of industry (I&O) data for cancer

registry professionals. Presented at the *Los Angeles Cancer Surveillance Program Annual Symposium* on April 14, 2011.

Mannetje A’t, Kromhout H. The use of occupation and industry classifications in general

population studies. *Int J Epidemiol*. 2003;32:419-428.

**Coding Steps**

**Step 1:** Responses to the employment history questions were provided from the Jackson Heart Study to the NIOSH Vanguard Center. The NIOSH Vanguard Center created Excel spreadsheets containing the relevant employment history questions for the NIOSH Industry and Occupation Coding Team. These spreadsheets were uploaded to a secure folder shared by the NIOSH Vanguard Center and the NIOSH Industry and Occupation Coding Team.

Descriptions of the employment variables sent to the coding team are given below. The SAS variable names are shown in parentheses.

1. Participant ID (***subjid***)

The following questions from Dataset ‘PDSA06’.

1. We would like to know about the kind of work you do. Looking at this card, [SHOW RC #2] please tell me the letter which best describes your current job? (***PDSA3***)
   1. Working now, full-time – Go to Item 5
   2. Working now, part-time – Go to Item 5
   3. Employed, but temporarily laid off
   4. Sick or on leave for health reasons
   5. Unemployed, looking for work
   6. Unemployed, not looking for work
   7. Homemaker, not working outside the home
   8. Retired from my usual job and not working
   9. Retired from my usual job but working for pay
2. What (is/was) your occupation on your main job? (For example: registered nurse, personnel manager, auto mechanic, accountant, machine operator, etc.) (***PDSA6A***)

[IF MORE THAN ONE, ASK:] Which do you consider your main occupation or job?

[PROBE FOR WHAT RESPONDENT DOES, NOT WHERE RESPONDENT WORKS,

OBTAIN JOB TITLE]

1. Tell me a little more about your main job. What are your most important activities or duties? For example patient care, directing hiring policies, repairing automobiles, reviewing financial records, operating machinery, etc.) (***PDSA7***)
2. What kind of business or industry (is/was) that? (For example, hospital, newspaper publishing, auto repair shop, bank, etc.) (***PDSA8***)

[IF UNSURE, ASK:] What do they make or do where you (work/worked)?

[PROBE FOR NAME OF BUSINESS OR INDUSTRY]

**Step 2:** The NIOSH Industry and Occupation Coding Team used the NIOSH Industry and Occupation Computerized Classification System (NIOCCS) to derive industry and occupation codes for each respondent.

NIOCCS is a Web-based software system designed to translate industry and occupation (I&O) text to standardized I&O codes. This software reduces the high cost of manually coding I&O information and improves the uniformity of the codes. See the following link for a description of the NIOCCS coding process, <http://www.cdc.gov/niosh/topics/coding/overview.html>

Industry and occupation responses not autocoded by NIOCCS were assigned to a NIOSH trained coder for coding using the NIOCCS Computer-Assisted program. After completion of Computer-assisted records, 100% quality control was performed for all responses (including autocoded) by a NIOSH trained quality control coder. All data extraction, coding and entry were performed with an accuracy rate exceeding 98%. A routine 10% sample of all coded/entered products was taken to assure the accuracy figure was obtained.

A small percentage of the Exam 1 and Exam 3 industry (1.23% and 0.29%, respectively) and occupation (1.13% and 0.21%, respectively) were classified as uncodable. This was due to either missing or incomplete information for these participants.

**Step 3:** The NIOSH Industry and Occupation Coding Team provided the NIOSH Vanguard Center with the codes for each respondent.

The codes include:

Industry code: 2002 U.S. Census Industry Codes

Occupation code: 2002 U.S. Census Occupation Codes

NAICS code: 2002 North American Industry Classification System Codes (<http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2002>)

SOC code: 2000 U.S. Department of Labor, Bureau of Labor Statistics Standard Occupational Classification System Codes (<http://www.bls.gov/soc/2000/soc_majo.htm>)

**Step 4:** The NIOSH Vanguard Center performed additional random quality control checks of both Exam 1 and Exam 3 data.

**Step 5:** The NIOSH Vanguard Center created SAS datasets containing the industry and occupation codes for Exam 1 and Exam 3.

Attached are two SAS data files called “JHS\_EXAM1\_IO” and “JHS\_EXAM3\_IO” containing the NIOSH Industry and Occupation coding for the respective exams. Each data file contains five variables (see the contents below) including subject ID. The exam 1 data has 5,301 subjects while the exam 3 data has 3,754 subjects.

**Contents of the NIOSH Industry and Occupation coding SAS data files**

| **Variable** | **Type** | **Len** | **Format** | **Informat** | **Label** |
| --- | --- | --- | --- | --- | --- |
| SUBJID | Char | 7 | $7. | $7. | SUBJID |
| ind\_code | Char | 4 | $4. | $4. | Industry code: 2002 U.S. Census Industry Codes |
| naics\_code | Char | 49 | $49. | $49. | NAICS code: 2002 North American Industry Classification System Codes |
| occ\_code | Char | 4 | $4. | $4. | Occupation code: 2002 U.S. Census Occupation Codes |
| soc\_code | Char | 52 | $52. | $52. | SOC code: 2000 U.S. Department of Labor, Bureau of Labor Statistics Standard Occupational Classification System Codes |

**Step 6:** Develop summary tables for the Jackson Heart Study.

Summary tables using the 2002 U.S. Census Industry and Occupation codes are provided below.

**Jackson Heart Study Exam 1 Results**

**Table 1. Distribution of Industry using the 2002 U.S. Census Industry Codes**

|  |  |  |
| --- | --- | --- |
| **Industry** | **No.** | **%** |
| **Agriculture, Forestry, Fishing and Hunting (0170-0290)** | **25** | **0.47** |
| **Mining (0370-0490)** | **2** | **0.04** |
| **Utilities (0570-0690)** | **34** | **0.64** |
| **Construction (0770)** | **218** | **4.11** |
| **Manufacturing (1070-3990)** | **503** | **9.49** |
| Nondurable Goods (1070-2390) | 142 | 2.68 |
| Food Manufacturing (1070-1290) | 69 | 1.30 |
| Beverage and Tobacco Products Manufacturing (1370-1390) | 5 | 0.10 |
| Textile Mills and Textile Product Mills (1470-1590) | 5 | 0.10 |
| Apparel Manufacturing (1670-1690) | 19 | 0.36 |
| Leather and Allied Product Manufacturing (1770-1790) | 1 | 0.02 |
| Paper Manufacturing (1870-1890) | 14 | 0.27 |
| Printing and Related Support Activities (1990) | 6 | 0.11 |
| Petroleum and Coal Products Manufacturing (2070-2090) | 2 | 0.04 |
| Chemical Manufacturing (2170-2290) | 13 | 0.25 |
| Plastics and Rubber Product Manufacturing (2370-2390) | 9 | 0.18 |
| Durable Goods (2470-3990) | 361 | 6.81 |
| Nonmetallic Mineral Product Manufacturing (2470-2590) | 16 | 0.32 |
| Metal Industries (2670-2990) | 47 | 0.90 |
| Machinery Manufacturing (3070-3290) | 27 | 0.51 |
| Computer and Electronic Product Manufacturing (3360-3390) | 14 | 0.28 |
| Electrical Equipment, Appliances and Component (3470-3490) | 39 | 0.74 |
| Transportation Equipment Manufacturing (3570-3690) | 139 | 2.66 |
| Motor Vehicles and Motor Vehicle Equipment (3570) | 121 | 2.29 |
| Wood Products, including Furniture, Manufacturing (3770-3890) | 20 | 0.40 |
| Miscellaneous Manufacturing (3960-3990) | 59 | 1.11 |
| **Wholesale Trade (4070-4590)** | **77** | **1.45** |
| Durable Goods, Wholesalers (4070-4290) | 34 | 0.66 |
| Nondurable Goods, Wholesalers (4370-4590) | 43 | 0.82 |
| **Retail (4670-5790)** | **332** | **6.26** |
| **Transportation and Warehousing (6070-6390)** | **230** | **4.34** |
| **Information and Communications (6470-6780)** | **114** | **2.15** |
| Publishing Industries (6470-6590) | 14 | 0.30 |
| Broadcasting and Telecommunications (6670-6695) | 87 | 1.65 |
| Information Services and Data Processing Services (6770-6780) | 13 | 0.29 |
| **Finance, Insurance, Real Estate and Rental and Leasing (6870-7190)** | **188** | **3.55** |
| Finance and Insurance (6870-6990) | 138 | 2.62 |
| Real Estate and Rental and Leasing (7070-7190) | 50 | 0.94 |
| **Professional, Scientific, Management (7270-7790)** | **219** | **4.13** |
| Professional, Scientific and Technical Services (7270-7490) | 95 | 1.84 |
| Management, Administrative & Support, & Waste Management Services (7570-7790) | 124 | 2.35 |
| **Educational, Health and Social Services (7860-8470)** | **2050** | **38.67** |
| Educational Services (7860-7890) | 1051 | 19.83 |
| Elementary and Secondary Schools (7860) | 801 | 15.11 |
| Colleges, including Junior Colleges, and Universities (7870) | 228 | 4.30 |
| Health Care (7970-8290) | 814 | 15.36 |
| Hospitals (8190) | 543 | 10.07 |
| Social Assistance (8370-8470) | 185 | 3.49 |
| Child Daycare Services (8470) | 130 | 2.45 |
| **Arts, Entertainment, Recreation, Accommodations, & Food Services (8560-8690)** | **219** | **4.13** |
| Arts, Entertainment, and Recreation (8560-8590) | 30 | 0.63 |
| Accommodations and Food Services (8660-8690) | 189 | 3.61 |
| Restaurants and other Food Services (8680) | 129 | 2.46 |
| **Other Services, except Public Administration (8770-9290)** | **492** | **9.28** |
| Repair and Maintenance (8770-8890) | 69 | 1.35 |
| Personal and Laundry Services (8970-9090) | 124 | 2.38 |
| Religious, Grantmaking, Civic, Business and Similar Organizations (9160-9190) | 103 | 2.01 |
| Private Households (9290) | 196 | 3.74 |
| **Public Administration (9370-9590)** | **496** | **9.36** |
| Other General Government and Support (9390) | 130 | 2.45 |
| Justice, Public Order, and Safety Activities (9470) | 138 | 2.65 |
| Administration of Human Resource Programs (9480) | 127 | 2.40 |
| **Active Duty Military (9590-9870)** | **10** | **0.19** |
| **Homemakers and Students (9890)** | **26** | **0.49** |
| **Uncodable (incomplete information) (9990)** | **65** | **1.23** |
| **Total** | **5301** | **100.00** |

**Jackson Heart Study Exam 1 Results**

**Table 2. Distribution of Occupation using the 2002 U.S. Census Occupation Codes**

|  |  |  |
| --- | --- | --- |
| **Occupation** | **No.** | **%** |
| **Management, Professional, and Related Occupations (0010-3540)** | **1881** | **35.48** |
| Management, Business and Financial (0010-0950) | 620 | 11.70 |
| Management (0010-0430) | 455 | 8.58 |
| Business and Financial Operations (0500-0950) | 165 | 3.11 |
| Professional and Related (1000-3540) | 1261 | 23.79 |
| Computer and Mathematical (1000-1240) | 52 | 0.98 |
| Architecture and Engineering (1300-1560) | 35 | 0.66 |
| Life, Physical and Social Science (1600-1960) | 24 | 0.45 |
| Community and Social Services (2000-2060) | 143 | 2.70 |
| Legal (2100-2150) | 38 | 0.72 |
| Education, Training and Library (2200-2550) | 639 | 12.05 |
| Arts, Design, Entertainment, Sports and Media (2600-2960) | 44 | 0.83 |
| Healthcare Practitioners and Technical (3000-3540) | 286 | 5.40 |
| **Service Occupations (3600-4650)** | **1292** | **24.37** |
| Healthcare Support (3600-3650) | 190 | 3.58 |
| Protective Service (3700-3950) | 147 | 2.77 |
| Food Preparation and Serving Related (4000-4160) | 249 | 4.70 |
| Building and Grounds Cleaning and Maintenance (4200-4250) | 435 | 8.21 |
| Personal Care and Service (4300-4650) | 271 | 5.11 |
| **Sales and Office Occupations (4700-5930)** | **914** | **17.24** |
| Sales and Related Workers (4700-4960) | 278 | 5.24 |
| Office and Administrative Support Workers (5000-5930) | 636 | 12.00 |
| **Farming, Fishing and Forestry (6000-6130)** | **12** | **0.23** |
| Agriculture Workers including Supervisors (6000-6050) | 9 | 0.17 |
| Fishing and Hunting, and Forest and Logging Workers (6100-6130) | 3 | 0.06 |
| **Construction, Extraction, Maintenance, and Repair Occupations (6200-7620)** | **334** | **6.30** |
| Construction and Extraction (6200-6940) | 203 | 3.83 |
| Installation, Maintenance, and Repair (7000-7620) | 131 | 2.47 |
| **Production, Transportation, Material Moving Occupations (7700-9000, 9110-9750)** | **772** | **14.56** |
| Production (7700-8960) | 466 | 8.79 |
| Transportation and Material Moving Workers (9000, 9110-9750) | 306 | 5.77 |
| **Homemakers, Students, Did not work (9010, 9020, 9050, 9060, 9100)** | **25** | **0.47** |
| **Military (9830-9850)** | **11** | **0.21** |
| **Uncodable (9990)** | **60** | **1.13** |
| **Total** | **5301** | **100.00** |

**Jackson Heart Study Exam 3 Results**

**Table 3. Distribution of Industry using the 2002 U.S. Census Industry Codes**

|  |  |  |
| --- | --- | --- |
| **Industry** | **No.** | **%** |
| **Agriculture, Forestry, Fishing and Hunting (0170-0290)** | **10** | **0.27** |
| **Mining (0370-0490)** | **3** | **0.08** |
| **Utilities (0570-0690)** | **28** | **0.75** |
| **Construction (0770)** | **130** | **3.46** |
| **Manufacturing (1070-3990)** | **364** | **9.70** |
| Nondurable Goods (1070-2390) | 98 | 2.61 |
| Food Manufacturing (1070-1290) | 45 | 1.20 |
| Beverage and Tobacco Products Manufacturing (1370-1390) | 5 | 0.13 |
| Textile Mills and Textile Product Mills (1470-1590) | 1 | 0.03 |
| Apparel Manufacturing (1670-1690) | 20 | 0.53 |
| Leather and Allied Product Manufacturing (1770-1790) | 0 | 0.00 |
| Paper Manufacturing (1870-1890) | 4 | 0.11 |
| Printing and Related Support Activities (1990) | 5 | 0.13 |
| Petroleum and Coal Products Manufacturing (2070-2090) | 0 | 0.00 |
| Chemical Manufacturing (2170-2290) | 9 | 0.24 |
| Plastics and Rubber Product Manufacturing (2370-2390) | 9 | 0.24 |
| Durable Goods (2470-3990) | 266 | 7.09 |
| Nonmetallic Mineral Product Manufacturing (2470-2590) | 15 | 0.40 |
| Metal Industries (2670-2990) | 22 | 0.59 |
| Machinery Manufacturing (3070-3290) | 22 | 0.59 |
| Computer and Electronic Product Manufacturing (3360-3390) | 10 | 0.27 |
| Electrical Equipment, Appliances and Component (3470-3490) | 32 | 0.85 |
| Transportation Equipment Manufacturing (3570-3690) | 117 | 3.12 |
| Motor Vehicles and Motor Vehicle Equipment (3570) | 99 | 2.64 |
| Wood Products, including Furniture, Manufacturing (3770-3890) | 14 | 0.37 |
| Miscellaneous Manufacturing (3960-3990) | 34 | 0.91 |
| **Wholesale Trade (4070-4590)** | **22** | **0.59** |
| Durable Goods, Wholesalers (4070-4290) | 10 | 0.27 |
| Nondurable Goods, Wholesalers (4370-4590) | 12 | 0.32 |
| **Retail (4670-5790)** | **231** | **6.15** |
| **Transportation and Warehousing (6070-6390)** | **156** | **4.16** |
| **Information and Communications (6470-6780)** | **67** | **1.78** |
| Publishing Industries (6470-6590) | 5 | 0.13 |
| Broadcasting and Telecommunications (6670-6695) | 50 | 1.33 |
| Information Services and Data Processing Services (6770-6780) | 12 | 0.32 |
| **Finance, Insurance, Real Estate and Rental and Leasing (6870-7190)** | **143** | **3.81** |
| Finance and Insurance (6870-6990) | 112 | 2.98 |
| Real Estate and Rental and Leasing (7070-7190) | 31 | 0.83 |
| **Professional, Scientific, Management (7270-7790)** | **168** | **4.48** |
| Professional, Scientific and Technical Services (7270-7490) | 80 | 2.13 |
| Management, Administrative & Support, & Waste Management Services (7570-7790) | 88 | 2.34 |
| **Educational, Health and Social Services (7860-8470)** | **1559** | **41.53** |
| Educational Services (7860-7890) | 857 | 22.83 |
| Elementary and Secondary Schools (7860) | 659 | 17.55 |
| Colleges, including Junior Colleges, and Universities (7870) | 183 | 4.87 |
| Health Care (7970-8290) | 589 | 15.69 |
| Hospitals (8190) | 375 | 9.99 |
| Social Assistance (8370-8470) | 113 | 3.01 |
| Child Daycare Services (8470) | 73 | 1.94 |
| **Arts, Entertainment, Recreation, Accommodations, & Food Services (8560-8690)** | **115** | **3.06** |
| Arts, Entertainment, and Recreation (8560-8590) | 14 | 0.37 |
| Accommodations and Food Services (8660-8690) | 101 | 2.69 |
| Restaurants and other Food Services (8680) | 73 | 1.94 |
| **Other Services, except Public Administration (8770-9290)** | **297** | **7.91** |
| Repair and Maintenance (8770-8890) | 33 | 0.88 |
| Personal and Laundry Services (8970-9090) | 83 | 2.21 |
| Religious, Grantmaking, Civic, Business and Similar Organizations (9160-9190) | 73 | 1.94 |
| Private Households (9290) | 108 | 2.88 |
| **Public Administration (9370-9590)** | **402** | **10.71** |
| Other General Government and Support (9390) | 131 | 3.49 |
| Justice, Public Order, and Safety Activities (9470) | 114 | 3.04 |
| Administration of Human Resource Programs (9480) | 76 | 2.02 |
| **Active Duty Military (9670-9870)** | **13** | **0.35** |
| **Homemakers and Students (9890)** | **35** | **0.93** |
| **Uncodable (9990)** | **11** | **0.29** |
| **Total** | **3754** | **100.00** |

**Jackson Heart Study Exam 3 Results**

**Table 4. Distribution of Occupation using the 2002 U.S. Census Occupation Codes**

|  |  |  |
| --- | --- | --- |
| **Occupation** | **No.** | **%** |
| **Management, Professional, and Related Occupations (0010-3540)** | **1615** | **43.02** |
| Management, Business and Financial (0010-0950) | 562 | 14.97 |
| Management (0010-0430) | 401 | 10.68 |
| Business and Financial Operations (0500-0950) | 161 | 4.29 |
| Professional and Related (1000-3540) | 1053 | 28.05 |
| Computer and Mathematical (1000-1240) | 53 | 1.41 |
| Architecture and Engineering (1300-1560) | 27 | 0.72 |
| Life, Physical and Social Science (1600-1960) | 23 | 0.61 |
| Community and Social Services (2000-2060) | 115 | 3.06 |
| Legal (2100-2150) | 33 | 0.88 |
| Education, Training and Library (2200-2550) | 548 | 14.60 |
| Arts, Design, Entertainment, Sports and Media (2600-2960) | 31 | 0.83 |
| Healthcare Practitioners and Technical (3000-3540) | 223 | 5.94 |
| **Service Occupations (3600-4650)** | **774** | **20.62** |
| Healthcare Support (3600-3650) | 144 | 3.84 |
| Protective Service (3700-3950) | 114 | 3.04 |
| Food Preparation and Serving Related (4000-4160) | 155 | 4.13 |
| Building and Grounds Cleaning and Maintenance (4200-4250) | 206 | 5.49 |
| Personal Care and Service (4300-4650) | 155 | 4.13 |
| **Sales and Office Occupations (4700-5930)** | **559** | **14.89** |
| Sales and Related Workers (4700-4960) | 187 | 4.98 |
| Office and Administrative Support Workers (5000-5930) | 372 | 9.91 |
| **Farming, Fishing and Forestry (6000-6130)** | **9** | **0.24** |
| Agriculture Workers including Supervisors (6000-6050) | 9 | 0.24 |
| Fishing and Hunting, and Forest and Logging Workers (6100-6130) | 0 | 0.00 |
| **Construction, Extraction, Maintenance, and Repair Occupations (6200-7620)** | **222** | **5.91** |
| Construction and Extraction (6200-6940) | 137 | 3.65 |
| Installation, Maintenance, and Repair (7000-7620) | 85 | 2.26 |
| **Production, Transportation, Material Moving Occupations (7700-9000, 9110-9750)** | **519** | **13.83** |
| Production (7700-8960) | 314 | 8.36 |
| Transportation and Material Moving Workers (9000, 9110-9750) | 205 | 5.46 |
| **Homemakers, Students, Did not work (9010, 9020, 9050, 9060, 9100)** | **35** | **0.93** |
| **Military (9800-9830)** | **13** | **0.35** |
| **Uncodable (9990)** | **8** | **0.21** |
| **Total** | **3754** | **100.00** |