# **Chapter 2. Patient Characteristics**

# Magnitude and Trend of Patient Population

**Figure 2.1. Number of new NYS OHCN patients seen, by year.** Between 1988 and 2003, 47,207 patients were seen by the NYS Occupational Health Clinic Network (OHCN) in 115,406 visits. These patients were roughly equally divided between group screening patients and symptomatic patients; however, in the past few years, there were substantially more symptomatic patients seen. This increase is explained in part by patients seen for conditions related to the World Trade

Center (WTC) disaster of September 2001. The number of new patients seen increased almost every year from 635 in part-year 1988 to 4,213 in 2003. Since 2000, this increase has been primarily among symptomatic patients. Overall, the total number of patients seen each year by the NYS OHCN has also increased over the years, to 7,556 patients seen in 2003 (data not shown). Information on when individual Clinics and their satellites opened and closed is available on the top of the graph.

Figure 2.1. Number of New NYS OHCN Patients Seen, by Year

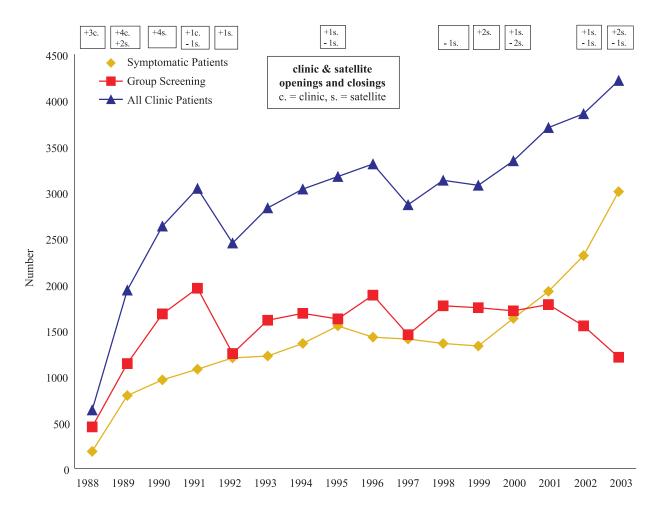
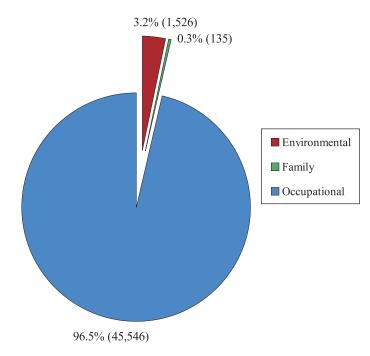


Figure 2.2. Percent of NYS OHCN patients, by type seen.

Overall, 45,546 (96%) of patients were seen for occupational exposures. Occupational patients had an exposure from either their present or past occupation. Environmental patients had an exposure from a non-occupational environment which include individuals seen for exposures to such places as landfills, home mold-related problems, and a variety of other exposures. In addition, some patients are family members of workers seen for possible health effects related to take-home exposures.

In general, there is a much higher percent of females (data not shown) among the environmental (58%) and family (86%) patients, compared to the occupational patients (25%).

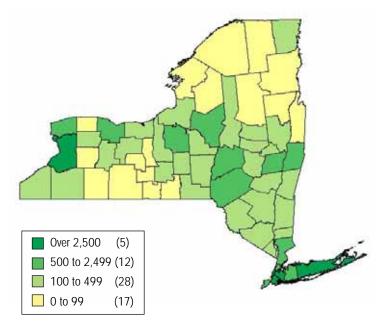
Figure 2.2. Percent of NYS OHCN Patients, by Type Seen



# **County of Residence**

# Figure 2.3. Residence of NYS OHCN patients, by county. Patients were seen from all but one county in NYS, with large percentages residing in counties with large metropolitan areas such as New York City (NYC), Albany, Erie, Monroe and Onondaga counties. There were substantially fewer patients from areas of New York with lower populations such as the Adirondack Park.

Figure 2.3. Residence of NYS OHCN Patients, by County

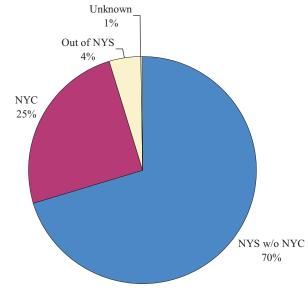


**Figure 2.4. Percent of NYS OHCN patients, by geographic region**. Overall, 33,136 (70%) patients resided in New York State, outside of NYC, 11,900 (25%) resided in New York City, and 2,103 (4%) were not residents of NYS. Place of residence was unknown for 68 patients.

# **Group Screening Patients**

Overall, 24,479 (52%) patients were seen in the NYS OHCN as part of a group screening. Among those seen, 7,788 (32%) were part of a respirator certification program, 6,464 (26%) were follow-up for asbestos exposure; and 5,740 (23%) were general occupational health examinations due to an on-the-job exposure. Many of the group screening patients were seen due to potential exposures to hazardous agents including screenings for Lyme Disease, skin cancer, Hepatitis, lead, and hearing. Patients were also screened as part of preplacement and termination examinations.

Figure 2.4. Percent of NYS OHCN Patients, by Geographic Region



# **Sex of Patient Population-Females**

**Figure 2.5. Percent of female NYS OHCN patients, by geographic region.** Females accounted for 26% (n=12,411) of the patient population. Women made up a higher percentage of the patients seen in New York City (32%) as opposed to NYS outside of NYC (25%). Overall, the

Figure 2.5. Percent of Female NYS OHCN Patients, by Geographic Region

percent of patients who were female has remained relatively stable. Ninety-two percent of the females were seen for occupational conditions, while 98% of the males were seen for occupational conditions (data not shown).

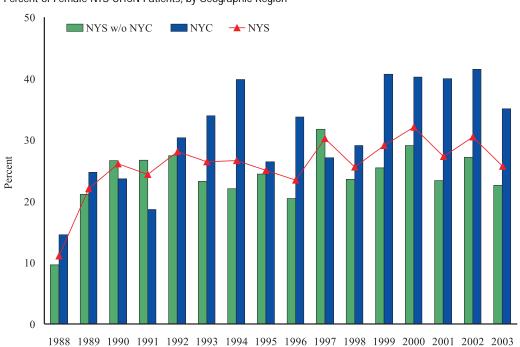
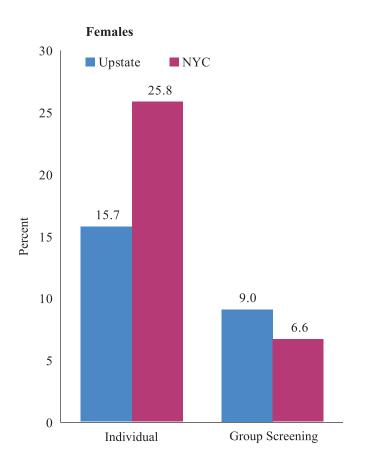
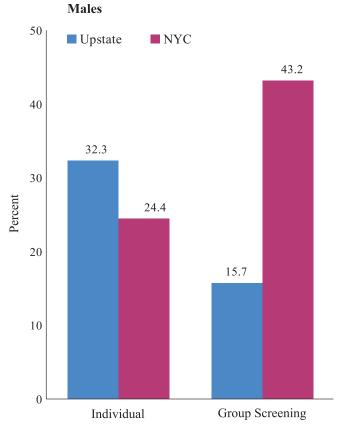


Figure 2.6. Percent of NYS OHCN patients, by sex, geographic region and patient type. Among all of the patients seen in NYS outside of NYC (n=33,136), 5,208 (16%) were symptomatic female patients and 2,993 (9%) were females seen as part of a group screening; 10,688 (32%) were symptomatic male patients, and 14,224 (16%) were

males seen as part of a group screening. A greater percentage of women were seen as symptomatic patients in New York City (26%) as opposed to the rest of New York (7%); while a much higher percent of males in New York City were seen as part of a group screening (43%) compared to the percent seen as symptomatic patients (24%).

**Figure 2.6.** Percent of NYS OHCN Patients, by Sex, Geographic Region and Patient Type





# **Age of Patient Population**

# **Figure 2.7. Percent of NYS OHCN patients, by age.** The mean age of the patients during their first visit to the

The mean age of the patients during their first visit to the NYS OHCN was 43 years (data not shown), with over 70% of the patients between 31 and 60 years of age. Almost 1000 patients were under 20 years of age when first seen, and 4,890 patients were over 60 years of age during their first visit to the Clinic.

Figure 2.7. Percent of NYS OHCN Patients, by Age

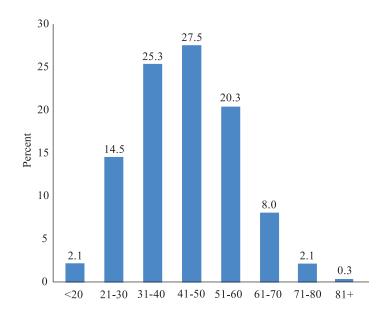
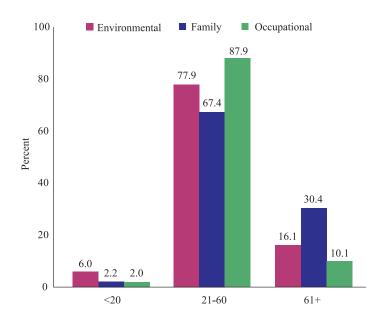


Figure 2.8. Percent of NYS OHCN patients, by type and age. As expected, the majority of occupational patients were between 21 and 60 years of age (88%). A slightly higher percent of environmental patients were younger than 20 years of age (6% vs. 2% each of family and occupational patients), and a substantially higher percent of the family patients were 61 years and older (30% vs. 16% environmental and 10% occupational).

Figure 2.8. Percent of NYS OHCN Patients, by Type and Age

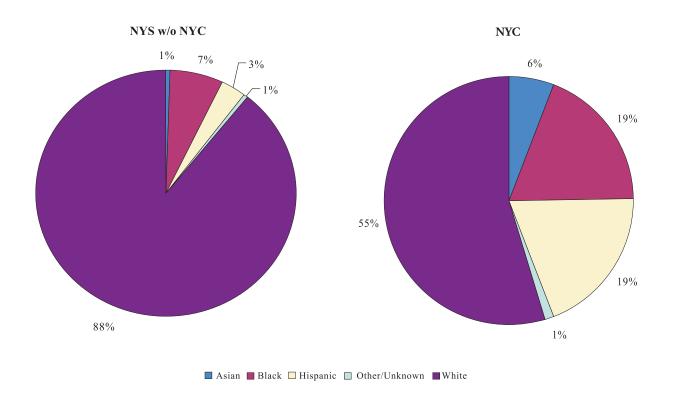


# **Ethnicity of Patient Population**

**Figure 2.9. Percent of NYS OHCN patients, by ethnicity and geographic region.** Of the patients seen Statewide, 37,703 (80%) were White, 4,617 (10%) were African-American, 3,479 (7%) were Hispanic, and 964 (2%) were Asian. Again, these percents varied by whether the

patients were from NYS outside of NYC where 88% of the Clinic patients were White versus NYC where only 55% of the Clinic patients were White. The ethnicity of the patients also varied by whether they were symptomatic or group screening patients - with a higher percentage of non-Whites seen as symptomatic patients (data not shown).

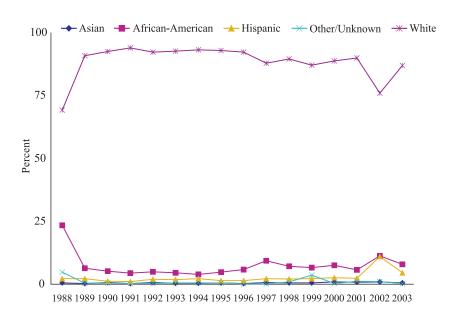
**Figure 2.9.** Percent of NYS OHCN Patients, by Ethnicity and Geographic Region



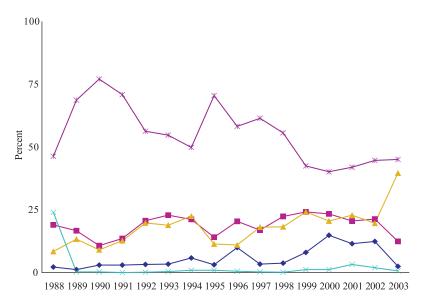
**Figure 2.10. Percent of NYS OHCN patients, by ethnicity, geographic region and year.** Excluding 1988, the initial year of the Clinic Network, there has been a sharp decrease in the percent of White patients from NYC seen by the OHCN. This trend is not observed in the rest of NYS. A very slight increase in the percent of Hispanic patients is observed, while the percent of African-American and other ethnicities appears to remain relatively constant over time.

**Figure 2.10.** Percent of NYS OHCN Patients, by Ethnicity, Geographic Region and Year

### NYS w/o NYC



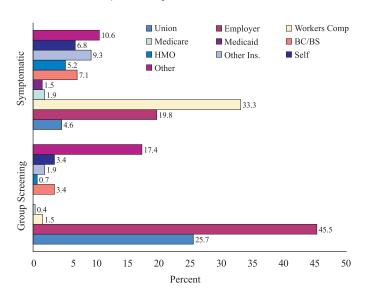
**NYC** 



# Source of Payment for Services

Figure 2.11. Percent of NYS OHCN patients, by source of payment and patient type. Among group screening patients, the employer or union was primarily responsible for payment of clinical services (71% vs. 25% of symptomatic patients). Overall, employers were billed for 33% of the Clinic patients' services. Among those patients seen for symptoms, the Clinics expected Workers' Compensation to cover payment of services for 33% of the patients, while this payment source was expected for only 1.5% of the group screening patients.

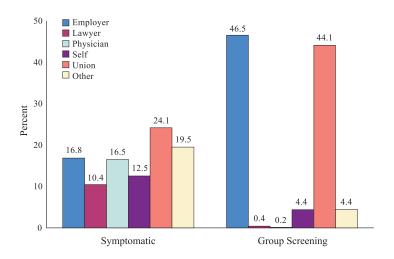
**Figure 2.11.** Percent of NYS OHCN Patients, by Source of Payment and Group Screening



## **Source of Patient Referral**

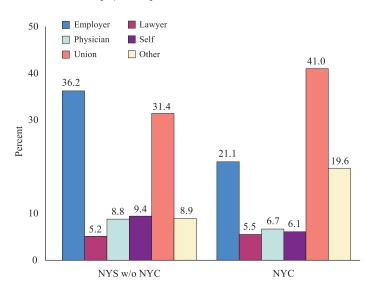
Figure 2.12. Percent of NYS OHCN patients, by referral source and patient type. The clinics are primarily centers of referral, not primary care clinics. The majority of patients regardless of patient type were referred to the Clinics by either their employer or their union (67%), regardless of patient type. Over 90% of the group screening patients and 40% of the symptomatic patients were referred by one of these two sources.

**Figure 2.12.** Percent of NYS OHCN Patients, by Referral Source and Patient Type



**Figure 2.13. Percent of NYS OHCN patients, by referral source and geographic region.** There was a difference by geographic location in that Clinics located in NYC received over 40% of their referrals from unions and 21% from employers; while in NYS, outside of NYC, 31% of referrals were from unions and 36% from employers.

**Figure 2.13.** Percent of NYS OHCN Patients, by Referral Source and Geographic Region



# **Occupations of Clinic Patients**

Figure 2.14. Percent of occupational NYS OHCN patients, by major occupational group and patient type. Examining the job titles among the occupational Clinic patients showed that 13,737 (30%) were employed in precision production occupations; followed by 10,026 (22%) in services, and 9,319 (20%) as operators, fabricators and laborers (data not shown). Among the symptomatic patients, 5,439 (25%) worked in precision production, 4,831 (22%) as operators and laborers, 3,821 (18%) in technical and sales occupations, and 3,647 (17%) as managers and professionals. Among the group screening patients, 8,298 (35%) worked in precision production, 6,668 (28%) in service occupations, and 4,488 (19%) as operators and laborers.

**Figure 2.14.** Percent of Occupational NYS OHCN Patients, by Major Occupational Group and Patient Type

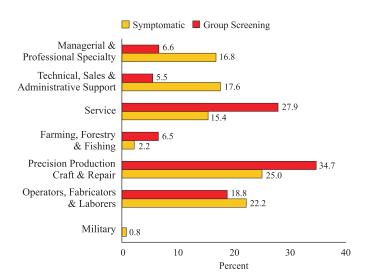
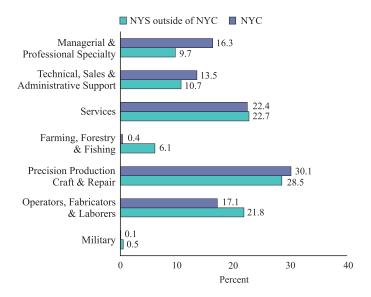


Figure 2.15. Percent of occupational NYS OHCN patients, by major occupational group and geographic region. The largest percent of Clinic patients were employed in precision production, craft and repair occupations in both NYC (30%) and the remainder of NYS (29%), followed by those employed in services occupations (22% in both NYC and NYS outside of NYC). In NYC, 1,857 (16%) were employed as managers and professionals, compared to 3,108 (10%) in the rest of NYS. In contrast, only 1,951 (17%) were employed as operators, fabricators and laborers in NYC versus 7,008 (22%) in the rest of NYS. Similarly, there were more people employed in farming, forestry and fishing outside of NYC (43 in NYC versus 1,979 in the rest of NYS).

**Figure 2.15.** Percent of Occupational NYS OHCN Patients, by Major Occupational Group and Geographic Region



### **Industries of Clinic Patients**

Figure 2.16. Percent of occupational NYS OHCN patients, by major industrial group and patient type. Among those patients seen for occupational exposures, 10,316 (23%) were employed in the services industry; followed by 10,195 (22%) in construction and 9,970 (22%) in public administration at the time of their first visit to the Clinic (data not shown). Variability among the type of industry also occurred when the patient was seen as part of a group screening. Among those seen in the Clinics as part of a group screening, 6,760 (28%) worked in the construction industry and 5,999 (25%) worked in public administration; while among the symptomatic patients, 3,435 (16%) worked in the construction industry and 3,971 (18%) worked in public administration.

Figure 2.16. Percent of Occupational NYS OHCN Patients, by Major Industrial Group and Patient Type

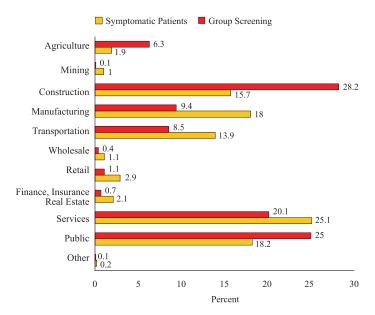


Figure 2.17. Percent of occupational NYS OHCN patients, by major industrial group and geographic region. In NYC, 4,619 (40%) of occupational patients were employed in the services industry, compared to 5,236 (16%) in the rest of NYS. Likewise, 2,862 (25%) were employed in the construction industry in NYC compared to 6,202 (19%) in the rest of NYS.

Figure 2.17. Percent of Occupational NYS OHCN Patients, by Major Industrial Group and Geographic Region

