



Epi Data Brief

New York City Department of Health and Mental Hygiene

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Utilization of Oral Health Services among Adults in New York City

Nationally, 47% of adults ages 30 and older have periodontitis (gum disease) and 26% of adults ages 20 to 64 have untreated caries (cavities) which can lead to tooth loss, pain, infection and trouble eating and speaking.^{1,2} Periodontitis has been associated with certain systemic diseases such as cardiovascular diseases, diabetes, and adverse pregnancy outcomes.³ Many oral diseases can be prevented and managed through self-care and regular visits to dental and other health care providers.³

Regular dental visits are recommended for adults, many of whom do not have dental insurance coverage.⁴ Under the Affordable Care Act, most individuals are required to have health insurance that includes at least the “Essential Health Benefits” (EHB), a specified set of coverage categories. Although pediatric oral health benefits are part of the EHBs, adults are not required to purchase dental coverage. For those with dental insurance, two annual preventive dental visits are typically covered. New York State Medicaid provides coverage for treatment, diagnostic and preventive dental care for children and adults. For those without dental coverage, there are free and low cost dental providers in New York City, however access to quality dental services for the uninsured remains a public health concern.^{5,6,7}

Nationally, hospital emergency department (ED) visits for dental conditions are on the rise.⁸ EDs are an expensive and inefficient source of dental care, especially since EDs often do not have dentists on staff to appropriately treat acute or underlying oral health problems.⁹

Definitions: No preventive dental visit in the past year

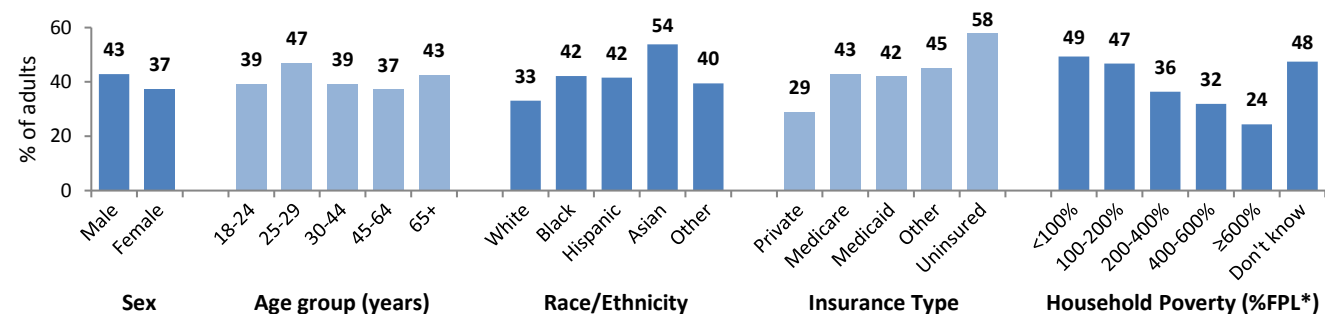
was identified by length of time since the last teeth cleaning by a dentist or hygienist.

Preventable oral health Emergency Department (ED) visits

were defined as visits that could potentially be prevented by seeing a dentist and were identified using the chief complaint text field in the ED Syndromic Surveillance system. The oral health “syndrome” included words related to the oral cavity (e.g. ‘tooth’ or ‘gum’) in combination with a pain term (e.g. ‘ache’) or a specific oral health diagnosis (e.g. ‘gingivitis’) and excluded visits with words related to trauma (e.g. ‘assault’). Common misspellings and abbreviations were included in the coding.

Two in five adult New Yorkers had no preventive dental visit in the past 12 months

Prevalence of adults with no preventive dental visit in the past 12 months, New York City, 2013



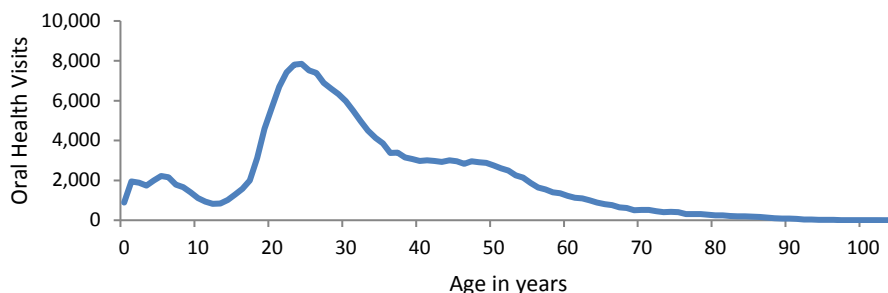
*FPL=Federal Poverty Level, Source: NYC Community Health Survey, 2013

- In 2013, approximately 2.5 million adult New Yorkers (40%) had no preventive dental visit in the past year.
- New Yorkers ages 25 to 29 were more likely than those ages 30 to 44 and 45 to 64 to not have a preventive dental visit in the past year.
- Asians (54%) were more likely than other racial/ethnic groups to not have a preventive dental visit in the past year.
- New Yorkers without health insurance, a proxy for dental insurance, were more likely to not have a preventive dental visit in the past year than those with health insurance (58% vs. 35%).
- The likelihood of not having a preventive dental visit in the past year decreased as household poverty increased.

Adults made over 180,000 preventable oral health visits to emergency departments from 2009 to 2014 in New York City

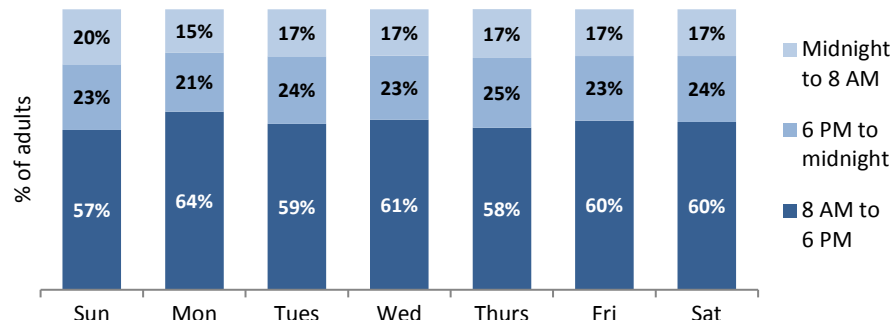
- Among all ED visits made from 2009 to 2014 in NYC, 1% (874 per 100,000) were identified as being preventable oral health visits.
- One in three (33%) preventable oral health visits were made by adults ages 21 to 30.
- Visits were more likely to be made by male (52%) than female (48%) adults.

Emergency department oral health visits by age, New York City, 2009-2014



Source: NYC DOHMH Syndromic Surveillance Unit, 2009-2014

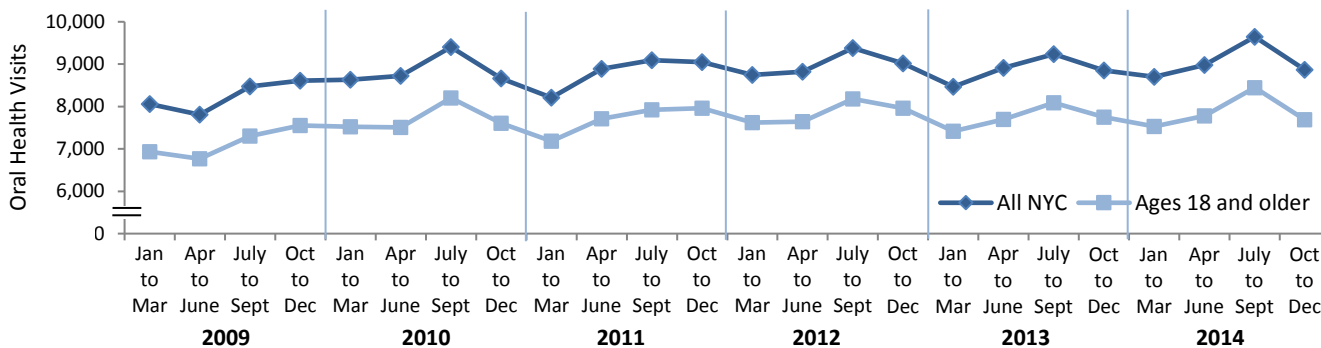
Emergency department oral health visits by day of week and time of day among New York City adults, 2009-2014



Source: NYC DOHMH Syndromic Surveillance Unit, 2009-2014

- Among adults, the majority (60%) of weekday dental ED visits occurred from 8 AM to 6 PM, when dental offices were open.
- In 2010 and since 2012, more preventable oral health visits were seen among adults in the July to September quarters compared with the other quarters within the same year.

Emergency department oral health visits by quarter among New York City adults, 2009-2014



Source: NYC DOHMH Syndromic Surveillance Unit, 2009-2014

Data Sources:

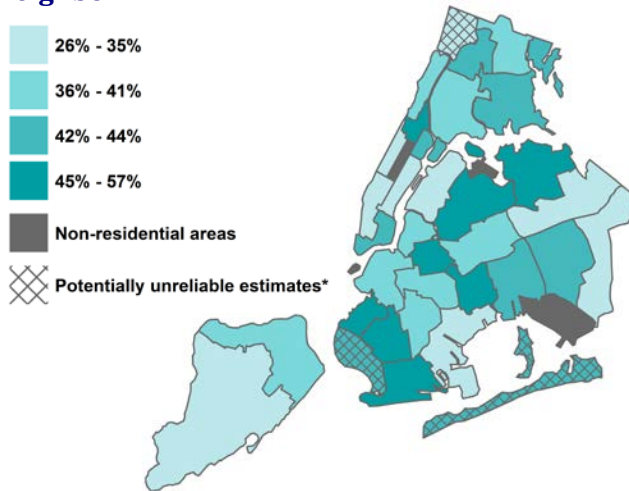
The Community Health Survey (CHS) is conducted annually by the Health Department with approximately 9,000 NYC residents ages 18 and older. Presented findings are from 2013 and are age adjusted to the US 2000 standard population, except for age-specific estimates. Starting in 2009, the CHS included adults with landline as well as cell phones. For more survey details, visit nyc.gov/health/survey.

Syndromic Surveillance 2009-2014: As of December 2014, data from 51 of 53 hospital's Emergency Departments (EDs) in NYC are sent to the Health Department daily, comprising approximately 98% of all ED visits citywide. Syndromes are based on keyword search of the chief complaint text field, and are therefore, inherently non-specific and not based on diagnostic testing. Syndrome counts do not necessarily capture all dental-related ED visits, and are limited to including visits that are identified by key word search of the chief complaint. Rates by UHF are age adjusted to the US 2000 standard population to be comparable to the CHS age adjustment. Note that due to missing chief complaint data, rates in Staten Island are likely underestimated.

There were differences in utilization of dental care by borough and neighborhood

- New Yorkers who lived in the Bronx (42%), Brooklyn (43%) and Queens (41%) were more likely to not have a preventive dental visit in the past year compared with those who lived in Manhattan (35%).
- In 2013, adults in Williamsburg-Bushwick, East New York, Sunset Park, Borough Park, Coney Island, Flushing, West Queens, and Central Harlem were most likely not to have a preventive dental visit in the past year (45-58%).
- Between 2009 and 2014, adults in Bedford Stuyvesant-Crown Heights, Williamsburg-Bushwick, East New York, Jamaica, East and Central Harlem, South Bronx and Fordham-Bronx Park exhibited some of the highest rates of ED utilization for preventable oral health issues (3,678 – 6,611 per 100,000 adults).
 - The South Bronx accounted for 11% of all preventable oral health visits to the ED.

Adults with no preventive dental visit in the past 12 months by New York City neighborhood,^ 2013

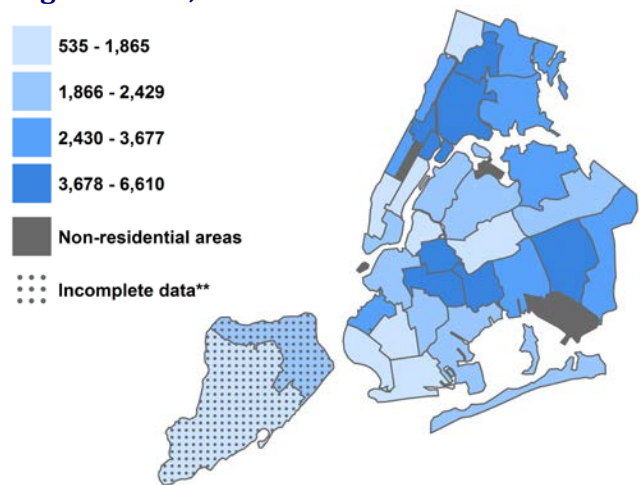


*Estimate should be interpreted with caution due to small sample size

^ The United Hospital Fund classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes, several of which were combined to create the 34 neighborhoods represented above

Source: NYC Community Health Survey 2013 and NYC DOHMH Syndromic Surveillance Unit, 2009-2014

Preventable oral health emergency department visit rates per 100,000 adults by New York City neighborhood,^ 2009-2014



**Rates are underestimated due to high % missing chief complaint data.

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