CareQuest Institute for Oral Health®

Dental Care in Crisis

Tracking the Cost and Prevalence of Emergency Department Visits for Non-Traumatic Dental Conditions

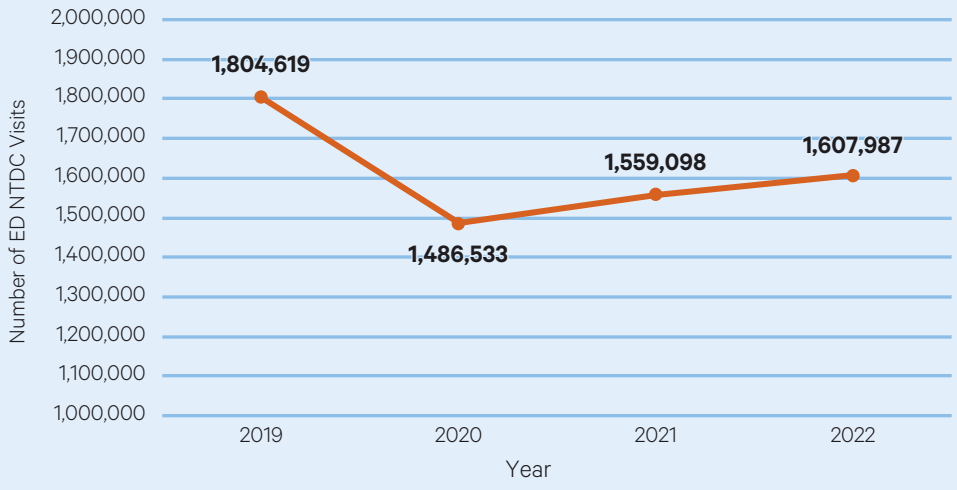
Hospital emergency department (ED) visits for non-traumatic dental conditions (NTDCs) can strain vital resources and increase the workload for ED staff.

Additionally, most hospitals are not equipped to deliver definitive dental treatment that addresses the source of the dental condition (e.g., infection) rather than treating symptoms that may return. Additionally, the cost of ED visits for NTDCs is typically much higher than receiving care for the same condition from a dental professional. These factors highlight the importance of tracking ED usage trends for such visits. Moreover, these trends often serve as indicators of broader shifts in Americans' access to dental care. For example, ED visits for dental care increase when Medicaid adult dental benefits are eliminated.

Key Findings

1 **In 2022, individuals made approximately 1,607,987 ED visits for NTDCs (weighted estimate). This is an increase from 1,486,533 visits in 2020 and 1,559,098 ED visits in 2021 and a decrease from 1,804,619 ED visits in 2019.**

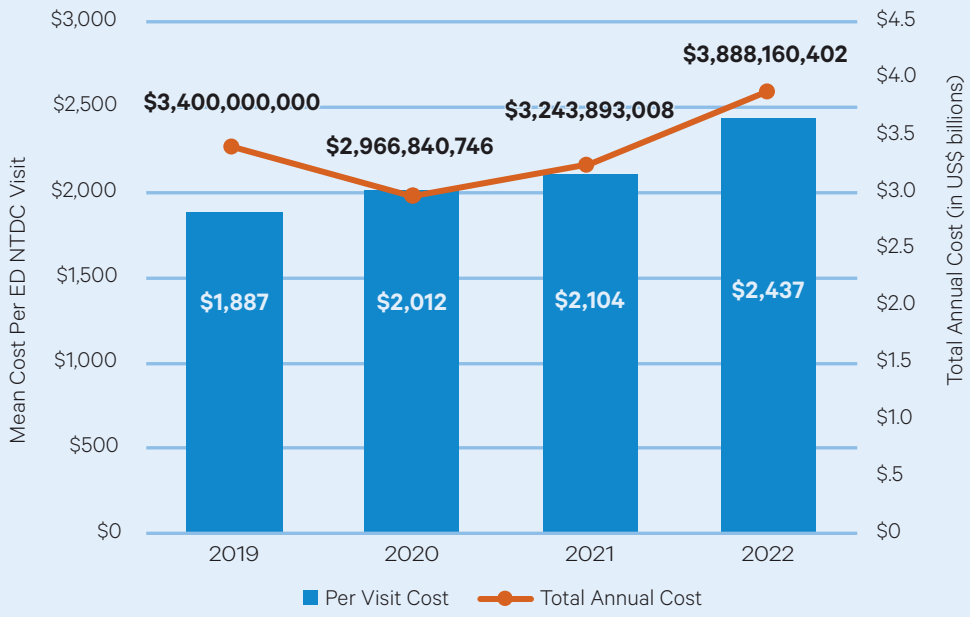
Number of ED Visits for NTDCs, 2019–2022



The decrease in ED NTDC visits in 2020 mirrors an **overall decrease in ED visits** during the first several months of the COVID-19 pandemic.

2 The estimated total costs for ED visits for NTDCs in 2022 was $3.9 billion, up from $3.4 billion in 2019, $3 billion in 2020, and $3.2 billion in 2021. The decrease in costs for ED NTDC visits in 2020 mirrors the decrease in total ED visits for NTDCs shown above.

Mean Per Visit and Total ED NTDC Costs

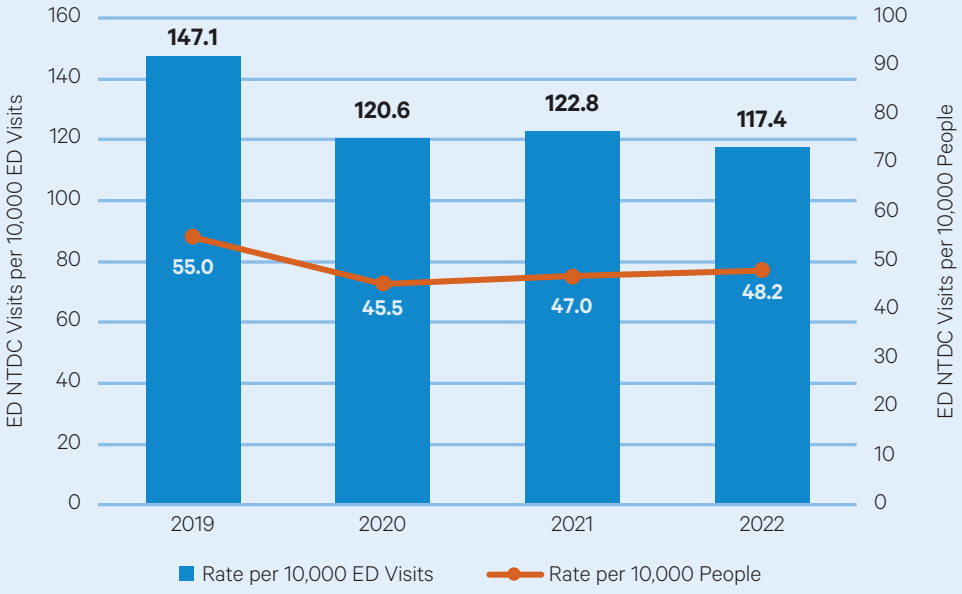


The mean cost of an ED NTDC visit **increased by 29.1%**, from $1,887 in 2019 to $2,437 in 2022.

In 2022, the total annual cost of ED visits for NTDCs **rose to $3.9 billion**, over $500 million more than the 2019 cost of $3.4 billion, despite declines in 2020 and 2021.

3 The rate of ED visits for NTDCs per 10,000 *ED visits* decreased by 20.2% from 2019 (147.1 per 10,000 visits) to 2022 (117.4 per 10,000 visits). The rate of ED visits per 10,000 *people* decreased by 12.4% over the same period, from 55 per 10,000 people in 2019 to 48.2 per 10,000 people in 2022.

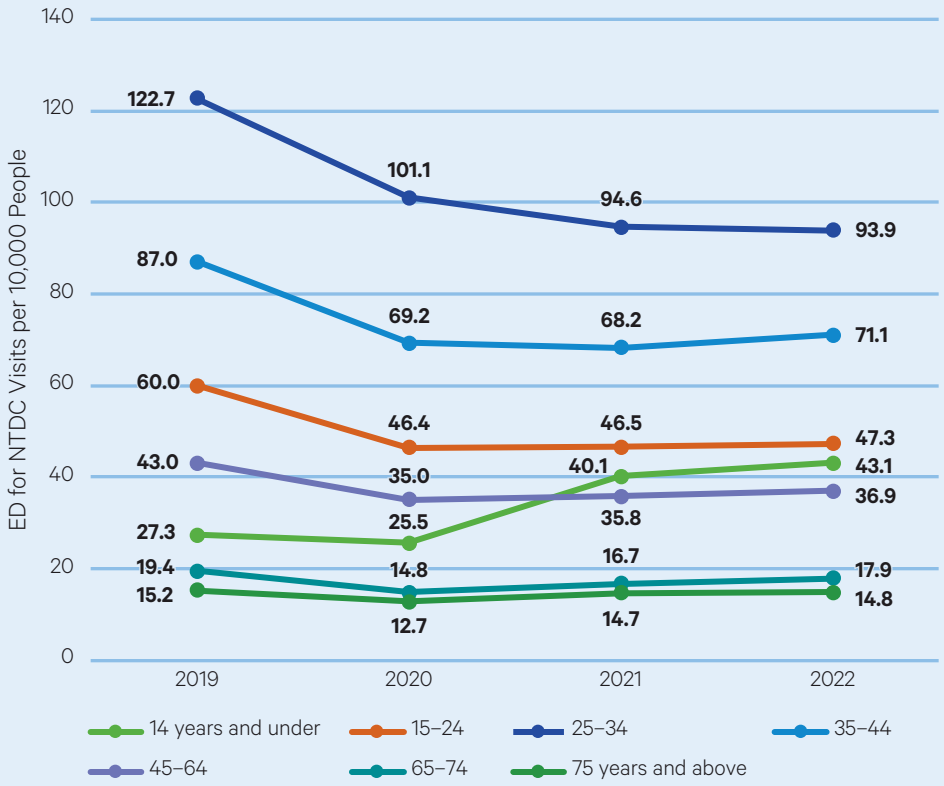
Rate of ED NTDC Visits per 10,000 ED Visits and per 10,000 Persons



Both the rate per 10,000 visits and per 10,000 people dropped from 2019 to 2020 before beginning to rebound in 2021 and **have not returned to 2019 levels as of 2022**.

4 Adults aged 25–34 years had the highest rate of ED visits for NTDCs per 10,000 people of all age groups across all years.

Rate of ED for NTDC Visits per 10,000 People by Age

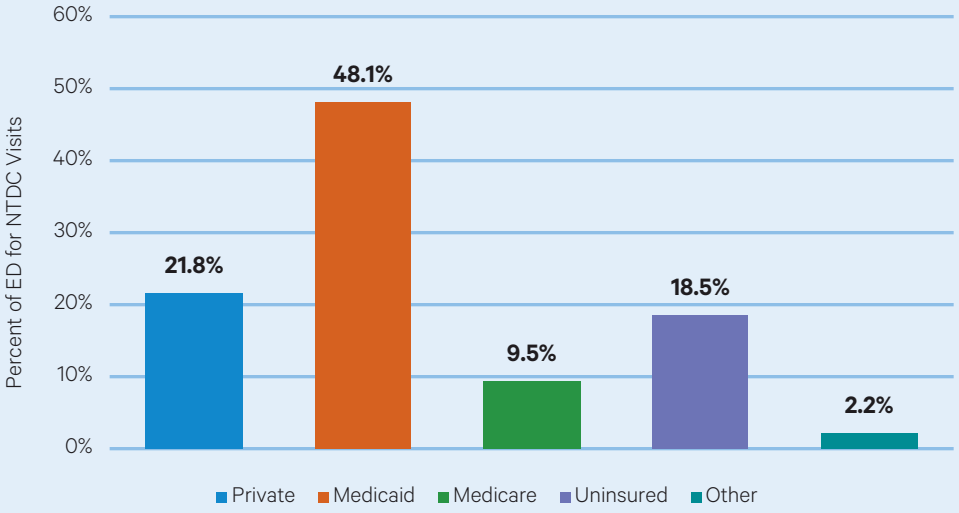


The overall annual rate of NTDC ED visits per 10,000 people has **continued to decrease,** following a pattern from 2014. However, this rate among those aged 14 years and under is increasing.

ED visits for NTDCs among those aged 14 years and under increased significantly from 27.3 per 10,000 people in 2019 to 40.1 in 2021 and 43.1 per 10,000 in 2022, despite a decrease to 25.5 per 10,000 people in 2020.

5 Nearly half of all ED visits for NTDCs (48.1%) were made by Medicaid enrollees in 2022, while 21.8% of ED NTDC visitors had private dental insurance.

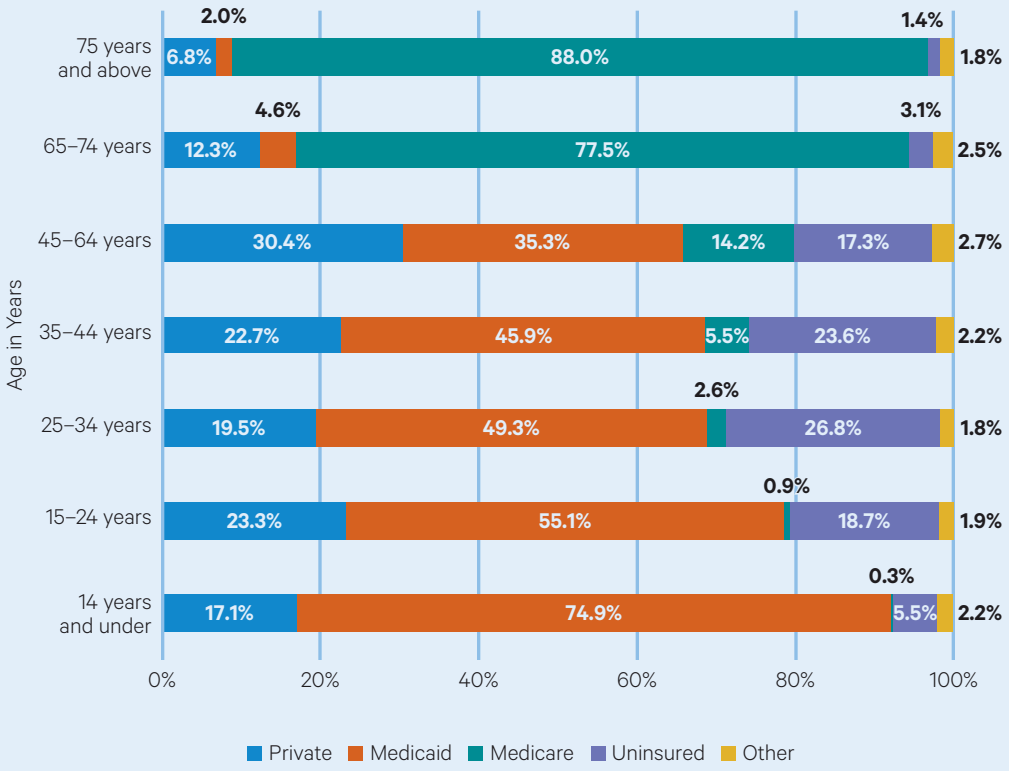
ED for NTDC Visits by Dental Insurance Type in 2022



Two thirds of all ED visits for NTDCs (66.6%) were made by **individuals with Medicaid dental insurance (48.1%)** or who were uninsured (18.5%).

6 In 2022, the percentage of ED NTDC visits made by individuals with Medicaid dental insurance decreased with increasing age.

Percentage of ED NTDC Visits by Age and Dental Insurance Type in 2022



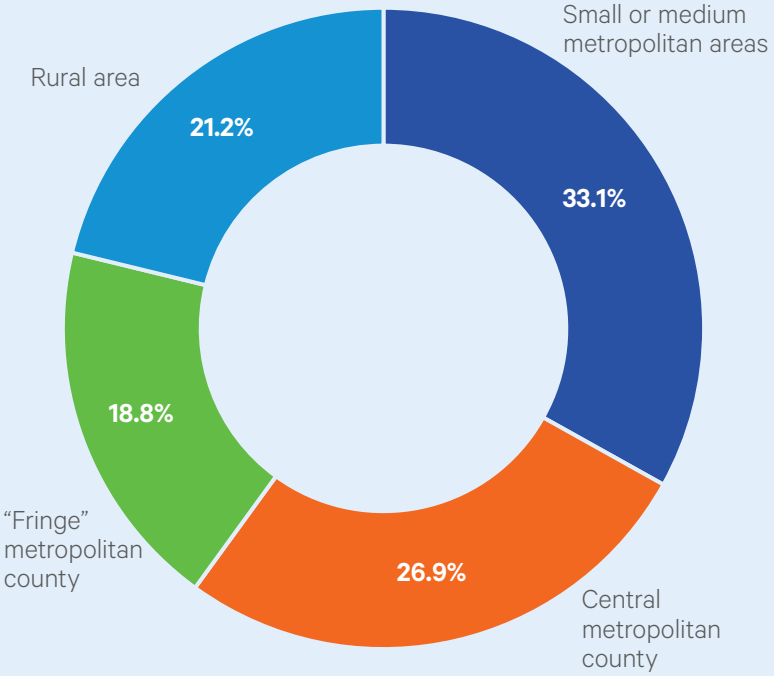
While **74.9% of ED NTDC visitors aged 14 and under had Medicaid dental insurance**, this percentage **decreased to 35.3%** of those aged 45–64 years and 2% of adults aged 75 and above.

Most adults aged 65 and above who visited an ED for NTDCs had **Medicare Advantage** dental insurance.

Adult ED NTDC visitors **most likely to be uninsured** were those **aged 25–34 (26.8%)** and **35–44 years (23.6%)**.

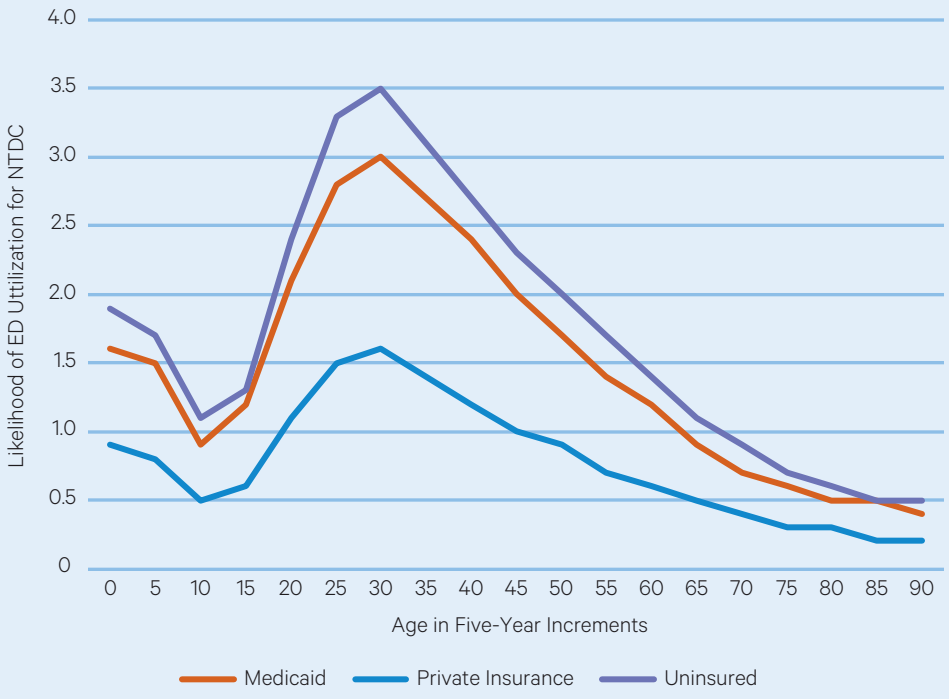
7

Individuals living in **small or medium metropolitan areas** (consisting of 50,000 to 999,999 residents) **visited an ED for an NTDC visit in the largest percentage** (33.1%) compared to those living in a **central metropolitan county** of 1 million residents or more (26.9%), **a "fringe" metropolitan county** (18.8%), or **a rural area** (21.2%).



8 Across all age groups, individuals without dental insurance were most likely to have ED visits for NTDCs, followed by those with Medicaid coverage and then those with private dental insurance.

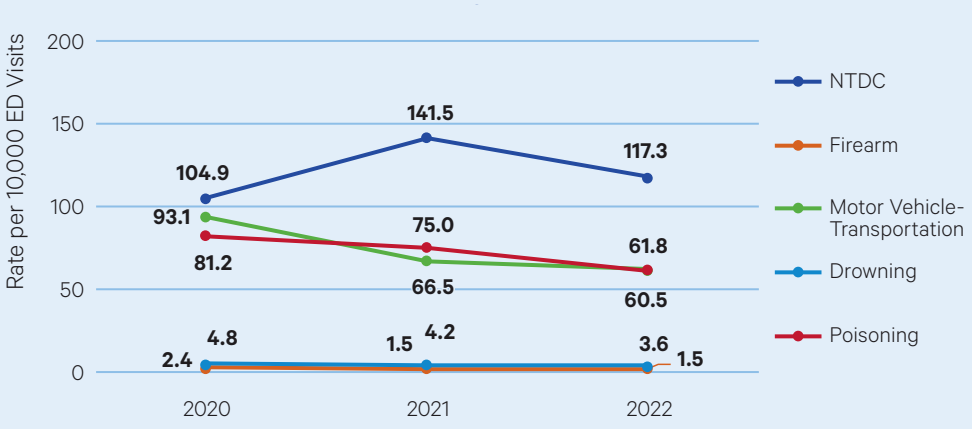
Likelihood of ED Utilization for NTDC by Age and Payer Type in 2022



The likelihood of visiting an ED for an NTDC, particularly for those with Medicaid or no insurance, **decreased for the first 10 years of life before increasing to a peak around the age of 30 years**, then steadily decreased.

9 Overall, among children aged 14 years and under, the rate of ED visits for NTDCs per 10,000 visits was higher than that of ED visits for other types of injuries, including those involving firearms, motor vehicles or other types of transportation, drowning, or poisoning.

Rate of ED Visits for NTDCs and Other Injury Types per 10,000 ED Visits for Children Aged 14 Years and Under



ED visit rates for NTDCs increased sharply from 2020–2021 before decreasing again in 2022.

Meanwhile, rates of **ED visits for other types of injuries** either **remained stable or decreased** from 2020–2022.

Data are for surviving children who were not admitted for inpatient hospitalization.

Methodology

CareQuest Institute for Oral Health used the discharge data from the Nationwide Emergency Department Sample (NEDS), which is the largest all-payer US ED database, containing a 20% stratified sample of ED visits from across the US.[1,2] NEDS data is provided by the Healthcare Cost and Utilization Project (HCUP), a project of the Agency for Healthcare Research and Quality. It includes State Emergency Department Databases (SEDD) that capture the discharge information on ED visits that do not result in an admission to the same hospital. We used the HCUP SEDD database to examine trends of ED utilization for NTDCs. Consistent with past research, we defined NTDCs based on the principal diagnosis using ICD-9-CM or ICD-10-CM codes as recommended by the Association of State and Territorial Dental Directors. Furthermore, we examined factors associated with ED utilization for NTDCs for the year 2022.[3]

References

1. "Overview of the Nationwide Emergency Department Sample (NEDS)," Healthcare Cost and Utilization Project (HCUP), Agency for Healthcare Research and Quality, July 2025, www.hcup-us.ahrq.gov/nedsoverview.jsp.
2. "Introduction to the HCUP Nationwide Emergency Department Sample (NEDS)," Agency for Healthcare Research and Quality, July 2025. https://hcup-us.ahrq.gov/db/nation/neds/NEDSIntroduction2022.pdf.
3. Michael C. Manz, "Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments," Association of State and Territorial Dental Directors, July 2022, https://www.astdd.org/docs/recommended-guidelines-for-surveillance-of-ntdc-in-eds.pdf.

Suggested Citation:
CareQuest Institute for Oral Health. *Dental Care in Crisis: Tracking the Cost and Prevalence of Emergency Department Visits for Non-Traumatic Dental Conditions*. Boston, MA: October 2025.