A number of national studies have described an increase in dental-related emergency department (ED) visits in recent years. This trend has also been observed in Missouri; between 1994 and 2014, there was a 350% increase in ED visit rates. The primary diagnosis for these visits includes “disorders of the tooth and jaw” which are complaints that could be treated in a dental office rather than an ED and specifically exclude injuries. In 2014 alone, 56,073 ED visits for dental complaints occurred among Missouri residents. According to national estimates, an ED visit for a dental complaint costs more than $300; based on this estimate, Missouri dental ED visits exceeded $16.8 million in 2014. Furthermore, hospitals generally only provide antibiotics and pain medications for temporary relief of symptoms, and many will require an additional visit to a dentist to complete their treatment.

In order to understand more about patients who use the ED for dental complaints, it is important to examine the trends by different demographic factors. ED visit rates are generally higher among females than males and among African Americans than whites. There are also differences by age group. ED rates are lowest among children (younger than 18 years old) and those 55 years of age and older. ED visit rates for dental complaints are highest among adults 18 to 44 years of age.

For all age groups combined, there has been a 350% increase in dental ED visit rates between 1994 and 2014. Not only are rates the highest among 18 to 44 year-olds, but the rates of increase over the years is highest among these groups. There was a 475% increase among 25 to 34 year-olds and 450% increase among 35 to 44 year-olds between 1994 and 2014. Since 2009, 25 to 34 year-olds have had the highest ED visit rate among all age groups.

The three most commonly reported payment sources are Medicaid, Self-Pay, and Commercial Insurance for ED visits due to dental complaints. ED visit rates for Medicaid and Self-Pay groups have increased dramatically over the years; Commercial Insurance rates have remained
relatively stable during this period of time. Between 2000 and 2006, Medicaid was the leading expected payment source until 2006 when Self-Pay became the leading payment source.

![Trends in Emergency Department Utilization Rates by 3 Common Payment Sources, Missouri 1994-2014](image)

Data Source: Emergency Department MICA; Rates per 1,000 Population

All ED visits for dental complaints are considered preventable, since a hospital setting is not the appropriate place to treat non-traumatic disorders of the teeth and jaws. The highest ED visit rates are associated with adults 18 to 44 years old and individuals who report Medicaid or Self-Pay as their expected payment source. This suggests that access to appropriate dental services is driving some of the trends in ED utilization.

The number of ED visits due to dental complaints is excessive, because the visits are preventable and do not address the underlying problem effectively. However, the number of dental ED visits reported in 2014 (56,073) was down from the peak of 58,714 in 2011. Some communities have initiated programs using waivers and education to assist patients who visit the ED to complete needed treatment in a dental setting. Education about the importance of dental visits and overuse of EDs for dental complaints has been coordinated by the Office of Dental Health, local health departments, and oral health organizations. It is possible that all of these projects have had some effect.

It is hoped that this trend will continue due to a combination of educational programs and interventions addressing ED visits for dental complaints. In May of 2016, dental benefits were restored for adults on Medicaid in Missouri, after being discontinued in 2005. It is predicted that this will help to prevent some ED visits for dental problems; however, Missouri is somewhat limited in the number of dental clinics that accept Medicaid as a payment source, particularly for adults.

References

2. Missouri Department of Health and Senior Services, Missouri Information for Community Assessment, MICA.

This report was prepared by the Missouri Department of Health and Senior Services, Office of Dental Health. Please visit [www.health.mo.gov/oralhealth](http://www.health.mo.gov/oralhealth) for more information.