
MISSOURI ORAL HEALTH & COMMUNITY HEALTH

STATUS, CHALLENGES & WORK IN PROGRESS

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DEPARTMENT OF HEALTH AND SENIOR SERVICES
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OUTLINE

- Overview of the oral health of Missouri citizens, highlight specific areas of need
- Surveillance data on oral health in Missouri
- The effect of Medicaid Adult Dental Benefits
- The State Oral Health Plan 2020-25
- The results of the Basic Screening Survey for Children
- Access to care issues and disparity

EARLY CHILDHOOD TOOTH DECAY (CARIES)



TOOTH DECAY - WHY IS IT IMPORTANT?

- Poor oral health is linked to diabetes, heart disease and stroke.
- Children or adults with poor dentition can't eat a healthy diet due to their problems chewing.
- Abscessed teeth can be the problem that can lead to death.
- Poor oral health limits your ability to successfully get a job; dental pain makes it hard to work.

DENTAL CARIES - MOST COMMON CHRONIC DISEASE AMONG CHILDREN

Consequences of poor oral health:

- Declined overall health - ability to learn, eat and speak.
- Nationally, children miss **51 million school-hours** annually due to dental-related issues.
- Poor self-esteem.



OFFICE OF DENTAL HEALTH (ODH)

- Small office with 5 full-time employees and 7 part-time contractors
- Programs and Contracts under ODH scope
 - Preventive Services Program
 - Elks Mobile Dental Program
 - Donated Dental Services Program
 - Community Water Fluoridation training (PHHS)
 - University of Missouri online training
 - Missouri Coalition for Oral Health
 - HRSA (competitive 4-year grant)
 - Tele-dentistry
 - WIC Varnish
 - CDC (competitive 5-year contract)
 - Sealant Program
 - Community Water Fluoridation

Missouri Oral Health Plan 2020-2025



A Five-Year Plan for the Missouri Department of Health and Senior Services.

Created in Partnership with the Oral Health State Plan Workgroup and Missouri Coalition for Oral Health.

THE SOHP WORKGROUP

- 33 members
- 8 goals with multiple action plans under each



ORAL HEALTH SURVEILLANCE DATA

BASIC DENTAL SCREENING SURVEY ON ORAL HEALTH CONDITIONS

- A randomized, standardized survey of the oral health of third grade students in Missouri (2019)
- Third graders have a mixture of permanent and deciduous (baby) teeth
- They are old enough to cooperate to be seen by most dentists
- They are old enough to perform their oral care independently

BSS CHILDREN RESULTS

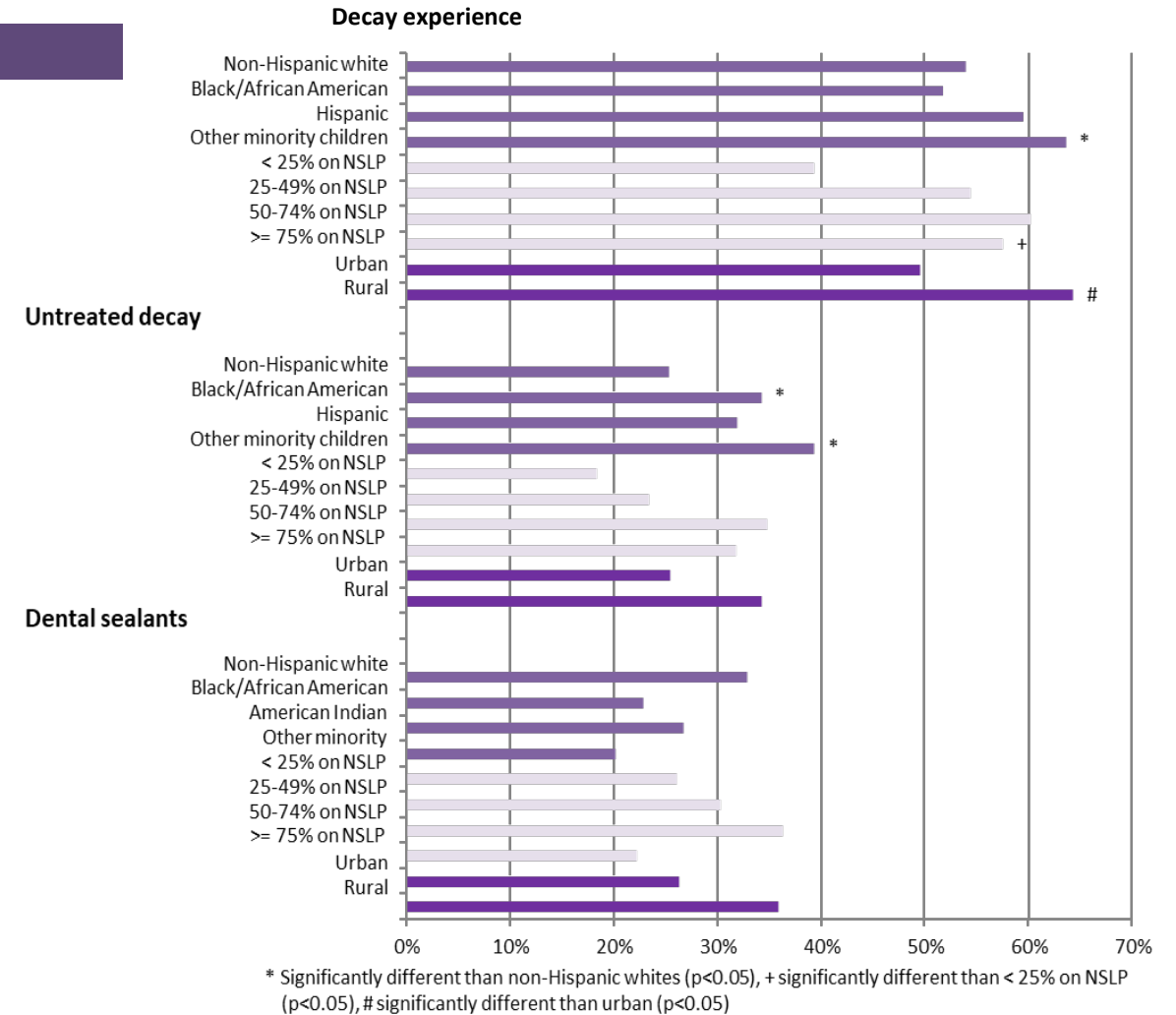
- 2,354 children screened in 53 representative schools
- 55% of children have had dental decay in Missouri (US average, 62%)
- 29% of children have untreated tooth decay in Missouri (US average, 22%)
- 30% of children have dental sealants in Missouri (US average, 42%)

WHAT DO WE KNOW ABOUT ORAL HEALTH IN RURAL MISSOURI?

- 1. Overall dental decay rates of school children are higher among children from rural counties 63-49%
- 2. Need for urgent dental care is slightly higher in children from rural counties 3.4 -2.4%
- 3. Rates of untreated decay are higher, 34-25%
- 4. In rural counties, 2% fewer children have rampant decay
- 5. Dental sealant rates are higher in rural areas 36-27%
- 6. Oral hygiene is better among rural children, 19-24% poor OH
- 7. 29 counties in Missouri don't have any fluoridated water systems. All of them are rural.
 - Children from non-fluoridated areas have a 4% higher cavity rate.
- 8. Nine rural counties don't have a dentist licensed registered in the county.
- 9. 54% of Missouri Medicaid participants reside in rural counties.

Oral health disparities

Figure 3. Prevalence of decay experience, untreated tooth decay and dental sealants among Missouri's third grade children by race/ethnicity, percent of children in a school eligible for the national school lunch program (NSLP) and urbanicity, 2018-2019

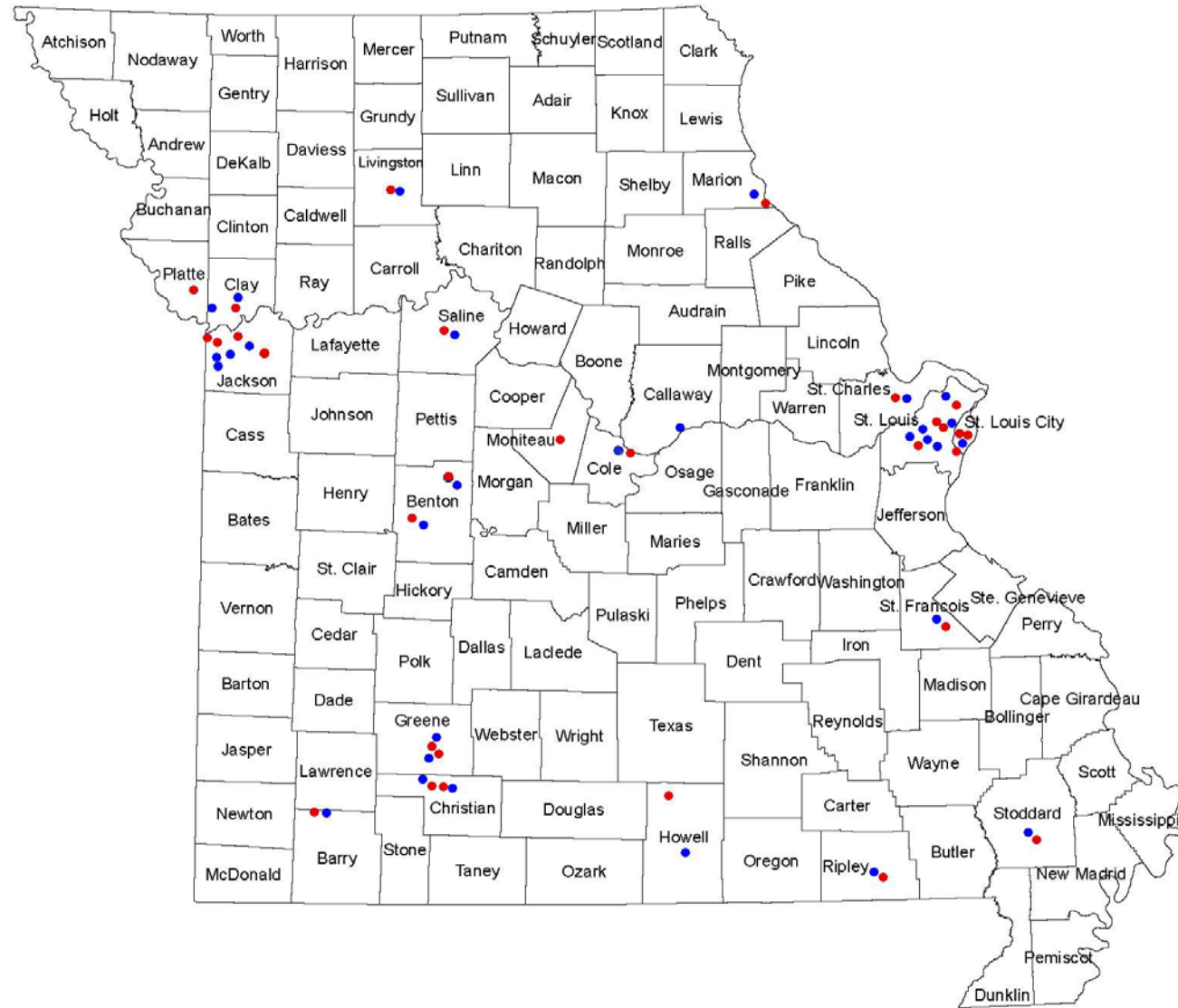


¹To be eligible for the NSLP, the child must be from a household whose income is below 185% of the federal poverty level.

BASIC SCREENING SURVEY FOR OLDER ADULTS IS COMING IN 2020

- Last completed in 2009
- Working through the process of organizing this screening
- Plan to screen at least 400 people over the age of 60
- ASTDD has identified 30 randomly selected nursing homes and 30 randomly selected congregant meal centers in the state

NURSING FACILITIES AND SENIOR CENTER LOCATIONS IN MISSOURI





ACCESS TO CARE



 Census
 HPSA Geographic
 High Need Geographic
 HPSA Population
 Not Designated

MISSOURI RANKS 40TH IN DENTIST TO POPULATION RATIO = IMPROVEMENT

Year	Number per 100,000	Ranking	Massachusetts
2018	45.8	41	Rank #1
2019	49.4	40	82/100,000

MISSOURI LICENSURE STATISTICS: WE ARE GETTING BETTER

Fiscal Year	Dentists	Specialists	Hygienists
2002	3,029	592	2,419
2019	3,529	760	4,382
Percent Increase	16.5%	27%	81%

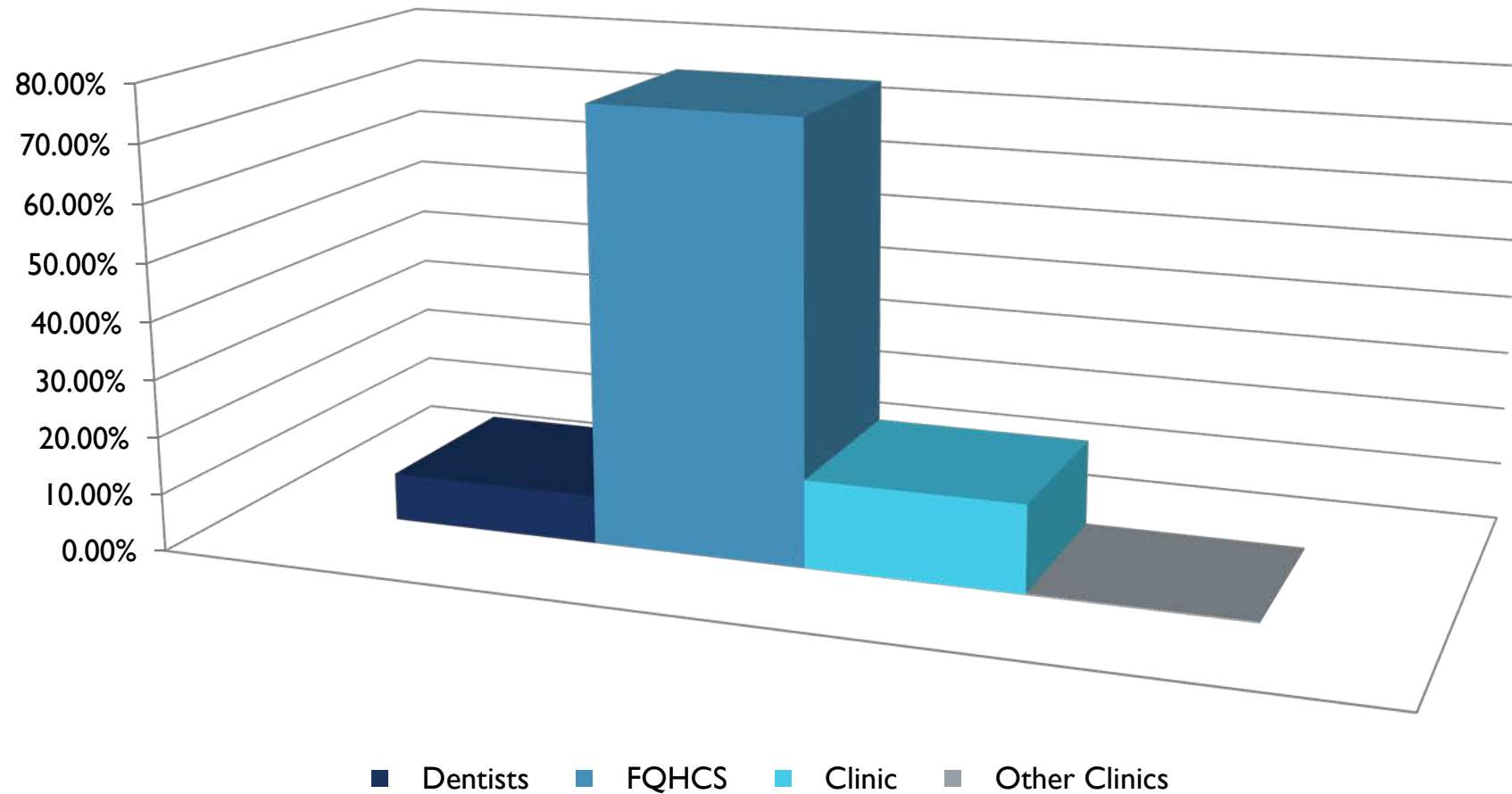
WHERE NEW DENTISTS COME FROM

New Dentist Applications	By Examination	By Credentials	Total
2013	158	39	197
2017	176	76	252
2019	169	55	224

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MISSOURI MEDICAID DENTAL

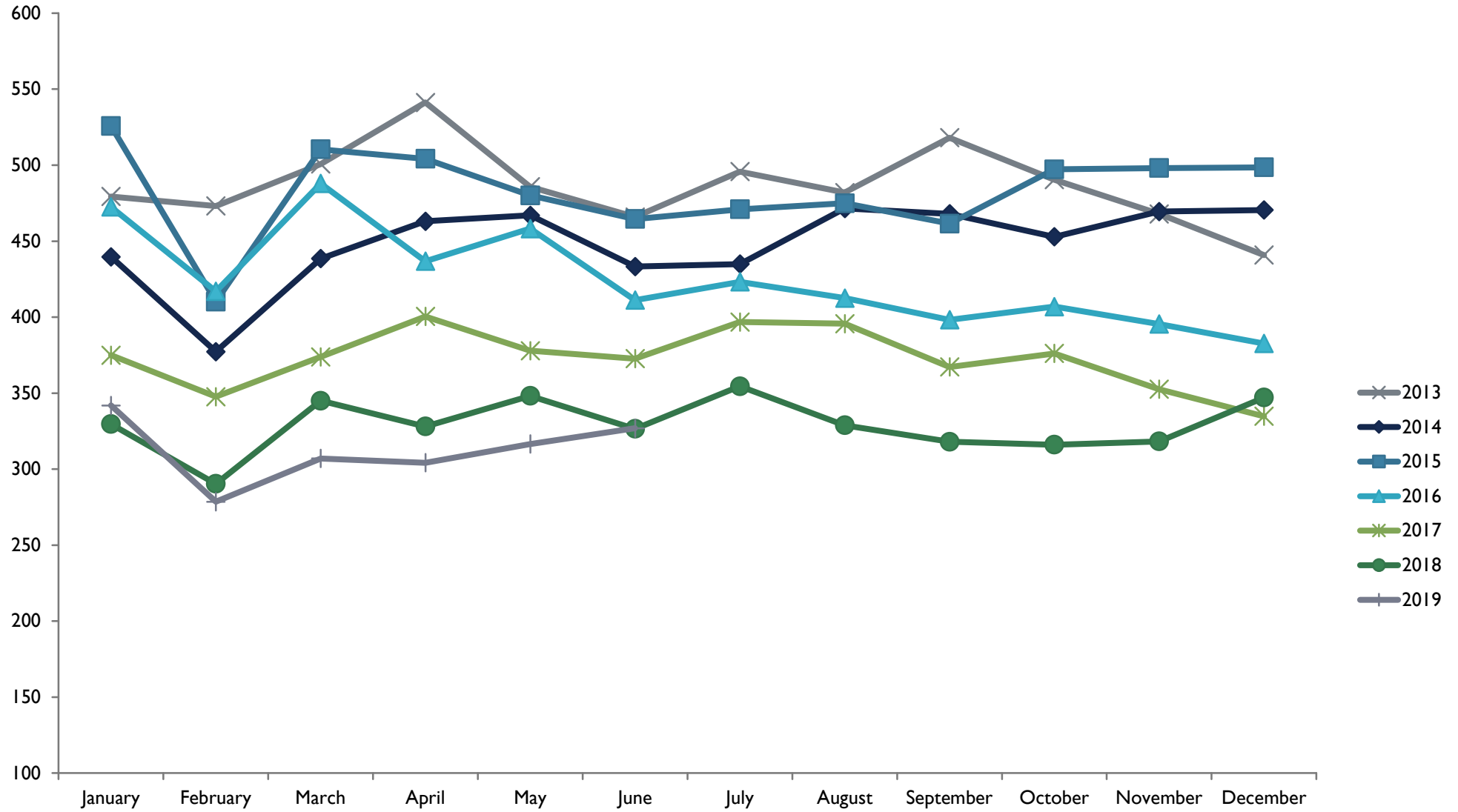
MISSOURI MEDICAID DENTAL PROVIDER DISTRIBUTION BY PRACTICE LOCATION - 2018





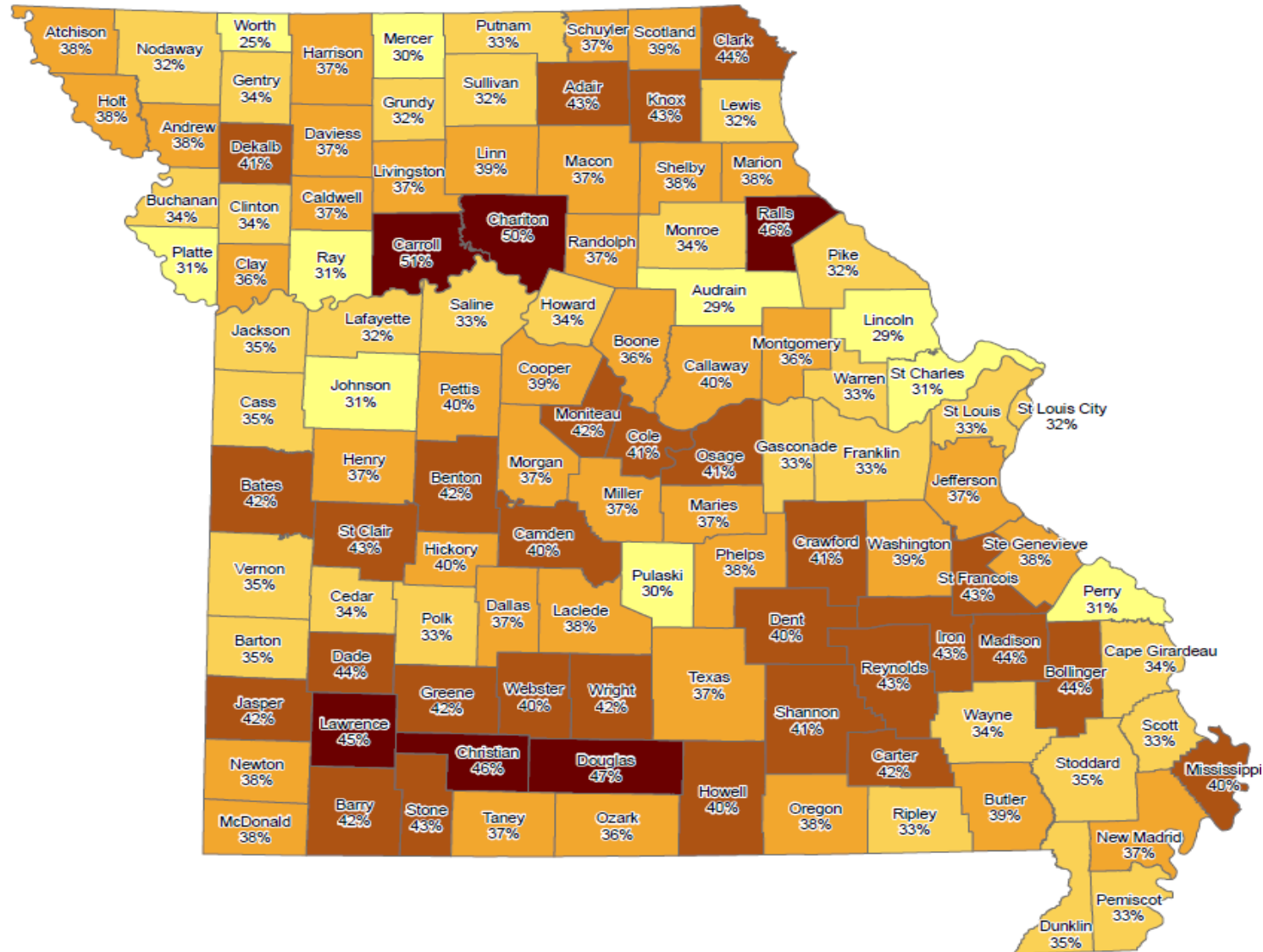
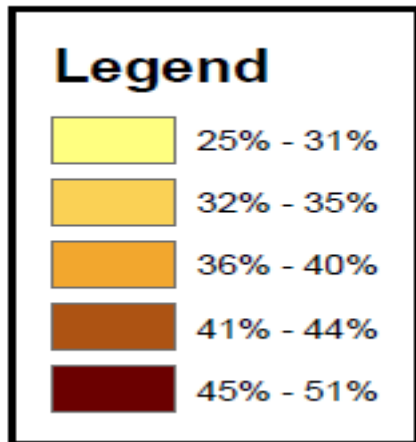
ADULT DENTAL BENEFITS STARTED ON JANUARY 4, 2016

Dental ED Visits Per 100,000 Participants



CMS-416, FISCAL YEAR 2018	TOTAL
TOTAL ELIGIBLE 760,005	
Total Eligibles receiving any dental services	250,664 32.9%
Total Eligibles receiving preventive dental services	222,300 29.2%
Total Eligibles receiving dental treatment services	104,784 13.7%
Total Eligibles receiving a sealant on a permanent molar tooth	36,920 4.9%
Total Eligibles receiving dental diagnostic services	236,213 31.1%
Total Eligibles receiving oral health services provided by a non-dental provider	4,541 0.5%
Total Eligibles receiving any dental or oral health service	251,765 33.1%

MO HEALTHNET PATIENTS WITH AT LEAST ONE DENTAL VISIT, FISCAL YEAR 2016 - CHILDREN



2019: Count of Dentists Serving MO HealthNet Counties

AHR RANKS MO AS 4TH IN MATERNAL ORAL HEALTH

Missouri Medicaid participants don't use service

- MO HealthNet provides comprehensive dental care for pregnant women and 6 weeks post-partum!
- Unique women MO HealthNet Participants - becoming pregnant during (07/01/2016 – 06/30/2017): **56,830**
- Number of those pregnant women having at least one dental procedure from 07/01/2016 to 06/30/2018: **9,242**
- Percent of pregnant women having at least one dental procedure: **16.3%**

MHD QUALITY EFFORT TO IMPROVE UTILIZATION BY PREGNANT WOMEN

- Raising awareness of providers – poster to providers that treat pregnant women about oral care for pregnant women
 - “Secret shopper” survey of dentists about access to care for pregnant women
 - Plan to survey MDA members about treating pregnant women in practice
 - Article in Missouri Dental Journal “Focus” on dental care for Pregnant Women
- Raising awareness of pregnant women
 - Pilot program to send mailings to pregnant women in Cole County advising them of their eligibility for dental services while pregnant
 - Adding dental visit to the “checklist” information that is given to pregnant women

MO HEALTHNET PROVIDES COMPREHENSIVE DENTAL CARE FOR NURSING HOME RESIDENTS

- (CY) 2016, 101,000 individuals 65 years of age and older (seniors) were enrolled in MHD.
- During CY2016, only 5,735* (or 6%) of MHD seniors received dental services
- The BSS for older adults will help us understand this problem better.

TELE-DENTISTRY



TELE-DENTISTRY IN MISSOURI

- Teledentistry is a reality in Missouri – 6 projects started or in process
- Teledentistry allows a dentist to supervise a dental hygienist in a remote location, using synchronous and asynchronous methods
- Allows the hygienist to work to the limit of his/her license
- The Missouri Dental Practice Act was modified in 2017 to allow teledentistry
- Potential to expand access to care by allowing hygienists to work in nursing homes and schools

OHD ACTIVITIES IN TELEDENTISTRY

- HRSA Workforce Grant – 4 year
- 6 contracts to provide dental services via teledentistry
- Teledentistry Workshop – November 2019, May 2020 planned
- Teledentistry Webinars – 3 in 2019

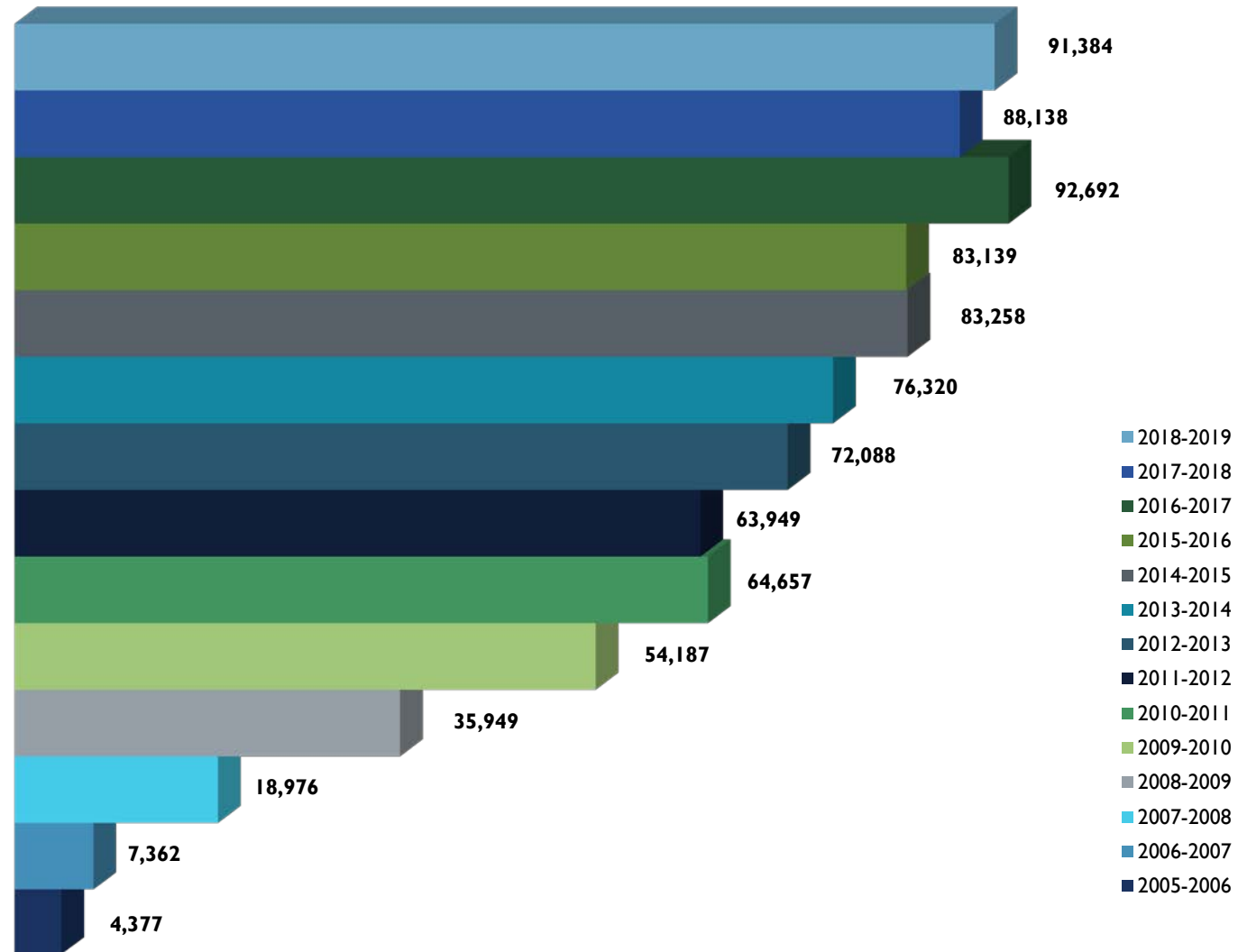
Preventative Service Program (PSP)



PREVENTIVE SERVICES PROGRAM

- Started in 2009 with Missouri Smiles Program
- Provides dental screenings to students age 4-18
- Education and dental home care supplies
- Fluoride varnish provided at time of screening and 6 months later

Total PSP Participants by School Year



A 1.75% DECREASE IN DECAY RATE AMONG PSP CHILDREN SCREENED

School Year	Decay Experience	Total Screened	Percent Decay Experience
2013-2014	6710	9978	67.25%
2014-2015	7292	11170	65.28%
2015-2016	7129	11328	62.93%
2016-2017	8374	13192	63.48%
2017-2018	7902	12122	65.20%
2018-2019	8638	13193	65.50%

IMPACT OF PSP PROGRAM – FLUORIDE VARNISH APPLICATION (BASED ON 2017 DATA)

- Total estimated value of fluoride varnishes in 2018 delivered at Medicaid Rate \$1,001,243 (not submitted for reimbursement)
- Estimated reduction of dental decay of Medicaid patients 7%
- Identification of schools and areas that are having problems accessing dental care by the untreated decay rate.

SCHOOLS WITH THE MOST CHILDREN WITH UNTREATED DECAY

School	City	# of Untreated Decay
Gladstone Elementary	Kansas City, MO	179
South Elementary	Kennett, MO	165
Alton R-IV Elementary	Alton, MO	130
Gracemore Elementary	Kansas City, MO	126
Truman Elementary	Nevada, MO	125
Van-Far R-I Elementary	Vandalia, MO	119
Southern Boone County R I	Ashland, MO	118

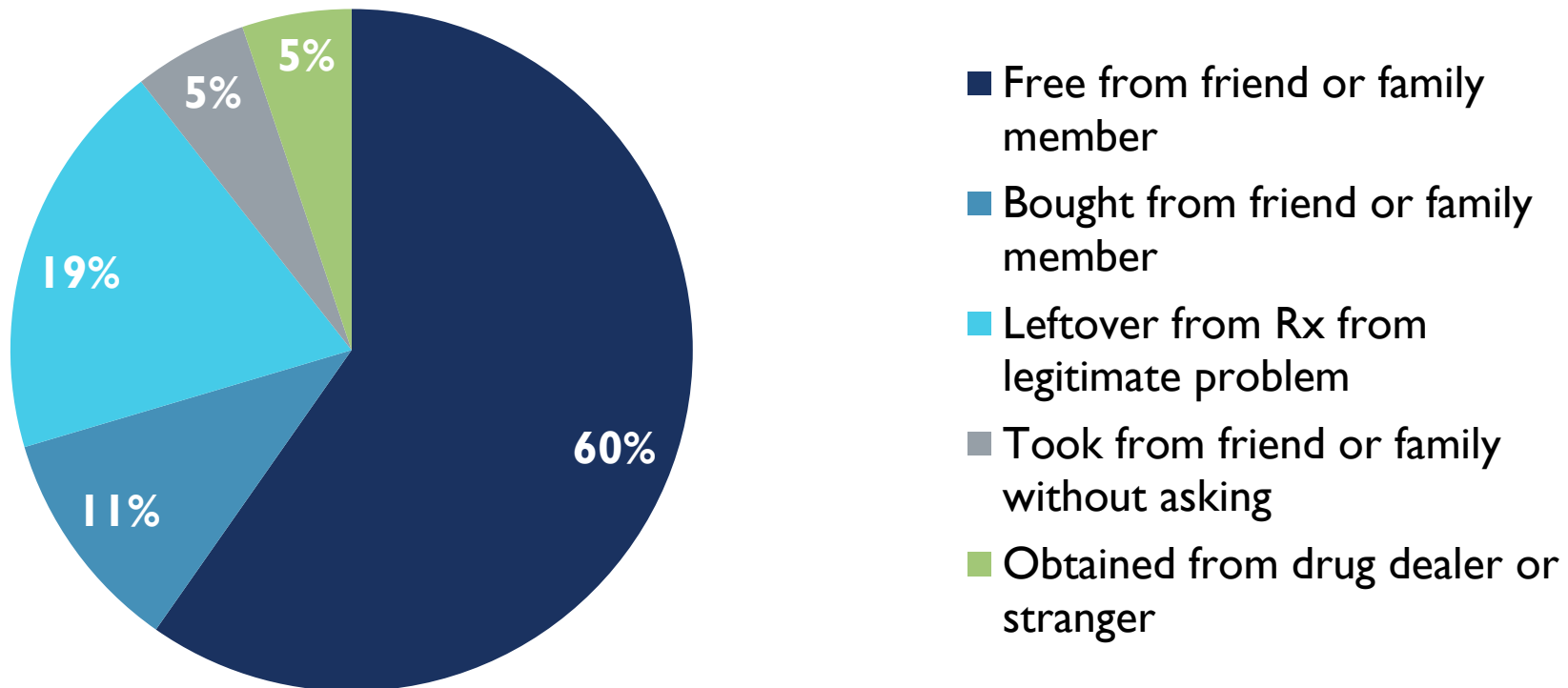


OPIOIDS IN DENTAL PRACTICE

BIGGEST PROBLEM FOR DENTISTS - MISUSED OPIOID PRESCRIPTIONS

- NSDUH survey definition of misuse - use with out a personal prescription or simply for the experience of feeling the drugs caused.

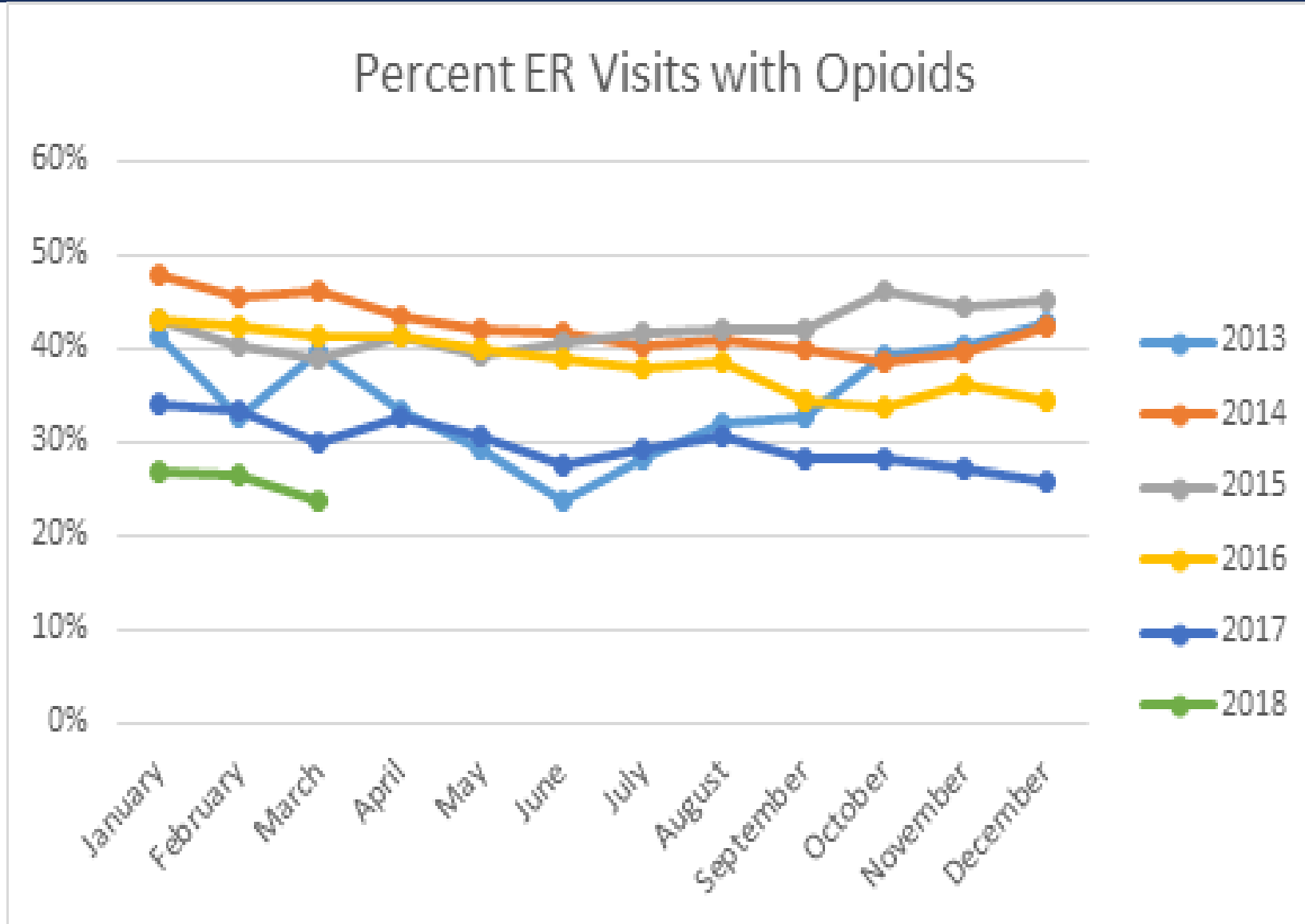
Most Common Sources



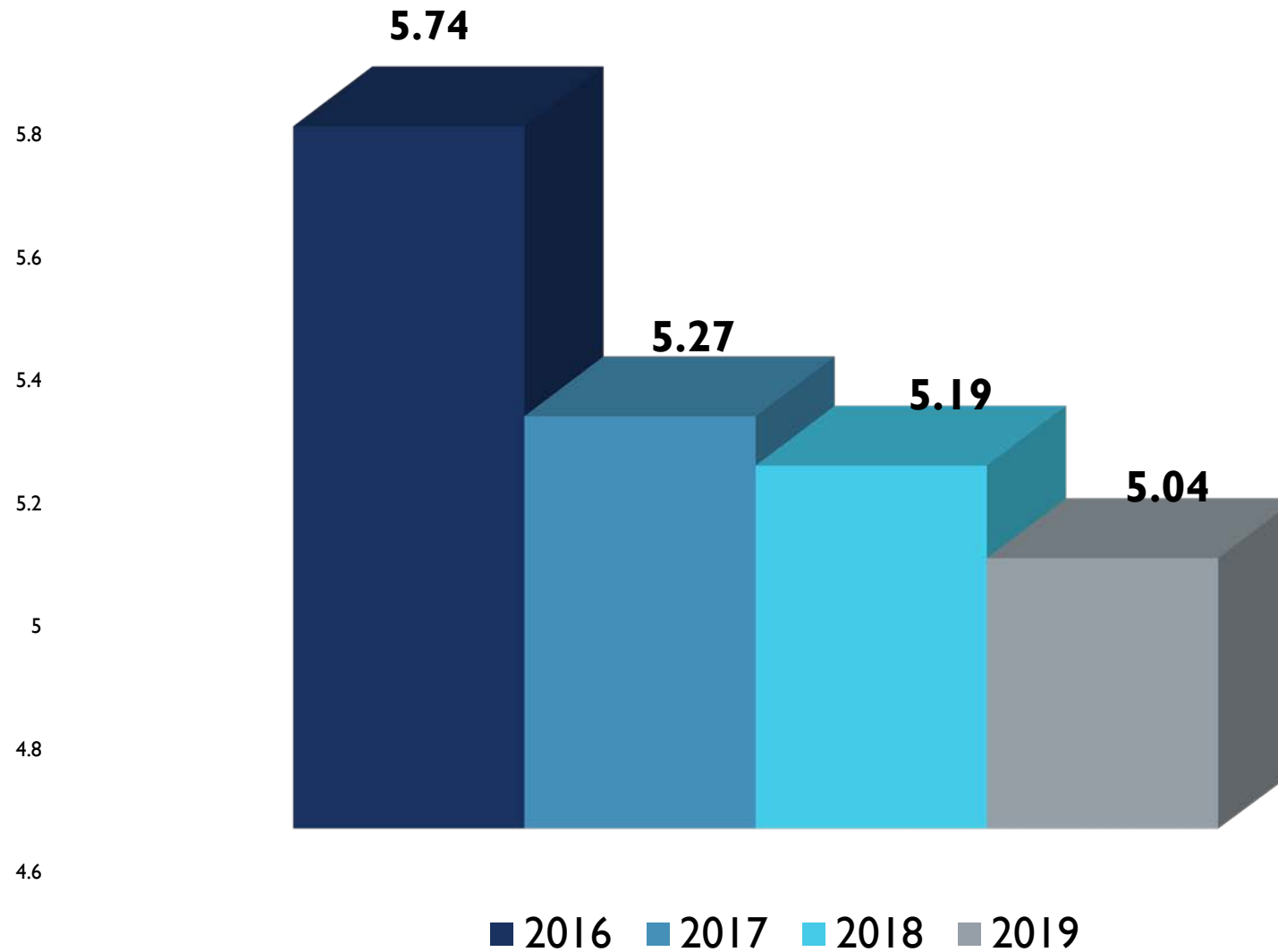
EFFORTS TO CHANGE OPIOID PRACTICES RELATED TO DENTAL PRACTICE

- Reduction of ED visits for non-traumatic dental complaints results in fewer pose visit opioid prescriptions
- Changes in Dental Practice Act to limit prescribing of opioids by dentists along with educational campaign has resulted in fewer opioid prescriptions
- Raising the awareness of diversion problems when prescribing opioids
- DEA/BNDD diversion education sessions

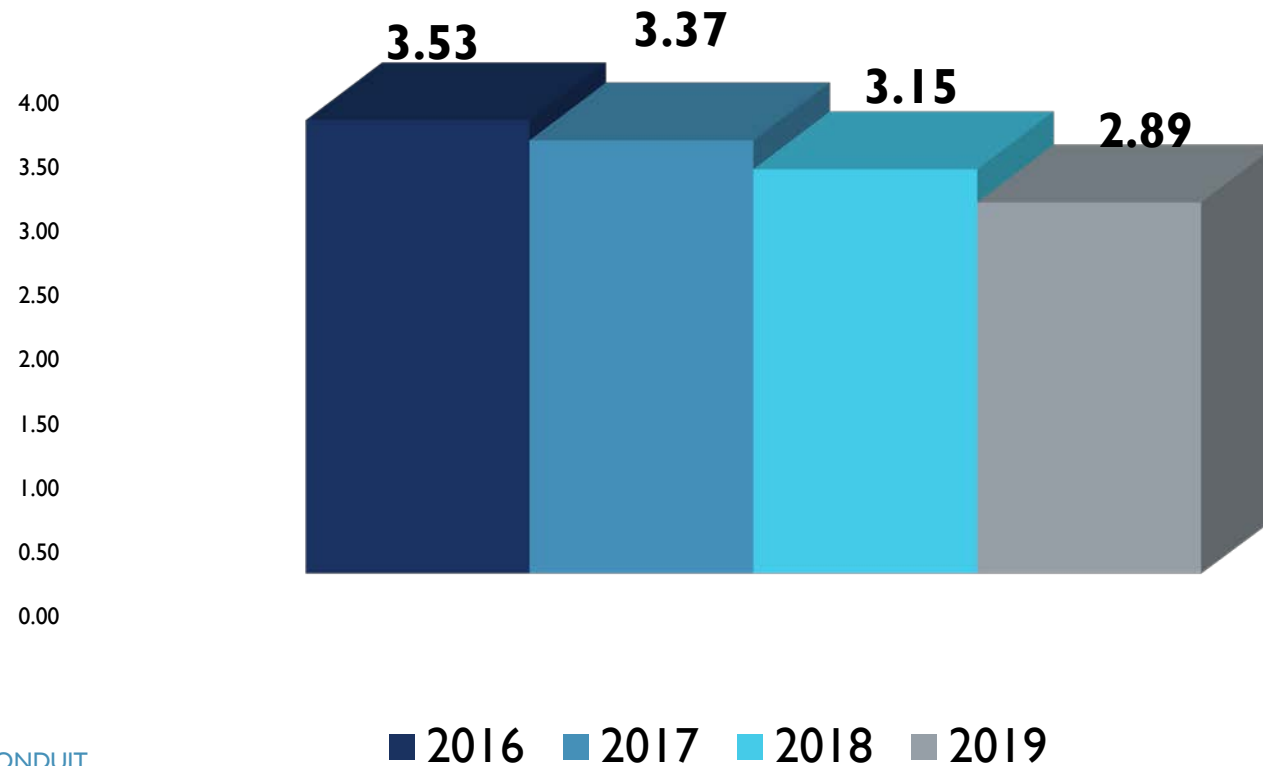
OPIOID PRESCRIPTIONS FOLLOWING ED VISITS FOR NTDC



DENTAL PRESCRIPTION QUANTITY OF OPIOID DOSES PER DAY



DENTAL PRESCRIPTION DAYS OF PRESCRIBED OPIOIDS



ORAL AND PHARYNGEAL CANCER

- Nationally, 2.7% of all cancer diagnoses are oral and pharyngeal cancer - about 55,000 per year
- Smoking, tobacco use and alcohol use are the most common risk factors. HPV is a new risk factor.
- Human Papilloma Virus is responsible for a recent surge in oral pharyngeal cancer patients.
- The American Dental Association and the CDC have recommended HPV vaccine for prevention of HPV infection that may lead to head and neck cancer.
- ODH is partnering with the Office of Immunizations to promote HPV vaccinations.

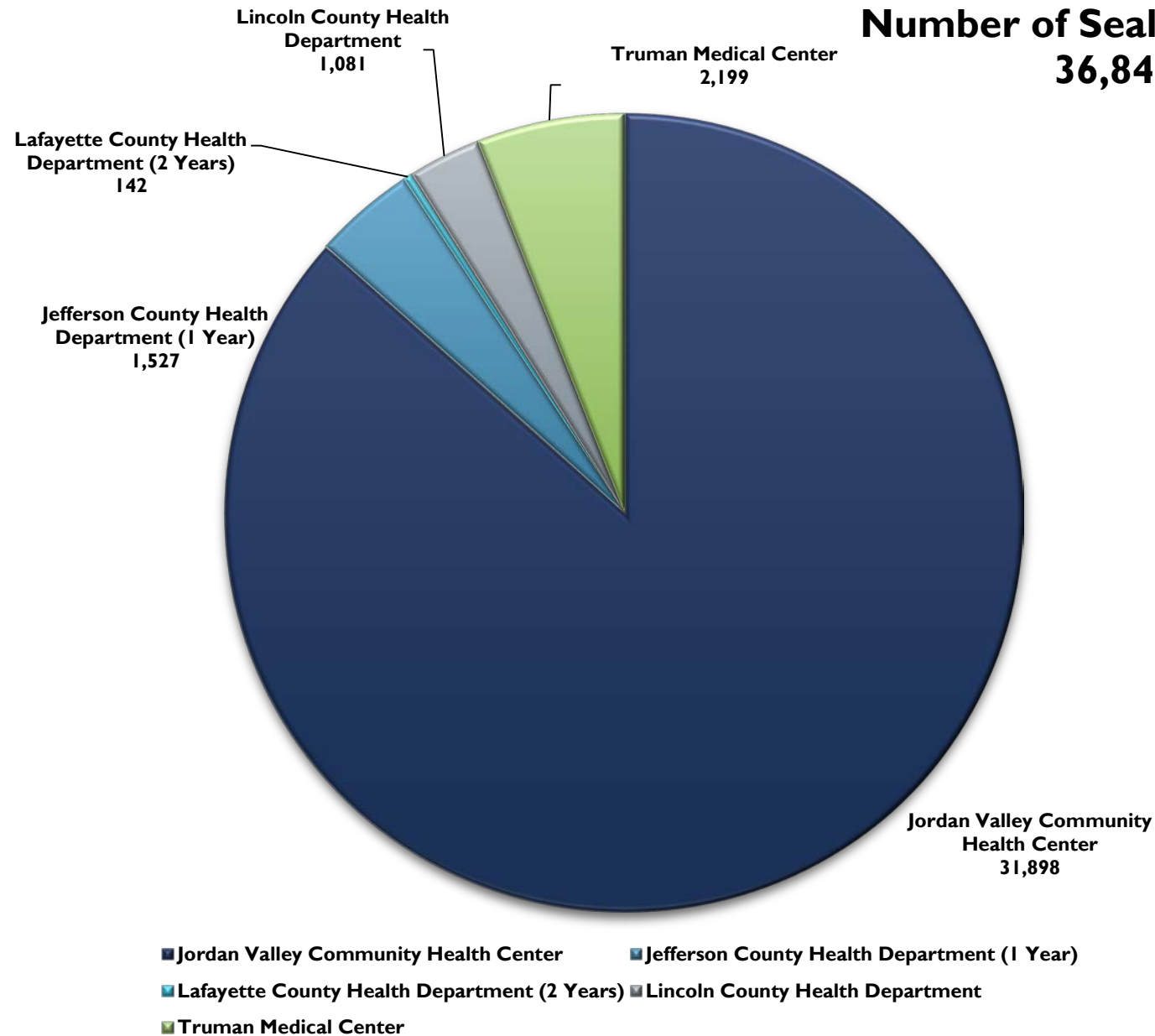
NON TRAUMATIC DENTAL VISITS TO EMERGENCY DEPT – MEDICAID CLAIMS

- Adult dental services started January 2016
- January 2018 shows a 44% decrease compared to January 2015
- This is not because we have fewer Medicaid participants; those levels have stayed the same.
- The rates per 100,000 are 38% lower.

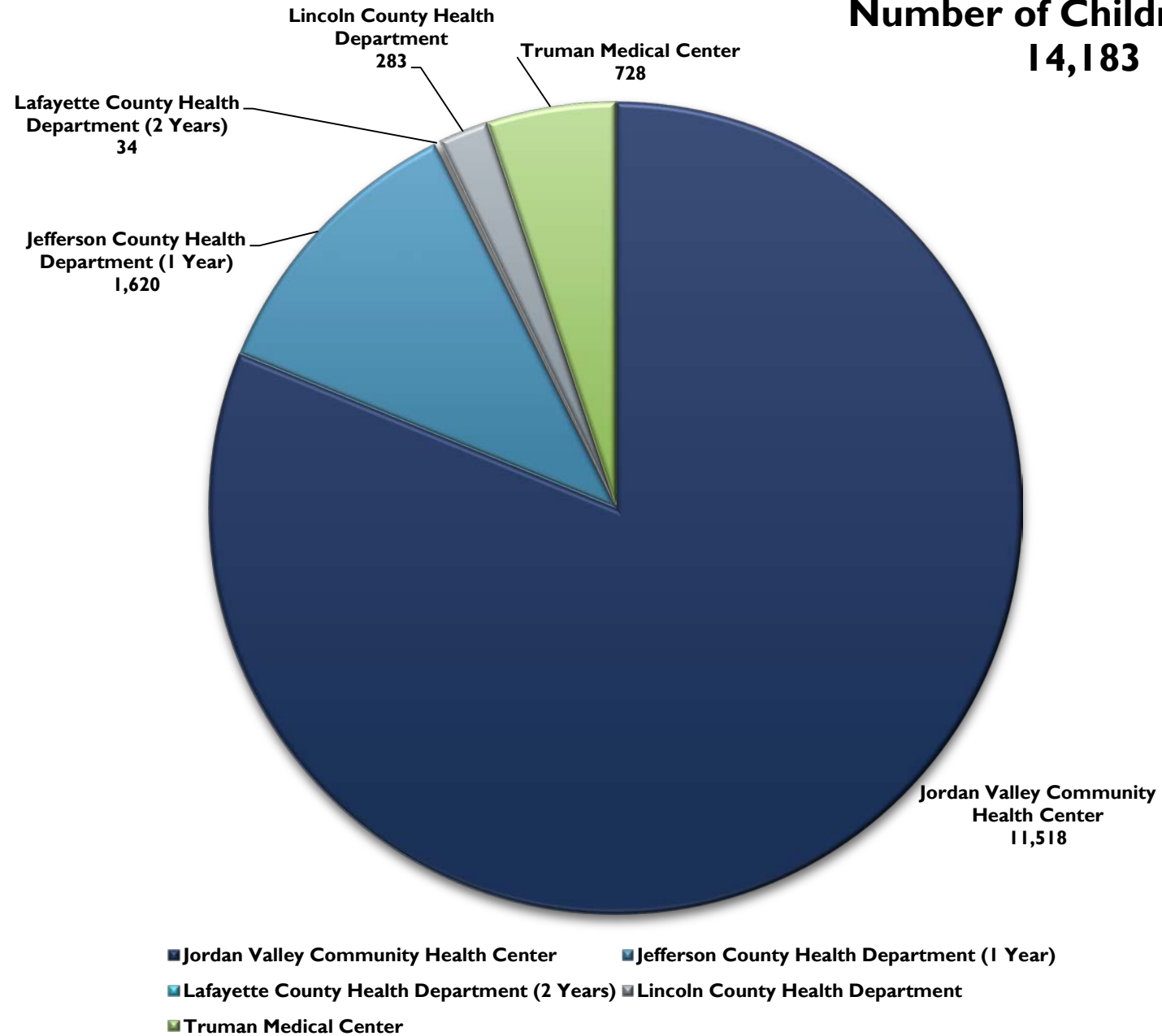
DELTA DENTAL SEALANT PROGRAM – 3 YEAR REPORT

- Delta Dental of Missouri provide 3 years \$600,000
- Goal to provide sealants to students in High Risk schools
 - Schools that had more than 50% of children on Free or Reduced Lunch Program (FRLP) participants –
- 268 schools in 85 counties were eligible (2016).
- Four contractors: TMC, Jefferson County, Lincoln County and Jordan Valley HC.

Number of Sealants Placed 36,847



Number of Children Seen 14,183



OUTCOMES

- Missouri Dental Sealant rate*
 - 2014-15 - 25.4%
 - 2015-16 - 24.8%
 - 2016-17 - 26.2%
 - 2017-18 - 26.65%
 - 2018 -19 – 30%**

DENTAL SEALANT WEBPAGE

- ODH Dental Sealant Webpage is :
<https://health.mo.gov/living/families/oralhealth/dsp.php>



COMMUNITY WATER FLUORIDATION

Fluoride in Missouri Public Water Supplies

Public Water Systems that Serve
Water with Fluoride Concentrations
equal to or greater than 0.6 mg/L

0 20 40 80 Miles



- Natural Fluoride
- Added Fluoride

Only primary public water systems shown. All public water systems shown here
have naturally-occurring levels of Fluoride in source water greater than or
equal to 0.6 mg/L or chemically add Fluoride to water to achieve this concentration.
Data shown based on monitoring records from 2014, 2015, and 2016.

MISSOURI COMMUNITY WATER FLUORIDATION STATISTICS

- Total # of Community Water Systems (CWS) - **1,452**
- Total Population on CWS – **5,126,532**
- Total Number of fluoridated systems – **467**
- Total Population on fluoridated systems – **3,876,786**
- Total % of CWS that are fluoridated – **75.61%**

CWF/SEALANT ADVISORY BOARD

A group of 22 volunteers that provides input and evaluation for ODH programs through monthly teleconferences.

This group work with staff to produce:

1. CWF work plan and communication plan
2. Sealant work plan and communication plan
3. Advocated for SB619
4. Provide advice for education and response activities

COMMUNITY WATER FLUORIDATION WEBPAGE

- ODH Fluoridation webpage
- <https://health.mo.gov/living/families/oralhealth/waterfluoridation.php>

CWF MEDIA CAMPAIGN 2019

- Funded by MCH one time funds
- Radio spots and newspaper inserts in 9 counties and Independence, MO
 - Radio spots aired over 9,000 times
 - Newspaper inserts in 14 newspapers once a month for 3 months to approximately 58,000 homes
- Plans for new campaign in Eastern MO to run next summer using CDC grant funds.

How Community Water Fluoridation Prevents Tooth Decay

For children



When children are young
fluoride that is swallowed
enters the bloodstream.



It combines with calcium and phosphate
as the tooth is formed under the gums.

These teeth are more resistant to decay
throughout childhood and the teenage years.



For people of all ages



Fluoride in beverages and foods
mixes with the saliva.

Saliva neutralizes acid produced
by bacteria on teeth.



**the fluoride heals the teeth and
protects them from further decay.**

ILikeMyTeeth.org

CAMPAIGN FOR
DENTAL HEALTH
Let's Get Better Together

American Academy
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ADVOCATING FOR THE HEALTH OF ALL CHILDREN



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