Oral Health in Massachusetts

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- Focused on the relationship between oral health and overall good health throughout life
- Identified a "silent epidemic" of dental and oral diseases that burdens some population groups
- Significant disparity between racial and socioeconomic groups in regards to oral health and ensuing overall health issues
Surgeon General’s Report

- Lack of awareness of the importance of oral health among the public
- The association between oral health problems and other health problems
- Mouth as a mirror for general health and well-being

National Call for Action

The Surgeon General called for action to promote access to oral health care for all Americans, especially the disadvantaged and minority children found to be at greatest risk for severe medical complications resulting from minimal oral care and treatment.
National Call for Action

- Change Perceptions of Oral Health
- Overcome Barriers by Replicating Effective Programs
- Build Science Base and Accelerate Transfer
- Increase Oral Health Workforce Diversity, Capacity and Flexibility
- Increase Collaborations

Massachusetts Oral Health Report
October 2006

- Many Massachusetts residents lack easy access to routine dental care
- Profound impacts on overall health and social functioning
- The greatest barriers to access to dental care are experienced by minorities, the poor, the uninsured, and persons in relatively poor health
Access to dental care may also be powerfully impacted by:
- the availability of dentists
- the geographic distribution of dentists
- number and distribution of dentists who accept MassHealth(Medicaid)

Many rural areas of Massachusetts lack easy access to dental care providers.

- 30% of cities/towns in Massachusetts don't have enough dentists to care for the people who live there.
- 69 cities/towns in Massachusetts have NO dentist.
- 58% of cities/towns in Massachusetts have no dental specialists.
Massachusetts Oral Health Report - 2006

- 65% of cities/towns in Massachusetts have no pediatric dentist.
- More than 50% of cities/towns in Massachusetts have no dentist that accepts MassHealth (Medicaid).
- The majority of MassHealth dentists in Massachusetts are clustered in urban areas.

The Oral Health of Massachusetts Children - 2008

- Overall we have made some progress in improving oral health, on average, by reducing caries experience, percent of children with untreated decay and the number of children who have received dental sealants.
- Dental disease continues to be a significant health issue for many children at an unacceptable level for such a preventable disease.
- Significant disparities also exist along race and ethnicity, income status, and where children live.
Dental Disease is a Serious Health Issue for Massachusetts Children

<table>
<thead>
<tr>
<th>Grade</th>
<th>History of cavities</th>
<th>Untreated cavities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>28%</td>
<td>15%</td>
</tr>
<tr>
<td>3rd Grade</td>
<td>41%</td>
<td>17%</td>
</tr>
<tr>
<td>6th Grade</td>
<td>34%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Significant Disparities in Disease Experience Among Racial and Ethnic Minority Children

Percent of children with one or more teeth with untreated cavities or with a dental filling

- Kindergarten
- 3rd Grade
- 6th Grade
Significant Disparities In Untreated Cavities Among Racial and Ethnic Minority Children

Percent of children with untreated cavities

- Non-Hispanic White
- Non-Hispanic Black
- Non-Hispanic Other
- Hispanic

Kindergarten | 3rd Grade | 6th Grade
--- | --- | ---
Non-Hispanic White | 25% | 17% | 9%
Non-Hispanic Black | 54% | 21% | 11%
Non-Hispanic Other | 14% | 14% | 14%
Hispanic | 15% | 20% | 14%

MA Average

More Untreated Decay Among Racial and Ethnic Minority Children

Mean number of teeth with untreated decay among children with untreated decay

- Non-Hispanic White
- Non-Hispanic Black
- Non-Hispanic Other
- Hispanic

Kindergarten | 3rd Grade | 6th Grade
--- | --- | ---
Non-Hispanic White | 2.3 | 2.3 | 1.9
Non-Hispanic Black | 3.0 | 2.7 | 1.9
Non-Hispanic Other | 2.3 | 2.6 | 2.0
Hispanic | 2.6 | 2.7 | 2.0

MA Average
One in Ten Racial and Ethnic Minority Children Suffer Oral Pain

Percent of children whose parents reported child was currently having pain in teeth or mouth:

- Kindergarten: Non-Hispanic White: 6%, Non-Hispanic Black: 9%, Non-Hispanic Other: 3%, Hispanic: 11%
- 3rd Grade: Non-Hispanic White: 4%, Non-Hispanic Black: 9%, Non-Hispanic Other: 11%, Hispanic: 4%
- 6th Grade: Non-Hispanic White: 7%, Non-Hispanic Black: 11%, Non-Hispanic Other: 9%, Hispanic: 4%

MA Average:

Fewer Racial and Ethnic Minority Children Receive Preventive Treatment (Sealants)

Percent of children with one or more dental sealants:

- 3rd Grade: Non-Hispanic White: 45%, Non-Hispanic Black: 43%, Non-Hispanic Other: 20%, Hispanic: 45%
- 6th Grade: Non-Hispanic White: 36%, Non-Hispanic Black: 44%, Non-Hispanic Other: 20%, Hispanic: 45%

MA Average:
Key Findings

- Dental disease is a significant health issue for children in Massachusetts
  - Most common chronic childhood disease
  - Affects many children before kindergarten
  - Many school children are in pain
- Significant oral health disparities
  - Racial and ethnic minority children
  - Children from low-income families
  - Across counties

For more information on the Massachusetts Oral Health Survey:

www.catalystinstitute.org
MassHealth Program

Percent of MassHealth Children Who Received a Clinical Dental Examination

<table>
<thead>
<tr>
<th>Periodic oral examination</th>
<th>Comprehensive oral evaluation</th>
<th>Total number of exams</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.0%</td>
<td>15.6%</td>
<td>19.8%</td>
</tr>
<tr>
<td>21.7%</td>
<td>17.7%</td>
<td>25.0%</td>
</tr>
<tr>
<td>30.0%</td>
<td>18.6%</td>
<td>39.4%</td>
</tr>
</tbody>
</table>

Graph showing the percentage of MassHealth children who received a clinical dental examination for Periodic oral examination, Comprehensive oral evaluation, and Total number of exams for FY2006, FY2007, and FY2008.
Percent of MassHealth Children Who Received a Clinical Dental Examination

- Periodic oral examination: 24.0%, 15.8%, 30.0%
- Comprehensive oral evaluation: 15.0%, 11.7%, 18.4%
- Total number of exams: 36.0%, 45.4%, 49.4%

Percent of MassHealth Children Who Received Prophy or Fluoride

- Prophylaxis (14 - 21 y.o.): 10.6%, 11.7%, 12.1%
- Prophylaxis (<14 y.o.): 26.2%, 30.6%, 32.7%
- Total number of prophylaxis: 39.3%, 41.2%, 44.8%
- Topical application of fluoride (prophy not incl): 36.8%, 36.9%, 34.5%
Percent of MassHealth Children Who Received Dental Sealants

Age group (years)

Percent of total number of unduplicated members who received procedure

Percent of MassHealth Children Who Received a Restorative Procedure

Type of Restoration

Total number of amalgam restorations
Total number of composite restorations
Total number of other restorations
### Dental Providers by County

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>FY2007</th>
<th>FY2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnstable</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Berkshire</td>
<td>23</td>
<td>28</td>
</tr>
<tr>
<td>Bristol</td>
<td>84</td>
<td>110</td>
</tr>
<tr>
<td>Dukes and Nantucket</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Essex</td>
<td>129</td>
<td>163</td>
</tr>
<tr>
<td>Franklin</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Hampden</td>
<td>84</td>
<td>110</td>
</tr>
<tr>
<td>Hampshire</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Middlesex</td>
<td>235</td>
<td>311</td>
</tr>
<tr>
<td>Norfolk</td>
<td>91</td>
<td>107</td>
</tr>
<tr>
<td>Plymouth</td>
<td>80</td>
<td>119</td>
</tr>
<tr>
<td>Suffolk</td>
<td>187</td>
<td>210</td>
</tr>
<tr>
<td>Worcester</td>
<td>87</td>
<td>143</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,042</td>
<td>1,356</td>
</tr>
</tbody>
</table>

### MassHealth Members (<21) by County

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>NUMBER OF MEMBERS (0-20 YEARS OLD) ENROLLED*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY 2007</td>
</tr>
<tr>
<td>Barnstable</td>
<td>12,669</td>
</tr>
<tr>
<td>Berkshire</td>
<td>11,033</td>
</tr>
<tr>
<td>Bristol</td>
<td>46,916</td>
</tr>
<tr>
<td>Dukes /Nantucket</td>
<td>1,457</td>
</tr>
<tr>
<td>Essex</td>
<td>60,913</td>
</tr>
<tr>
<td>Franklin</td>
<td>5,475</td>
</tr>
<tr>
<td>Hampden</td>
<td>61,437</td>
</tr>
<tr>
<td>Hampshire</td>
<td>7,130</td>
</tr>
<tr>
<td>Middlesex</td>
<td>70,392</td>
</tr>
<tr>
<td>Norfolk</td>
<td>26,067</td>
</tr>
<tr>
<td>Plymouth</td>
<td>31,239</td>
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<tr>
<td>Suffolk</td>
<td>80,363</td>
</tr>
<tr>
<td>Worcester</td>
<td>58,307</td>
</tr>
<tr>
<td>N/A</td>
<td>4,402</td>
</tr>
<tr>
<td><strong>Total number of members</strong></td>
<td><strong>477,800</strong></td>
</tr>
</tbody>
</table>
Fluoride Varnish Program

- As of October, 2008, physicians and other non-dental health providers may bill for fluoride varnish application
- Goal: to decrease Early Childhood Caries thus decreasing need for TX in Operating room and Emergency room.

School Based Programs

- DPH and MassHealth piloted a school based program in Springfield in academic year 08-09
- Twenty one schools in year 1 (13 are schools with SBHC)
- 9 elementary, 3 middle and 9 high schools.
- Total number of students with consent: 1,684. (31% also are enrolled in SBHC programs, 68% MassHealth children).
School Based Programs

- 4,829 sealants placed (19 schools reporting) with average of 5 sealants per student
- Cost $42/child
- 25.1% required restorative treatment 25.1%. (Range 14% to 45%).
  - Of these 3.4% needed urgent or immediate care

Race/Ethnicity of Students Participating in Pilot Program

<table>
<thead>
<tr>
<th>Race</th>
<th>% of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>0.2</td>
</tr>
<tr>
<td>Asian</td>
<td>5.8</td>
</tr>
<tr>
<td>Black</td>
<td>30.8</td>
</tr>
<tr>
<td>Hispanic</td>
<td>46.9</td>
</tr>
<tr>
<td>White</td>
<td>15.4</td>
</tr>
<tr>
<td>Other</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Plans for Expansion of DPH School Based Programs

- DPH, Office of Oral Health, will be responsible for replicating effective school prevention/sealant programs already implemented in the state, expanding the dental workforce for these portable programs and building collaborations and partnerships to ensure support and sustainability.

Plans for FY 10-11

- Coordinate expansion of School based programs with other public/private providers
- Coordinate referral network for school based programs with private practitioners and safety net providers
- Increase dental provider network