Oral Health Report 2013
Introduction

- Oral Health in Hamilton compared to Ontario and Canadian data
- Social Determinants of Health and Oral Health
- Public Health Services that support good oral health and access to dental care
- Results from mandated programs that provide data for future program planning and delivery of services
## Importance of Good Oral Health

<table>
<thead>
<tr>
<th>Poor oral health can cause:</th>
<th>Poor oral health is linked to:</th>
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<tbody>
<tr>
<td>• Tooth loss</td>
<td>➢ In the general population</td>
</tr>
<tr>
<td>• Gum disease</td>
<td>• Heart disease &amp; stroke</td>
</tr>
<tr>
<td>• Cancers of the mouth, tongue, throat, soft palate</td>
<td>• Diabetes</td>
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<tr>
<td>• Mouth &amp; jaw pain</td>
<td>• Poor nutrition</td>
</tr>
<tr>
<td>• Soft tissue injuries</td>
<td>➢ In seniors</td>
</tr>
<tr>
<td>• Mouth infections</td>
<td>• Respiratory infections</td>
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<tr>
<td></td>
<td>• Rheumatoid arthritis</td>
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<td></td>
<td>• Osteoporosis</td>
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<td></td>
<td>• Alzheimer’s</td>
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<tr>
<td></td>
<td>➢ In pregnant women</td>
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<tr>
<td></td>
<td>• Premature births</td>
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<td></td>
<td>• Babies born at a low birth weight</td>
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</table>
Maintaining Good Oral Health

- Drinking water treated with fluoride
- Using dental products with fluoride
- Brushing at least two times a day
- Flossing everyday
- Having an oral health check–up by a dental professional every 6-9 months
The World Health Organization (WHO) defines the social determinants of health as…

“The conditions in which people are born, grow, live, work and age, including the health system. These circumstances are shaped by the distribution of money, power, and resources at global, national, and local levels. The social determinants of health are mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries" (40).
Figure 1: Determinants & outcomes of poor oral health

**Determinants of Health**

- **Social**
  - Public policies
  - Economic system
  - Political system
  - Education system
  - Health services
  - Public health infrastructure
  - Employment situations
  - Physical environment
  - Social environment
  - Social inequalities
  - Social norms

- **Family**
  - Culture
  - Family norms
  - Family structure
  - Income & social status
  - Family health status
  - Behaviours
  - Social support networks
  - Healthy child development

- **Individual**
  - Biology and genetic endowment
  - Gender
  - Language
  - Education and literacy
  - Employment/working conditions
  - Personal health practices and coping skills
  - Oral hygiene
  - Use of dental services
  - Smoking
  - Diabetes
  - Medical Conditions
  - Medication

**Oral health problems**

**Outcomes**

- **Individual**
  - Physical
  - Growth & Development Problems (children)
  - Problems Eating
  - Problems speaking
  - Pain
  - Tooth loss
  - Serious illness (stroke, heart disease)
  - Alzheimer’s

- **Emotional**
  - Lowered self-esteem
  - Social isolation

- **Social**
  - Stigmatized
  - Difficulty interacting with others

- **Economic**
  - Loss of opportunity (stigma with oral health problems)
  - Loss of learning (missed school)
  - Loss of income with missed work

- **Family**
  - Negative effect on family dynamics
  - Loss of income
  - Financial hardship

- **Social**
  - Increases social inequalities
  - Impact on Economy (work & school days lost)
  - Impact on educational system (loss of school days, concentration problems)
  - Healthcare system (untreated dental problems can lead to expensive hospital emergency visits)
Social Determinants of Health and Oral Health

• Less than half (48.4%) of Hamiltonians with low incomes have dental insurance, compared to 75.8% in the middle income group and 79.9% of the high income group.

• Hamilton residents with high incomes reported very good levels of oral health almost one and a half times more often than those with low incomes (42.0% vs. 28.7%).

Source: Canadian Community Health Survey (CCHS), 2009/10, Share File, Ontario Ministry of Health and Long-term Care
Social Determinants of Health and Oral Health

- Children from low-income families have 2.5 times more decay than children from high-income families.
- Children from low-income families are less likely to receive comprehensive oral health care.
- These children are also more likely to have critical oral health problems that require emergency care than children from middle to high income families.
Social Determinants of Health and Oral Health

• Only 39% of Hamilton seniors (65+) have dental insurance coverage

• Only 55% of Hamilton seniors had a dental visit in the previous 12 months, while 36% stated they usually only visit a dentist for emergencies

Source: Canadian Community Health Survey (CCHS), 2009/10, Share File, Ontario Ministry of Health and Long-term Care
Ontario’s Dental Programs and Services for Children and Youth Under 18

- Children in Need of Treatment (CINOT)
- Children in Need of Treatment Expansion
- Healthy Smiles Ontario (HSO)
- Ontario Works (OW)
- Ontario Disability Support Program (ODSP)
- Assistance for Children with Severe disabilities (ACSD)
- Cleft Lip and Palate/Craniofacial Dental Program
- Non-Insured Health Benefits (NIHB)

Source: Ontario Benefits Directory
City of Hamilton Public Health Services that Support Oral Health

- Administer provincially mandated oral health programs (CINOT, CINOT Expansion, Healthy Smiles)
- Public Health Services Dental Clinic
- Dental Health Bus
- Community outreach activities
- Monitor water fluoridation
New Dental Health Bus
## Ontario Public Health Standards

*Oral Health Assessment and Surveillance Protocol*

<table>
<thead>
<tr>
<th>Risk rating</th>
<th>Grades screened</th>
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<tbody>
<tr>
<td>Low Risk</td>
<td>JK/SK and grade 2</td>
</tr>
<tr>
<td>= 9.5% or less</td>
<td></td>
</tr>
<tr>
<td>Medium Risk</td>
<td>JK/SK, grades 2 and 8</td>
</tr>
<tr>
<td>= 9.51% - 13.99%</td>
<td></td>
</tr>
<tr>
<td>High Risk</td>
<td>JK/SK grades 2, 4, 6 and 8</td>
</tr>
<tr>
<td>= 14.00% or more</td>
<td></td>
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Ontario Public Health Standards

Children in Need of Treatment Protocol

- 1,587 Hamilton children were identified with *urgent* dental treatment needs (according to the protocol requirements) during school screening, and required case management.
2011-2012 Oral Health Assessment (dental screening) results

Of the 15,773 students screened....

4,395 students required some type of dental treatment

1,587 cases of unmet urgent dental needs requiring immediate care

460 cases of non-urgent unmet treatment needs

2,468 cases of preventive dental care only
Ontario Public Health Standards
Preventive Oral Health Services Protocol

JK, SK & Grade 2 students with **preventive dental needs** in Hamilton, by Ward

Source: Community Dental Program, City of Hamilton Public Health Services (2011-2012 school year)
Map 3: Healthy Smiles Ontario (HSO) participant locations in Hamilton, 2010-2012

LEGEND

- Main Office Clinic
- Clinic
- Bus
- Urban Boundary
- Highway
- Major Road
- Escarpment

High density colours indicate a greater number of children enrolled in HSO.

High
Low
Oral Health Promotion and Education

Oral health promotion is a requirement of OPHS and HSO, of which raising the awareness of the importance of oral health is one component.

• In 2012, the dental team participated in health fairs, displays, and community events
• In 2012, the dental team provided over 100 presentations in the community
• Learning resources are developed and maintained for children and their families
Conclusion

• Raises awareness of the importance of good oral health and its effects on overall health
• Inequities in oral health persist and PHS strives to address these needs in the City of Hamilton
• Provides evidence to guide future program planning and delivery of services