



# INFORMATION REPORT

<b>TO:</b>	Mayor and Members Board of Health
<b>COMMITTEE DATE:</b>	December 5, 2016
<b>SUBJECT/REPORT NO:</b>	Healthy Birth Weights Project Update (BOH14002(b)) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
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## Council Direction:

This is an update on work to address the City's 2012-15 strategic plan objective 1.5 (v), "the development and implementation of a maternal health strategy to decrease low birth weight." Previous updates were provided in Reports BOH14002 and BOH14002(a).

## Information:

Babies born at less than 2500g are more likely to experience chronic health issues and delayed brain and physical development. Birth Weight is closely connected to the cycle of poverty and is an important indicator of long-term health for both children and parents. Hamilton has several neighbourhoods where the Low Birth Weight (LBW) rate

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is significantly higher than city average. The Healthy Birth Weights (HBW) Coalition is chaired by Public Health Services (PHS) and made up of more than 50 partners from 30 health and community organizations. The Coalition's vision is "to strengthen our community by supporting healthy lives and healthy relationships for moms, babies, and neighbourhoods." The Coalition aims to reduce the risk of low birth weight in Hamilton communities.

Since 2013, the HBW Coalition has focused on four strategic areas to improve the system of care for young parents. The Coalition has achieved intermediate targets toward long-term goals. This report highlights achievements so far and outlines next steps for continued progress toward reducing LBW rates and related risk factors.

### **Background**

As reported in BOH14002, LBW is a complex issue that requires a long-term collaborative approach to reducing health and social inequities. LBW risk is highest among people who face social disadvantage, such as low income, precarious housing, limited education, poor mental health, and, lack of social support. Pregnant youth are especially likely to experience these social risk factors and have double the risk of delivering a baby with LBW<sup>1</sup>. LBW exacerbates existing social disadvantage. It increases the likelihood of the baby developing long-term chronic illness, impaired physical and brain development, and consequent health and socio-economic costs<sup>2</sup>.

Table 1: Low Birth Weight (<2500g) rate for live births by age range of mother, City of Hamilton<sup>3</sup>

<b>Year</b>	<b>&lt;20 years of age</b>	<b>&lt;23 years of age</b>	<b>Citywide All Ages</b>
2014	7.9	7.6	6.0
2015	9.0	8.6	6.1

Data show a long-standing pattern in Hamilton. The same neighbourhoods with high LBW rates also have the highest rates of low income, teen pregnancy, and smoking during pregnancy. The five year trend from 2008-2012 showed a citywide LBW rate of 6.5%, similar to the provincial average of 6.6%<sup>4</sup>. However, several postal code areas showed significantly higher LBW rates at 7-8.6%.

PHS first convened the HBW Coalition in 2011 to collaborate on citywide strategies to reduce the risk of LBW. Hamilton is now seeing a decreasing five year trend for both LBW and teen pregnancy rates based on 2010-2014 data (see table 2). Smoking during pregnancy rates have also been decreasing since 2013. This is good news. However, it is too early to confirm success in reducing LBW rates. Because rates change from year to year, it is important to continue tracking data trends over five year

periods. To track progress over time, the HBW Coalition has been measuring process goals over the past three years.

Table 2: Low Birth Weight and Teen Pregnancy Trends, City of Hamilton<sup>5</sup>

<b>5 Year Trend</b>	<b>LBW Hamilton</b>	<b>LBW Ontario</b>	<b>Teen Pregnancy Hamilton</b>	<b>Teen Pregnancy Ontario</b>
2008-2012	6.5	6.6	31.3	25.7
2010-2014	6.24	6.7	26.2	21.5

Table 3: Rate of any reported smoking during pregnancy<sup>6</sup>

<b>Year</b>	<b>Hamilton</b>	<b>Ontario</b>
2013	11.8%	7.8%
2014	11.3%	8.2%
2015	10.3%	7.4%

## **Healthy Birth Weights Coalition**

### **Goals**

The Healthy Birth Weights Coalition aims to strengthen the system of care to improve pregnancy supports citywide. Strengthening the overall system has improved collaboration between health and community partners to better support populations with complex social, physical and mental health needs. In 2013, the HBW Coalition engaged in cross-sector planning to develop 52 recommendations for action. The Coalition formed Action Teams to develop strategies and action plans to build community capacity and a stronger system of supports.

In 2014, the HBW Coalition set three long-term targets to reach by 2020:

- Reduce the incidence of low birth weights in target postal codes (where rates are disproportionately high) by 10%
- Reduce the incidence of smoking during pregnancy in target postal codes by 10%
- Reduce the incidence of teen pregnancy (youth under 20 years of age) in target postal codes, demonstrated by decreasing trend in 2020

Because it takes a long time to influence change in LBW rates, the HBW Coalition developed intermediate goals and strategies. The strategies fall under two broad directions:

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- 1) Best possible care during pregnancy to support healthy birth weights
- 2) Teen pregnancy prevention

Through 2014-2016, the Coalition focused on best possible care for pregnant youth by developing four strategic goals.

- 1) Youth Leadership: Include youth as partners and leaders in all aspects of strategy development, research, and implementation.
- 2) Care Pathway: Build a Care Pathway for young parents, to coordinate best possible care and streamline approach to service provision across the City.
- 3) Build Capacity through Cross-sector Education: Develop consistent community-wide education for professionals working with youth in Hamilton to build capacity and create a common approach.
- 4) Implement Best Practice Smoking Cessation Supports for pregnant and postpartum women.

### **Achievements**

Taking a community-driven and evidence-informed approach, the HBW Coalition has targeted LBW to address broader system challenges and inequity in Hamilton. By focusing on the social risk factors experienced by pregnant youth, the Coalition has initiated system improvements that benefit parents of all ages. Achievements in each of the four strategic areas prioritized for 2014-2016 have contributed to innovative programs and stronger collaboration.

#### **1. Youth Leadership: Young parents drive all aspects of the strategy**

Four young parents were hired in 2014 and have been important leaders through all project stages. These Young Parent Peer Mentors provide ongoing expertise at work group meetings, project planning, and consultations with key partners. Coalition and community partners are inspired and motivated by Peer Mentors' strength and wisdom. Peer Mentors report feeling empowered and transformed through the initiative.

The Peer Mentors have engaged more than 100 young parents through focus groups and community events to learn about experiences, barriers, and strengths of young parents. Young parents presented research findings while working with HBW Coalition partners to build strategies for improving the community of supports for pregnant youth. The Peer Mentors have since expanded their role to directly support pregnant and parenting youth to access resources and self-advocate. This role includes leading

advocacy and leadership groups, collaborative creation of youth-led advocacy videos, and, peer support at Coalition organizations.

Advocacy and case scenario videos created by young parents are promoted and viewed at education sessions and public events (conferences, steering committee meetings, workshops) to build awareness of young parents' reality and desire to improve the system of supports.

## **2. Care Pathway Approach to Strengthening the System of Care**

The Coalition has achieved its goal of developing a Youth Pregnancy Care Pathway to build a stronger and more integrated system of care. This means every door is the right door; youth have access to best possible supports no matter where they first connect with the system. Collaborative research and planning with young parents has directed the development of three interrelated tools to support best possible care for pregnant youth.

- a) Youth Pregnancy Care Pathway. The Care Pathway is a tool for service providers, available in hard copy and online at [www.ypcp.ca](http://www.ypcp.ca). The Care Pathway aims to help organizations better link with community resources; support a common knowledge and language; and, develop shared processes, practices, and tools to support an integrated approach to working with pregnant and parenting youth in Hamilton.
- b) Young Parent Resource Tool. This is an online resource for youth. It helps youth and providers connect with medical, mental health, and social supports available in the community. This interactive website is linked to the web version of the Care Pathway. This allows care providers to link directly from steps to best possible care in the Care Pathway to resources for youth in the Resource Tool found at [www.ypresourcetool.ca](http://www.ypresourcetool.ca).

Both websites are updated through Information Hamilton to ensure information is current and complete.

- c) "My Baby and Me" Passport and Incentives Program. The HBW Coalition has adapted the "My Baby and Me" Passport as a portable pregnancy resource and incentives program. The Passport Program has been piloted through the Maternity Centre of Hamilton since July 2015 and is funded through the Innoweave grant. All pregnant youth (21 and under) who receive care at the Maternity Centre are invited to participate in the program. Exception is made for pregnant youth up to age 23 who require additional supports and would benefit from the program. Participants receive a passport with information about what to expect during pregnancy, resources in Hamilton, and space where young parents

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and their care providers can write questions or record information. The program also includes incentives to reduce barriers to care. Program participants receive a \$10 grocery card and two bus tickets at each prenatal appointment. Research shows this Passport encourages self-management of care; improves access, experience, and outcomes of care; and, supports mother-infant attachment. A program evaluation is underway and will be used to support applications for sustainable funding.

### **3. Building Capacity through Cross-sector Education**

The HBW Coalition has created and coordinated cross-sector opportunities to identify community challenges and participate in shared learning to address them.

Achievements include:

- More than 80 education events from 2014-2016 to address identified education needs and community challenges.
- Two Young Parent Day events led by youth to celebrate and educate community around needs, strengths, and experiences of young parents.
- Sustainability of cross-sector education supported through partnership with Core Collaborative Learning (CCL). Through CCL, Coalition members have access to recorded workshops, online modules, and recurring in-person workshops.
- Roster of educational offerings available by and for Coalition organizations, developed to support education opportunities as needed by partners and youth-serving organizations in Hamilton.
- 33 Education Leads from partner organizations trained and provided with resources to support ongoing Care Pathway education at each organization.

### **4. Best Practice Smoking Cessation Supports for Pregnant and Postpartum Women**

Smoking cessation strategies have focused on enhancing supports through PHS and spreading best practices through partner organizations.

Achievements include:

- In 2013, Public Health Services approved a Medical Directive to offer no-cost Nicotine Replacement Therapy to Pregnant and Postpartum clients.

- All PHS staff and Coalition organizations were trained to offer Minimal Contact Intervention (MCI) with all pregnant clients. MCI is shown to increase use of smoking cessation supports and improve quit smoking rates.
- In 2013, PHS launched an innovative Prenatal Smoking Cessation Incentives Program (PSCIP) through the PHS Quit Smoking Clinic. Through PSCIP, all pregnant and postpartum clients are offered intensive counselling, no-cost Nicotine Replacement Therapy, bus tickets, and, grocery gift cards as incentives. Evaluation at 1.5 years showed 55% smoking reduction at completion of program and more than two-fold increase in attendance (program adherence). The PSCIP program is now routine practice at the Public Health Services Quit Smoking Clinic.
- Innovative programs to better support pregnant youth with smoking cessation through partner organizations. Innovative programs include co-location of PHS cessation services with the Maternity Centre, as well as training and ongoing support to help community organizations develop smoke-free policies and practice.

### **Resources**

PHS funded a temporary Healthy Birth Weights Project Manager from January 2013 through March 2016 (as endorsed by Board of Health through BOH14002(a)). The Project Manager chaired and convened the coalition and working groups; undertook research, grant writing, and collaborative planning; and, managed all project activities.

The Coalition successfully applied for three external grants, securing \$235,000 in collaborative funding. Community partners administered the funds while the HBW Project Manager managed activities. These funds supported community-driven research, cross-sector education, and innovative program development.

- 2014: \$10,000 Edith H. Turner Fund through Hamilton Community Foundation supported a youth-led creative storytelling and media production program.
- 2014-2015: \$75,000 Women's Xchange grant from Women's College Hospital to fund community-driven research with pregnant and parenting youth. Included hiring four young parents as Community Researchers.
- 2015-2016: \$150,000 Innoweave Youth Collective Impact grant to support implementation of collaborative strategies, including ongoing leadership of Young Parent Peer Mentors (formerly Community Researchers).

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### **Next Steps**

The HBW Coalition has achieved all intermediate strategy goals set for 2013-2016 and is regularly consulted by other organizations interested in system integration strategies. The Coalition has succeeded in meeting short-term targets. PHS is working with the HBW Coalition to sustain and leverage success of the initiative while working towards new goals. PHS began phasing out the temporary HBW Project Manager role in April 2016. Public Health and partners have integrated activities related to the Care Pathway, Cross-sector Education, and Smoking Cessation into operational programming and will continue to monitor progress.

The Coalition is currently building stronger links with other strategies and networks to maintain momentum towards broader targets (reducing rates of LBW, teen pregnancy, and smoking during pregnancy). PHS is currently reviewing work across all divisions that provide sexual health services and education. Staff are developing a collaborative and coordinated strategy to address teen pregnancy prevention and youth sexual health more broadly. Development of this strategy will involve consultation and engagement with the Sexual Health Network, which has been in place for nearly 20 years. In all of this work, PHS continues to monitor data trends to address emerging priorities in collaboration with community partners.

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<sup>1</sup> Roth, J., Hendrickson, J., Schilling, M., Stowell, D. (1998). The Risk of Teen Mothers Having Low Birth Weight Babies: Implications of recent medical research for school health personnel. *The Journal of School Health*, 68(7), 271-5.

<sup>2</sup> Institute of Health Economics. (2007). Healthy Mothers, Healthy Babies: How to prevent low birth weight. *Institute of Health Economics Consensus Statements*, 2, 1-24.

<sup>3</sup> Public Health Analytic Reporting Tool (2016). BORN Information System, BORN Ontario. Accessed October 2016.

<sup>4</sup> IntelliHealth Ontario. Inpatient discharges, and External Cause table, Ontario Ministry of Health and Long-Term Care. Extracted July 2015.

<sup>5</sup> IntelliHealth Ontario. Inpatient discharges, and External Cause table, Ontario Ministry of Health and Long-Term Care. Extracted July 2015.

<sup>6</sup> BORN Ontario (2015). BORN Information System.