

For Information

DATE: March 2, 2011

 REPORT TITLE: **FOLLOW UP ON THE COMPREHENSIVE HEALTH STATUS REPORT:  
 LOW BIRTH WEIGHT AND STILLBIRTH IN PEEL**

 FROM: Janette Smith, Commissioner of Health Services  
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## OBJECTIVE

To provide an update on the work by Peel Public Health related to two of the key issues identified in "A Picture of Health – A Comprehensive Report on Health in Peel 2008": Low Birth Weight and Stillbirth in Peel.

### REPORT HIGHLIGHTS

- A number of issues were identified in "A Picture of Health – A Comprehensive Report on Health in Peel 2008". An update regarding two of these issues, low birth weight and stillbirth is reported here.
- In order to understand why low birth weight and stillbirth rates appear to be higher in Peel compared to Ontario, Peel Public Health initiated a Low Birth Weight and Stillbirth Investigation Project, in collaboration with a researcher from the University of Manitoba.
- The findings of our investigation are:
  - Peel has a higher proportion of mothers born in South Asia.
  - Infants of South Asian-born mothers weigh less than infants of Canadian-born mothers. This results in the higher low birth weight rate in Peel.
  - The higher rate of stillbirth in Peel is the result of more stillbirths at the lowest birth weights (less than 500 grams) being registered.
- The findings for low birth weight and stillbirth have been presented in a technical report and in a Perinatal Health Status report that will be available on the Peel Public Health Website.

## DISCUSSION

### 1. Background

At the December 4, 2008 General Committee meeting, the Medical Officer of Health presented the findings from "A Picture of Health – A Comprehensive Report on Health in Peel 2008" ([http://www.peelregion.ca/council/gc\\_minutes/2000s/2008/gcmin20081204.htm](http://www.peelregion.ca/council/gc_minutes/2000s/2008/gcmin20081204.htm)). The report provided an overview of our Region, the health status of Peel residents and the factors that influence our health. Among the issues identified in this report as requiring further analysis by Public Health was the higher rate of low birth weight and stillbirth in our region.

March 2, 2011

## **FOLLOW UP ON THE COMPREHENSIVE HEALTH STATUS REPORT: LOW BIRTH WEIGHT AND STILLBIRTH IN PEEL**

### **2. Findings**

#### **a) Low Birth Weight**

Within recent years, the low birth weight rate (defined as infants born with a birth weight less than 2,500 grams) and stillbirth rate have been increasing in Peel and were found to be higher than the provincial rates. In response to this finding, the "Low Birth Weight and Stillbirth Investigation Project" was initiated, in collaboration with a University of Manitoba researcher, to investigate the possible reasons for these increasing rates and to explain the differences seen between Peel and Ontario.

Our findings show that infants born to immigrant mothers had lower median birth weights compared to infants born to non-immigrant mothers. For example, infants born to South Asian mothers had a significantly lower median birth weight compared to infants of Canadian-born mothers. Infants born in Peel are not more likely to be born prematurely (before 37 weeks of gestation) than infants born in the province as a whole.

#### **b) Stillbirth**

Our investigation into the higher rate of stillbirths in Peel showed that this high rate is due to an increase in the registration of stillbirths at the lowest birth weights (less than 500 grams). Stillbirths born at such low birth weights may occur more often in Peel because of the large proportion of immigrant mothers (who have infants with lower birth weights) or because Peel physicians may be more diligent about reporting such births when they occur. This finding is consistent with other research in Canada which has shown that differences in physician reporting can have a significant impact on the rates of stillbirth and infant mortality.

The results of this project have been released in a technical report (2011). In addition, the major findings will be included in the upcoming Perinatal Health Status Report which is scheduled to be released in 2011. The project team has also submitted a manuscript for publication in an academic journal outlining some aspects of the low birth weight analyses conducted.

### **3. Implications**

These findings provide the explanation for the observed trends in low birth weight and stillbirth in Peel and the reasons for the elevated rates in Peel compared to the provincial rates. Health care providers and public health practitioners should be aware of the lower birth weights which may be expected among infants born to immigrant mothers to avoid undue parental stress and unnecessary testing or health interventions. The results confirm the importance of examining reproductive health measures for immigrants and non-immigrants separately in order to fully understand the trends that are seen. In addition, the higher stillbirth rate in Peel can be attributed to a higher number of stillbirths being registered at the lowest birth weights (less than 500 grams) and not to an unknown health concern.

March 2, 2011

**FOLLOW UP ON THE COMPREHENSIVE HEALTH STATUS REPORT: LOW BIRTH WEIGHT AND STILLBIRTH IN PEEL**

**CONCLUSION**

This report provides a summary of work related to two of the issues identified in "A Picture of Health – A Comprehensive Report on Health in Peel 2008". This work has been accomplished working in collaboration with a researcher from the University of Manitoba. In addition to these issues, we continue to explore other themes identified in the Report

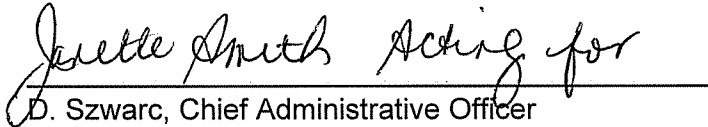


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**Approved for Submission:**



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