Better Health for All
Health Status Reporting Series Nine:
Maternal and Child Health

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Our Vision of Better Health for All

We envision a community in which everyone has a chance to live a healthy life and has the same opportunities to reach their full health potential. The ***Better Health for All Series*** highlights a number of key findings about the status of our health. Our series highlights what actions are being taken to make this vision a reality and what more we can do to create better opportunities for all to achieve better health.

Better Health for All Series 9: Maternal and Child Health

This report is of interest to all who care about children and the future of our communities. Maternal health refers to the health of women before and during pregnancy, childbirth and at the postpartum period (usually about six weeks after child birth).[1] Continuing on from postpartum, the early years may be the most important developmental phase of a person's life,[2] as evidence shows that the brain development that begins before birth continues fastest in the first two to three years of a child's life.[3] Children who are well cared for in their earliest years are more likely to grow up healthy and learn the thinking, language, emotional and social skills needed to succeed. Successful children grow up to be successful adults, with positive consequences for individuals, their family and our community. Early child development is therefore a recognized determinant of health and important to overall population health.[4]

This report is an update of a 2012 report[5] that asked the question, "How ready to learn are Saskatoon Health Region's children?" It presents information about children's health and development from before birth up to and including the time of school entry at around age six, as well as a multitude factors that influence maternal and child health. These include clinical health services but also the conditions in

[1] World Health Organization. (2017). *Maternal Health*. http://www.who.int/topics/maternal_health/en/
[2] World Health Organization. (2017). *Early Child Development*. http://www.who.int/social_determinants/themes/earlychilddevelopment/en/
[3] World Health Organization. (2016). *Every young child deserves to thrive*. http://www.who.int/maternal_child_adolescent/topics/child/early-child-development/WHO_LancetECD_Infographic.pdf?ua=1
[4]The Standing Senate Committee on Social Affairs, Science and Technology. (2009). A healthy productive Canada: A determinant of health approach https://sencanada.ca/Content/SEN/Committee/402/popu/rep/rephealth1jun09-e.pdf
[5] Neudorf et al. (2012). Healthy children, healthy families, healthy communities: A report of the Chief Medical Health officer on the health status and development of young children in the Saskatoon Health Region. https://www.saskatoonhealthregion.ca/locations_services/Services/Health-Observatory/Documents/Reports-Publications/Healthy_Families_Full_Report_2012.pdf

which we live, work and play. In addition, it provides evidence-informed recommendations to improve health outcomes.
In 2012, we called for a shared commitment to reduce the percentage of children "not ready to learn" from 30% to 18% by 2018.[6] The children born in 2012 are now entering school. How ready are they? In this report, we describe what has changed over the last five years for mothers and young children in our Region.

What Did We Find?[7]

Last year, the Government of Saskatchewan set a goal that 90% of students exiting kindergarten will be ready for learning in the primary grades by 2020. Although the Early Years Evaluation (EYE) instrument used in Saskatchewan since 2014 is different than the Early Development Instrument (EDI) reported in 2012, the last few years have indeed seen incremental improvements in children's readiness for learning in the primary grades.

Readiness for Learning – a slightly higher percentage of students in Saskatoon Health Region achieved developmental tasks at the time of kindergarten entry in the 2015/16 school year (63.6%) compared to the provincial average (58.7%). For 2015/16, about 83% of students in the Region at exit from kindergarten were considered ready for learning in the primary grades, compared to 80% provincially. Children living in rural areas were more likely to be ready to learn than children living in Saskatoon (81.8%), with the exception of Rosthern and area (76.7%). Within the city of Saskatoon, more than 90% of children in the most advantaged areas were achieving developmental tasks compared to 69% of those in the least advantaged areas.

A synopsis of all findings is found in a maternal child health dashboard found here; a summary of key trends is presented below.

Demographic Trends

For more information on demographics in the Region see here

The boundaries of Saskatoon Health Region include more than 100 cities, towns, villages, rural municipalities and four First Nations in both Treaty 6 and Treaty 4 Territories (Whitecap Dakota, Beardy's & Okemasis Willow Cree, One Arrow and Fishing Lake). The 2016 population of 360,314 is expected to increase to 418,000 by 2030. The main contributors to population growth are immigration from within and outside Canada and birth rates.

Maternal and Child Population – in 2016, there were almost 76,000 females of child bearing years (age 15 to 44 years) of which about 18,000 live in rural areas of our Region. The population is *increasing* from almost 68,000 in 2012.

The number of children 6 years of age and younger is also *increasing*. Of the 34,000 children in the Region, nearly 25,000 live in the city of Saskatoon.

Birth Rates – birth rates in the Region (13.5 per 1000 population) and Saskatchewan are mostly *unchanged* since 2012 and remain higher than the Canadian average. Over 4,800 births were seen in 2016 among mothers living in our Region with rates highest in the rural Saskatoon and Rosthern areas.

[6] As measured by the Early Development Instrument; See Neudorf et al. (2012). Healthy children, healthy families, healthy communities: A report of the Chief Medical Health officer on the health status and development of young children in the Saskatoon Health Region. https://www.saskatoonhealthregion.ca/locations_services/Services/Health-Observatory/Documents/Reports-Publications/Healthy_Families_Full_Report_2012.pdf

[7] See CommunityView Collaboration http://www.communityview.ca/pdfs/2016_shr_series9_aboutthedata.pdf for detailed definitions of these indicators.

Maternal Health

Maternal age – Fertility rates remain highest among women between 25 and 34 years old, and rates for women over 35 have been steadily increasing since 2010. Teen birth rates and pregnancy rates remain higher than the Canadian average, though they have been *decreasing* especially in the city of Saskatoon and remain lower than the Saskatchewan rate.

Prenatal care - Nearly all mothers (98.3%) received prenatal care, but only about half (56.1%) ever attended a prenatal course during pregnancy.

Smoking - As smoking rates have decreased for women in the Region among all age groups, maternal smoking rates are similarly *decreasing*. About one in six (16.4%) women of child bearing years were current smokers in 2013-14, compared to about one in nine (11.8%) new mothers who reported smoking in the same years.

Alcohol and substance use – Almost 30% of women age 15 to 44 years reported heavy drinking on one occasion at least once per month in 2013/14. Approximately 3% of new mothers report drinking alcohol or using other substances during pregnancy; *unchanged* and consistent with the rate reported for Saskatchewan.

Postpartum depression - One in five mothers (22.4%) were reported to be at risk of postpartum depression between the years 2013 and 2015.[8] This is *higher* than previous estimates of postpartum (8.1%) depression in the Region as reported in 2012,[9] but similar to other estimates found in the literature.[10]

Low income - About one in eight women in the Region live with low income; this is higher than rates for men but lower than Saskatchewan and Canadian women. About one in nine new mothers reported financial difficulties (11.1% in 2016), *unchanged* since 2012.

Vulnerability - The proportion of mother-baby pairs deemed "vulnerable" based on the In-Hospital Birth Questionnaire (IHBQ) was 22.0% in 2016/17, slightly lower than the provincial average (28.3% in 2014/15). The rate has been *decreasing* since 2010-11 (31.9%).

Child Health

Infant mortality - Every year, between 20 and 30 Regional infants under one year of age die. The infant mortality rate in the Region (5.5 per 1,000 live births) has been *higher* than the Canadian rate since 2010.

Birth weight - About 6% of infants (291) born to mothers from the Region were less than 2,500 grams (low birth weight) and about 2% (96) were over 4,500 grams (high birth weight). In recent years, the rate of low birthweight has been *increasing* while the rate of high birthweight has been *stable*, both along with Saskatchewan and Canadian rates.

Immunization – Measles vaccine coverage (two doses administered before two years of age) rates for the Region in 2015 was 77%; coverage rates are slightly *increasing* in recent years (76.2% in 2012).

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[8] Note that public health nurses in the Region asked those mothers who they thought may be at risk of depression to fill out a full screening tool. This means that the rates reported here will likely be over estimated compared to rates of postpartum depression found elsewhere.

[9] Neudorf et al. (2012). Healthy children, healthy families, healthy communities: A report of the Chief Medical Health officer on the health status and development of young children in the Saskatoon Health Region. https://www.saskatoonhealthregion.ca/locations_services/Services/Health-Observatory/Documents/Reports-Publications/Healthy_Families_Full_Report_2012.pdf

[10] Mothers First Working Group (2010). MotherFirst: Maternal Mental Health Strategy: Building Capacity in Saskatchewan. Saskatoon. http://www.feelingsinpregnancy.ca/MotherFirst.pdf

Breastfeeding - Almost half (45%) of all mothers breastfed exclusively when their babies were two weeks of age. Breastfeeding rates are *increasing*, as about one in five (21.1%) mothers exclusively breastfed their babies to six months in 2016 compared to one in six (16.7%) in 2013.

Oral health - Only 38.7% of six year old children were cavity free in the Region in 2016, *decreasing* in recent years (42.6% in 2012) and falling short of the national standard of 55%.

Hospitalization - The hospitalization rates for infants less than one year old and children from one to six years of age has remained essentially *unchanged* over the last couple of years. For infants less than 1 year old, jaundice, respiratory conditions, and issues related to prematurity were the leading causes of hospitalization. For 1 to 6 year olds, respiratory conditions and injuries, especially falls, were the leading causes of hospitalization.

Health Inequities Persist

Previous reports in the ***Better Health for All Series*** highlight very large gaps in health outcomes between people living in the most and least advantaged areas of Saskatoon.[11] In this report, we identify three groups that generally had worse maternal and child health outcomes.

For more information on Health Equity see our Better Health for All Series 3: Advancing Health Equity in Health Care— What Is Health Equity?

Young mothers - we found striking differences in health status for nearly every indicator between younger (less than 20 years) and older mothers. Younger mothers were more likely to be considered vulnerable (based on the IHBQ screening scores), report financial difficulties, and be at risk for post-partum depression. Younger women were more likely to smoke and drink alcohol heavily, and younger mothers were more likely to report smoking and use alcohol or other substances during pregnancy. Compared to older mothers, younger mothers were less likely to receive prenatal care or attend prenatal courses. Infants born to younger mothers were more likely to be born with low birthweight and less likely to be breastfed.

People living in the least advantaged areas of Saskatoon – Many of the inequities that exist for younger mothers are similar to those observed for the least advantaged areas. For example, inequities existed between mothers living in the least and most advantaged areas of Saskatoon for prenatal care, vulnerability (based on the IHBQ screening scores), financial difficulties, maternal smoking, alcohol and substance use, low birth weight, immunization, breastfeeding, oral health, and readiness to learn in the primary grades. As well, teen pregnancy rates were six times higher in the least advantaged areas of Saskatoon.

Rural and urban differences – When rural areas were compared to the city of Saskatoon, mothers' reports of financial difficulty and alcohol and substance use were higher in Saskatoon, while rates of breastfeeding were lower. For many indicators (vulnerability based on the IHBQ, financial difficulty, smoking, alcohol and substance use, and readiness to learn) those living in Rosthern and area had worse health status than mothers and children living in other parts of the Region.

[11] Deprivation in Saskatoon was identified using an index of six socioeconomic variables (income, education, employment, marital status, single-parent families, and living alone). The index divides Saskatoon into five categories ranging from highest to lowest deprivation and each area contains approximately one fifth of the population. See http://www.communityview.ca/pdfs/2014_shr_phase3_deprivationindexsummary.pdf for more information.

What Has Been Done to Create Better Conditions and Better Outcomes?

Our 2012 report involved data gathering and consultations with key stakeholders. For this current release, we again consulted with community to understand what has changed since that time: what actions have been taken, what issues are emerging, and what still needs to be done. Below is a summary of some key findings.

Federally, the Truth and Reconciliation Commission (TRC) released its report in 2015 and called for a series of actions, some of which touch maternal and child wellness. Specifically it called for the establishment of measurable goals to close the gap in health outcomes for infant mortality, maternal health, birth rates, and other infant and child health issues.[12] Saskatoon Health Region's responses to the TRC's Calls to Action include: cultural competency trainings for existing and all new staff; a Regional position statement on health equity; expanded First Nations and Métis Health Services workforce; and a flag raising event. The Region is also a member of Reconciliation Saskatoon along with over 58 groups apart of this collaborative. We acknowledge, however, that we have more work to do. In response to an external review of the experience of Aboriginal women who underwent tubal ligation procedures in Saskatoon hospitals, the Region issued an apology, acknowledged that racism exists within the health care system and committed to following the direction of the reports' recommendations to move forward to truly start the healing that needs to occur. As we move forward to transition to a single Saskatchewan Health Authority, the Saskatchewan Advisory Panel on Health System Structure is engaging with Indigenous leaders and communities to help inform how best to address First Nations and Métis health needs in a culturally responsive and respectful manner.

Provincially, in May, 2016, we were pleased to see that the province of Saskatchewan released an Early Years Strategy.[13] The Strategy lays out indicators and the related initiatives for maternal and child health indicators to improve. One of the key targets was for 90% of children leaving kindergarten being ready for learning in the primary grades, and progress is being made towards that goal. Other key areas of progress provincially have been the expansion of the Maternal Wellness Program offered through HealthLine 811, development of 90 child care spaces in joint use schools in Warman, Martensville, Saskatoon and Regina, and the implementation of Early Years Family Resource Centres across the province. The Jim Pattison Children's Hospital of Saskatchewan is slated to open in 2019 in Saskatoon, and planning is underway to meet the short- and long-term health, education and social needs of children and families across Saskatchewan who will utilize its services. Saskatoon is also the future home of the Children's Discovery Museum and the Remai Modern art gallery which will provide opportunities for recreation, creativity, play, and social connection by providing a welcoming environment for people of all ages. More broadly, the province also released a Poverty Reduction Strategy[14] in 2015 that spoke to the need for increased supports for early child development.

Locally, the Saskatoon Early Years Partnership was formed, made up of community groups involved in maternal and child health services including active participation by Saskatoon Health Region. The Partnership engaged service providers to develop a map of all maternal and child services in the city and identify gaps, efficiencies and opportunities for collaboration. The Partnership also created a series of videos that highlight the major challenges faced by parents: lack of time, support and choice. The Partnership is working to include voices of clients in this work and collaborate with rural service providers through the Rural Early Years Coalition (REYC).

[12] Truth and Reconciliation Commission of Canada: Calls to Action. (2015). Winnipeg, MB. http://www.trc.ca/websites/trcinstitution/File/2015/Findings/Calls_to_Action_English2.pdf
[13] Government of Saskatchewan. Saskatchewan's Early Years Plan 2016-2020. (2016). http://publications.gov.sk.ca/documents/11/89572-Early-Years-Plan-Final-2016-2020.pdf
[14] Government of Saskatchewan. Taking action on poverty: The Saskatchewan Poverty Reduction Strategy. http://publications.gov.sk.ca/documents/17/87896-Poverty-Reduction-Strategy.pdf

Improving Maternal and Infant Health – A Call to Action for Saskatoon Health Region and its Partners

Broad and continued support is needed to improve maternal and child health in our communities:

1. Respect and protect children's rights.

Work with the Office of the Advocate for Children and Youth to provide a voice and promote the best interests of children.

Rationale: Practically every area of policy affects children to some degree, and many changes in society are having a disproportionate, and often negative, impact on children. Because children's views and voices are rarely heard or rarely considered in decision making processes, our collective actions, or inactions, impact children more unfairly than any other group in society. And because children are growing and developing, and because they will inherit the long-term consequences of today's decisions, children are especially vulnerable to poverty and to inadequate education, health care, nutrition, community services, protection, safe housing, clean water and environmental pollution. Policymaking that fails to take children into account has a negative impact on the future of all members of society.

Canada's ratification of the United Nations Convention on the Rights of the Child in 1991 affirmed that every child has basic rights, and without distinction or discrimination, is entitled to protection against all forms of neglect, cruelty and exploitation; provision for education, nutrition, housing, recreation and health care services; and participation in decision making that includes listening to children and respecting their evolving capacities. The Convention includes specific protections and provisions for vulnerable populations such as Indigenous children, as does the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) endorsed by Canada in 2016.

The Office of the Advocate for Children and Youth created the Saskatchewan *Children and Youth First* Principles in order to consolidate the 54 articles of the United Nations *Convention on the Rights of the Child* into a more easily applied and practical tool for the public, decision makers and service providers to understand and use. In addition, in response to the over-representation of First Nations children and youth in child welfare care and to the Truth and Reconciliation Commission of Canada's Calls to Action, it has adopted Touchstones of Hope for Indigenous Children, Youth and Families as principles to Guide Reconciliation in Child Welfare.

2. Make investing in children a priority.

Implement comprehensive strategies such as the Saskatchewan Poverty Reduction Strategy and Early Years Plan in their entirety with targets, timelines and accountability.

Rationale: Tough financial circumstances require tough decisions. In austerity contexts, return on investment (ROI) calculations can offer reassurance on the economic value of public investments in this sector. The Canadian Public Health Association (CPHA) estimates that "*every $1 spent on early childhood health and development saves up to $9 in future spending on health, social and justice services. Return on investment: 800%.*"[15] Our society cannot afford less than the optimal development of every child; the time to invest is now.

The quality of early childhood development has a strong influence on children's eventual contribution, or cost, to society over the course of their lives. The data in this report show that disparities by

[15] Canadian Public Health Association Canadian Coalition for Public Health in the 21st Century and the Canadian Network of Public Health Associations. (2013). Public Health: A return on investment. https://www.youtube.com/watch?v=TVZxtuZhN_M

socioeconomic advantage that appear later in life as disparities in maternal health status are present even in the earliest years. For example, a larger proportion of children in least advantaged neighbourhoods are vulnerable on school readiness scores and other educational outcomes compared to other children.[16,17] Inequities in funding for First Nations children's health and education are longstanding and well documented,[18] as are the high numbers of First Nations children in child welfare care due, in part, to the unavailability of equitable family services. We can interrupt intergenerational inequities by focusing on the needs of children first in matters of jurisdictional dispute (Jordan's Principle), providing economic and life opportunities for young people in urban and rural areas, and supporting young mothers to ensure no child grows up in poverty.

3. Strengthen and support high quality early childhood education and care.

Connect families to parenting programs, early learning and Prekindergarten opportunities.

Rationale: All families require high quality, affordable, accessible and developmentally and culturally appropriate educational and child care options that meet their needs and preferences. The transition to parenthood can be a challenge; many mothers are not prepared for the intensity of caring for a newborn, reporting feelings of anxiety, exhaustion and isolation. Home visits from health visitors, such as offered by Healthy Mother Healthy Baby and KidsFirst programs, are valued by new mothers and are associated with a clinical reduction in symptoms of postnatal depression and increased confidence in parenting skills. Locally-led, evidence-based programs support positive parenting skills and styles, and provide families with an opportunity to develop social networks and supports. Research has shown that high quality early childhood programming benefits children's intellectual development, social skills and health, and can close the gap in children's readiness to learn.[19] Prekindergarten (PreK) programs in the province are aimed at vulnerable families of three and four year olds. PreK programs have the potential to help reach the target of 90% of students leaving kindergarten ready to learn.

4. Continue to monitor and report on children's health.

Expand use and enhance data collected by the In Hospital Birth Questionnaire (IHBQ) to develop programs and deliver services.

Rationale: The IHBQ is a valuable set of data gathered from mothers at the hospital bed shortly after birth. The information from this questionnaire is used by programs in Saskatoon Health Region to guide service provision for those most in need. While administration rates remain relatively high in the Saskatoon area (approximately 90%), other parts of the province have lower administration rates and therefore cannot fully use the information contained. Future IHBQ enhancements could include questions about maternal adverse childhood experiences (ACE), as evidence shows that a mother's early history affects both her reproductive, physical and mental health and her infant's health and development through a cumulative "cascade of risks" that transfers from one generation to the next.[20] Health care providers who administer or use the IHBQ should protect the safety and privacy of their clients when talking about the

[16] Santos R, Brownell M, Ekuma O, Mayer T, Soodeen R. (2012). The Early Development Instrument (EDI) in Manitoba: Linking Socioeconomic Adversity and Biological Vulnerability at Birth to Children's Outcomes at Age 5. Winnipeg, MB: Manitoba Centre for Health Policy.
[17] Ferguson HB, Bovaird S, Mueller M. (2007). The impact of poverty on educational outcomes for children. Pediatrics and Child Health, 12;8 (701-706).
[18] First Nations Caring Society. https://fncaringsociety.com/
[19] Community Guide to Preventive Services. (2015). https://www.thecommunityguide.org/sites/default/files/assets/Health-Equity-Center-Based-Early-Childhood-Education_3.pdf
[20] Madigan S, Wade M, Plamondon A, Maguire JL, Jenkins JM. (2017.) Maternal Adverse Childhood Experience and Infant Health: Biomedical and Psychosocial Risks as Intermediary Mechanisms. *The Journal of Pediatrics*. DOI: 10.1016/j.jpeds.2017.04.052

impacts of early adversity and making appropriate referrals for additional support. With client consent, information should be shared among service providers to coordinate a team-based approach that promotes physical, mental, emotional, psychological, social and spiritual wellness, through consistent and familiar relationships.

Continue to monitor and report readiness to learn with the Early Years Evaluation (EYE) and Early Development Index (EDI).

Rationale: One of the key measures of population health is how well children are doing developmentally as they enter the education system.[21] In Saskatchewan, the Early Years Evaluation (EYE) instrument is administered every year across the province to Kindergarten children to assess their readiness to learn in the primary grades. This information at a population level is invaluable as it shows where kids are thriving and where kids need more supports. The provincial government, similar to the Saskatoon Early Years Partnership before it, has set an ambitious target of 90% of children ready for learning in the primary grades by 2020. We will only know if this target is achieved if the EYE continues to be administered. The data collected can also be used for benchmarking and quality improvement efforts in health, education and other sectors in Saskatchewan.

Across Canada, the Early Development Instrument (EDI) has been implemented in every province and territory with the exception of Nunavut. It is a population-level research tool, which means that when implemented for all children in kindergarten classrooms, it measures developmental change or trends in populations of children at different levels of geography (e.g., neighbourhood, regional and provincial). Last collected in Saskatchewan in 2012/2013, the EDI should continue to be collected to contribute data that enables assessment and reporting of children's readiness to learn at a national level.

5. Continue a wide public health approach to support breastfeeding mothers.

Promote breastfeeding along with the conditions conducive to its success.

Rationale: Breastmilk is recognized as the optimal food for babies, but the decision to breastfeed is personal - every woman who wants to breastfeed should be supported to do so, and no mother should feel pressured or ashamed of her choice. Although most women start to breastfeed when their infants are born, many women encounter numerous barriers to breastfeeding, many of which occur at the social or cultural level and are therefore beyond their control. Because many women also experience enormous pressure to continue breastfeeding despite these barriers, early breastfeeding cessation can be associated with feelings of guilt and regret and even post-natal depression. The Baby-Friendly Hospital Initiative was initiated by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in 1991 to protect, support and promote breastfeeding; it is supported by Saskatoon Health Region policy, and facilities within the Region are encouraged to review BFI self-appraisals and work towards areas that have been identified as requiring more information or education. Breastfeeding in all public spaces is protected under the Human Rights Commission of Saskatchewan and of Canada. Local businesses can take an active role in protecting mothers' rights to breastfeed by signing the Breastfeeding Protection Pledge created by Saskatoon Breastfeeding Matters. Public messages and attitudes that promote acceptance and normalization of breastfeeding can help mothers feel socially supported, as do paid parental leave and polices that recognize their value and support mothers to return gradually to work. At an individual level, feeding choices can be supported through good quality prenatal and parenting education for mothers and fathers that includes individual one-to-one and peer relationships.

[21] Canadian Institute for Health Information. Children vulnerable in areas of early development. Offord Centre, McMaster University. https://yourhealthsystem.cihi.ca/hsp/inbrief;jsessionid=qVWc0lO4Wc4hs6FsJzvelFze.yhs?lang=en#!/indicators/013/children-vulnerable-in-areas-of-early-development/;mapC1;mapLevel2;/

6. Reduce financial barriers to care for expectant mothers and young children.

Reduce or eliminate costs of prenatal courses to increase attendance rates.

Rationale: Prenatal care has been shown to improve infant health outcomes.[22] Prenatal care is universally available to women through primary care providers, but financial barriers to access include time away from work, transportation and cost of care for other children. Models of prenatal care that offer evening and group sessions or provide incentives to address financial barriers have been shown to increase attendance rates for vulnerable women.[23] Currently prenatal education is available in our Region both in person group classes as well as on-line versions for those living in rural areas or who can otherwise not make it to a class. There is a $50 charge per couple to enroll in prenatal class, and though this fee is waived for those who cannot afford it, making it free for all would eliminate any financial barrier and stigma that might exist.

Institute a universal and multicomponent oral health strategy for pregnant women and children.

Rationale: Fluoridation of drinking water to optimal levels is a cost-effective community-based preventive strategy for reducing the cost of dental care[24] and should be available to all Saskatoon Health Region communities. Application of fluoride varnish and placing dental sealants on permanent teeth can prevent most of the dental caries in children. Preventive dental work while pregnant is essential to avoid oral infections such as gum disease, which has been linked to preterm birth. Instituting a universal dental care system for pregnant women and children 0 to 18 years could have a number of benefits that extend well beyond dental care to overall better health status and economic savings to the health care system.

7. Improve the quality of maternal and child services.

Engage families and integrate health promotion, protection, and illness and injury prevention efforts across sectors.

Rationale: It is crucial to know how we can best improve services for mothers in the Region and community by hearing from mothers themselves, especially where disparities exist. Alongside universal maternal and child services, more overall and proportionately more for vulnerable populations should be done to address these gaps, including working "upstream" to prevent illness and injury and promote health and wellness. Work is being planned by the Saskatoon Early Years Partnership in conjunction with the Region to engage mothers in developing programs and services that meet their needs and that offer opportunities to develop social networks and supports. Even though a number of sectors and partners deliver services for young children and families, we have to continue to work to make the array of services work together. Concepts such as working intersectorally, reducing barriers, supporting cultural safety and cultural equity, promoting wellness by building on assets and strengths, and using data to track progress are all ideas that align with Saskatchewan's Early Years Plan.

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[22] Alexander, G. R., & Kotelchuck, M. (2001). Assessing the role and effectiveness of prenatal care: History, challenges, and directions for future research. *Public Health Reports, 116*(4), 306-316.

[23] *Till SR, Everetts D, & Haas DM. (2015). Incentives for increasing prenatal care use by women in order to improve maternal and neonatal outcomes. Cochrane Database of Systematic Reviews, 12, CD009916.*

[24] Canadian Public Health Association Canadian Coalition for Public Health in the 21st Century and the Canadian Network of Public Health Associations. (2013). Public Health: A return on investment. https://www.youtube.com/watch?v=TVZxtuZhN_M

Learn More about the Better Health for All Series

We invite you to consider the information that we have presented in this message and through CommunityView. It is our hope that you will use the *Better Health for All* series to inform the decisions you make towards advancing the vision of a community in which everyone has the opportunity to live healthy lives. Available reports include:

- ✓ **Series 1, March 26, 2014**
  Our Population – A high level look at who lives in our Region.

- ✓ **Series 2, May 21, 2014**
  Immunization – Examines a selected set of immunization indicators to report on progress and gaps in coverage rates. Proposes further action to ensure equal opportunities for access to immunization.

- ✓ **Series 3, June 23, 2014**
  Advancing Health Equity in Health Care – Examines a range of health inequalities and proposes health care system action to create equal opportunities for all to achieve better health.

- ✓ **Series 4, July 28, 2014**
  Bloodborne and Sexually Transmitted Infections – Focuses on communicable disease such as human immunodeficiency virus (HIV), and sexually transmitted infections (STIs).

- ✓ **Series 5, Sept 19, 2014**
  HIV – Focuses on HIV in particular and the role of the health sector in reducing its occurrence.

- ✓ **Series 6, March 25, 2015**
  Health Behaviours and Risk Conditions – Focuses on the foods we eat, physical activity levels, tobacco and alcohol use, stress and mental health and the role of the health sector in creating environments that aim to support everyone in achieving their full health potential.

- ✓ **Series 7, May 18, 2016**
  Unintentional Injuries – Focuses on the injuries such as transportation and falls and provides first-hand accounts of injuries from survivors.

- ✓ **Series 8, Dec 19, 2016**
  Reportable Disease – Provides a snapshot of the Health Region's rates of other reportable disease infections.

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- Saskatoon Tribal Council
- Greater Saskatoon Catholic Schools
- Horizon School Division
- Prairie Spirit School Division
- Saskatoon Public Schools

Within Saskatoon Health Region:

- Population and Public Health including Public Health Observatory, Healthy Families, Kids First, Healthy Mother Healthy Baby, Oral Health Program and Health Promotion
- Child Health Services
- Maternal Services
- Primary Health

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