# **ACHIEVABLE GOALS, INFINITE REWARDS**

# **BREASTFEEDING IN OREGON: 2017**

# **TOPICS INCLUDE:**

- Current Successes
- Key Public Health Strategy
- Costs of Not Supporting Breastfeeding
- Existing Barriers
- Disparities Persist
- <u>CDC Breastfeeding Report Card</u>
- Actions: State and Local
- References

# AIM

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Breastfeeding supports lifelong health of children and their mothers and is one of the highest impact interventions providing benefits for children, women and society.<sup>1</sup> Increasing rates of exclusive breastfeeding is one of the most powerful interventions policy makers have to improve population health. From birth through the first year, breastfeeding's unparalleled brain-building capabilities gives babies the healthiest start to life<sup>2</sup>—it is a child's first inoculation against illness and risk for developing chronic disease leading to premature death. Breastfeeding reduces infant morbidity and mortality, is consistently associated with higher performance on intelligence tests among children and adolescents across all income levels<sup>2, 3</sup> and improves school achievement and boosts adult earning. Breastfeeding contributes to equity by giving all children a nutritional head start for success in life.<sup>1</sup>

# BACKGROUND

Breast milk is the biological norm for feeding babies. In addition to providing the essential building blocks for brain-development, its nutritional and immunological properties unique to breast milk help protect babies from infection and illness. This protection is key to reducing infant mortality, SIDS deaths, respiratory infections and necrotizing enterocolitis (NEC), a condition with very high medical costs that mainly affects premature babies when fed breast milk substitutes.<sup>2, 3, 4</sup> Longer duration of breastfeeding is associated with lower risk for overweight, obesity and type-2 diabetes later in life. Mothers benefit from reduced risk for ovarian cancer, breast cancer, heart disease and postpartum depression.<sup>2,3,4</sup>

Breast milk itself, as well as the experience of breastfeeding, contribute to healthy development-the nutritional quality and the quality of experiences and interactions strengthen baby's sensory and emotional circuitry. Breastfeeding facilitates a naturally responsive style of meeting babies' needs.<sup>2</sup>

# BEHIND THE CURRENT SUCCESS



Today's WIC mothers are breastfeeding at much higher rates than 20 years ago, receiving extensive support for breastfeeding initiation and continuation.<sup>11</sup> Oregon WIC has taken multiple policy steps to align daily clinic operations and implement evidence-based strategies to protect and support breastfeeding:<sup>10</sup>

#### **PROFESSIONAL LACTATION SUPPORT**

Currently 19 local WIC staff have obtained the International Board Certified Lactation credential (IBCLC) with financial and technical assistance from state WIC.

#### **PRENATAL EDUCATION**

Each month, WIC clinics statewide provide over 50 free prenatal breastfeeding preparation classes, giving families support for breastfeeding statewide.

#### PEER SUPPORT

Breastfeeding peer counselors provide additional support in 9 local WIC agencies; peer support is an evidence-based strategy that empowers women in their belief in their ability to breastfeed.<sup>12</sup>

#### **HEALTH CARE PROVIDER EDUCATION**

The state WIC staff teach an in-person Breastfeeding Basics twice a year that is open to staff from WIC, Head Start, public health nursing programs and hospitals.

### HEALTHY FOODS FOR BREASTFEEDING WOMEN

Women who exclusively breastfeed their infants receive additional foods in a food prescription or benefit designed to meet their nutritional needs.

#### **BREAST PUMPS**

Local WIC agencies can provide manual, personal, double and hospital-grade breast pumps to WIC participants who do not qualify for a pump through their insurer.

# A KEY PUBLIC HEALTH STRATEGY

Breastfeeding is a key strategy to improve public health and supports the Triple Aim of improving quality of care, improving the health of the community and reducing the cost of healthcare. The *Surgeon General's Call to Action to Support Breastfeeding* states that, "Rarely are we given the chance to make such a profound and lasting difference in the lives of so many."<sup>4</sup> Breastfeeding targets are identified in the U.S. *Healthy People 2020*<sup>5</sup> and *Global Nutrition Targets 2025*.<sup>6</sup> The Centers for Disease Control and Prevention has identified increasing the 6 month exclusive breastfeeding rate as a "winnable battle," a public health priority with large-scale impact on health.<sup>7</sup>

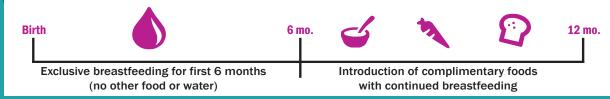
Despite being a leader in breastfeeding rates as compared to other states, overall **duration and exclusivity rates fall short of health organization recommendations** for optimal breastfeeding [in Oregon].

Oregon's health care transformation is shifting the focus to prevention. Modernization efforts address Oregon's capacity to provide foundational public health services in order to achieve improved health for all community members.8 In the Action Plan for Health Framework, breastfeeding fits in the context of addressing health outcomes, the social determinants of health and health equity. Breastfeeding is identified as a strategy in the State Health Improvement Plan (SHIP) under the priority 'Slow the increase of Obesity,' and breastfeeding strategies are in all 3 focus areas: population, health equity and health systems.8 Oregon's Title V program and community partners identified breastfeeding as a priority with dedicated targeted funding.9 Oregon WIC has long been a national leader in supporting breastfeeding, and Oregon has some of the highest breastfeeding rates in the nation.<sup>10</sup> Lower income women in Oregon start and continue breastfeeding at a rate comparable to the general population for some measures and exceed Healthy People 2020 goals.<sup>10</sup> Despite being a leader in breastfeeding rates as compared to other states, overall duration and exclusivity rates fall short of health organization recommendations for optimal breastfeeding.

# THE COSTS TO THE U.S. BY NOT SUPPORTING BREASTFEEDING

Protection, promotion and support of breastfeeding provides short- and long-term health and economic advantages to children, women and society<sup>1</sup>. Suboptimal breastfeeding, particularly low rates of exclusive breastfeeding increase health costs for both children and their mothers.

# **OPTIMAL BREASTFEEDING RECOMMENDATIONS**



# Gap between medical breastfeeding recommendations and current suboptimal breastfeeding rates result in significant excess costs and preventable deaths.

# **FOR WOMEN**

If 90% of mothers are supported in following optimal breastfeeding recommendations, the U.S. would save

# \$18.3 billion

in health care costs and can prevent

# PREVENTABLE DISEASES

- Breast cancer
- Hypertension
- Myocardial infarction (heart attack)
- Type 2 diabetes mellitus
- Premenopausal
  ovarian cancer

FOR CHILDREN

If 90% of mothers are supported in following optimal breastfeeding recommendations, the U.S.would save

**\$13** billion

in health care costs and can prevent



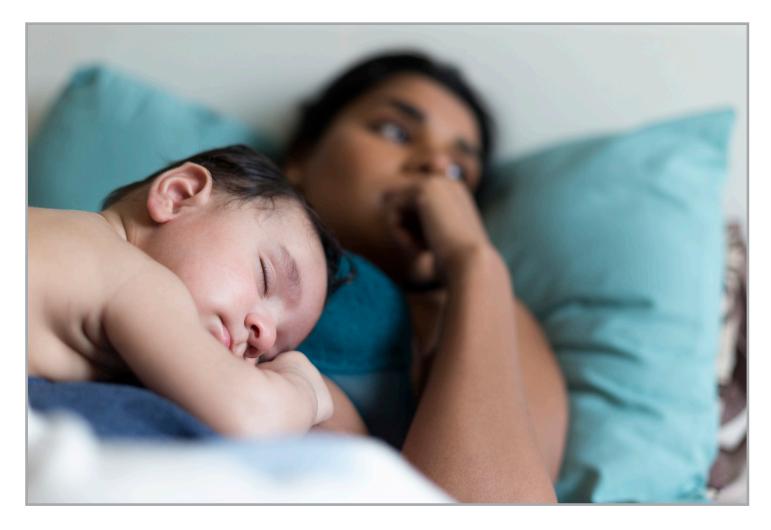


Premature deaths per vear<sup>13</sup>

# PREVENTABLE DISEASES

- Otitis media
- Gastroenteritis
- Lower resp. tract infections
- Atopic dermatitis
- SIDS
- Necrotizing enterocolitis
- Childhood asthma
- Childhood leukemia
- Type 1 diabetes mellitus
- Childhood obesity

These cost savings are even greater when taking into consideration that diseases prevented by breastfeeding are more prevalent among populations experiencing disparities.<sup>15</sup>



# **EXISTING BARRIERS**

Women who want to breastfeed need stronger support from their families, communities, health care providers and employers.<sup>1,2,4,15</sup> There are multiple barriers to improving breastfeeding rates, a major one being lack of access to a hospital or birthing center that is "Baby-Friendly,"<sup>2,4,15</sup> a certification that ensures that mothers in health facilities are optimally supported to breastfeed and bond with their baby.<sup>16</sup> In Oregon only 32.4% of births occur in Baby-Friendly facilities.<sup>15</sup> Since 2007 Oregon hospitals have improved in the majority of "Baby-Friendly" steps, from 74% in 2007 to 86% in 2015.<sup>17</sup> In 2015, 14% of hospitals reported routinely feeding infant formula or other liquids to healthy, breastfed newborns when there was no medical reason or parental consent to do so.<sup>15</sup> Aggressive and inappropriate marketing of breast milk substitutes (infant formula) influences not only families but also health care workers.<sup>1,4</sup> Nonetheless, hospital practices are improving. Continued areas for improvement in Oregon are having a hospital breastfeeding policy, not giving supplemental feedings to breastfeed infants, staff training, and hospitals providing appropriate discharge planning.<sup>17</sup>

Women may not have access to breastfeeding counselors, lactation consultants and other healthcare professionals trained in breastfeeding support.<sup>2</sup> The U.S. Preventive Services Task Force (USPSTF) recommends providing interventions during pregnancy and after birth to support breastfeeding as there is convincing evidence that breastfeeding provides substantial health benefits for children and adequate evidence that breastfeeding provides moderate health benefits for women.<sup>18</sup> Oregon has 8.27 International Board Certified Lactation Consultants (IBCLCs)/ 1000 births.<sup>15</sup> Legislation passed during the 2017 Oregon legislative session provides state licensure for IBCLCs beginning January 1, 2018. This will result in increased access to lactation consultants for all Oregon women who need medical management of breastfeeding initiation by as much as 2.5 percentage points; the effect was larger for populations that are less-educated, unmarried or non-Hispanic black.<sup>19</sup> The differential impacts suggest that coverage of lactation services can have a positive increase in breastfeeding rates among groups that have historically had lower breastfeeding rates.<sup>19</sup> *Strategies for Providing Lactation Services* outlines evidence-based strategies that Coordinated Care

Organizations (CCOs) and healthcare providers can implement to meet mandated coverage requirements to support breastfeeding women.<sup>12</sup>

Women who return to work while still breastfeeding must balance breastfeeding and the demands of employment.<sup>2</sup> They may face inflexibility in their work hours and locations, or a lack of privacy for breastfeeding or expressing milk.4 Oregon and federal lactation accommodation laws aim to provide the necessary support for women who have the need to express milk at work. Also, child care providers are essential in helping employed women continue to breastfeed after returning to work by having a breastfeeding-friendly environment.<sup>4</sup> Another major barrier is lack of paid maternity leave.<sup>1,2,4</sup> Maternity leave increases both breastfeeding initiation and duration.4, 19 Lack of access to paid leave means that women return to work just a few weeks after giving birth, putting their ability to breastfeed at risk.<sup>2</sup>

# DISPARITIES PERSIST IN BREASTFEEDING OPPORTUNITIES AND HEALTH OUTCOMES

Disparities in breastfeeding rates persist among both low income women and women of color, contributing to an increase in poor health outcomes and premature deaths and resulting in persistent inequality later in life.<sup>1,2</sup>

One study found that breastfeeding disparities in the U.S. are most pronounced among non-Hispanic blacks, with an increased risk for SIDS, type 2 diabetes, cardiovascular disease and breast cancer.<sup>20</sup> Additionally black infants have more than twice the deaths of whites attributable to lack of optimal breastfeeding and also had more than three times the rate of NEC.<sup>20</sup>

Breastfeeding provides a unique opportunity to reduce disparities in infant mortality and to disrupt intergenerational cycles of poor health, to ensure all children have an equal opportunity.<sup>2</sup> Disparity in breastfeeding duration and exclusivity may directly affect economic security<sup>20</sup> and lack of paid leave and hospital maternity care that is not evidencebased disproportionately impact families of color and are a significant barrier to breastfeeding.<sup>21</sup>

# **BABY-FRIENDLY HOSPITALS**

# 10 STEPS TO SUCCESSFUL BREASTFEEDING<sup>16</sup>



Have a written breastfeeding policy that is routinely communicated to all health care staff



Train all health care staff in the skills necessary to implement this policy



Inform all pregnant women about the benefits and management of breastfeeding



Help mothers initiate breastfeeding within one hour of birth



Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants



Give infants no food or drink other than breastmilk, unless medically indicated



Practice rooming in - allow mothers and infants to remain together 24 hours a day



Encourage breastfeeding on demand



Give no pacifiers or artificial nipples to breastfeeding infants



Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center

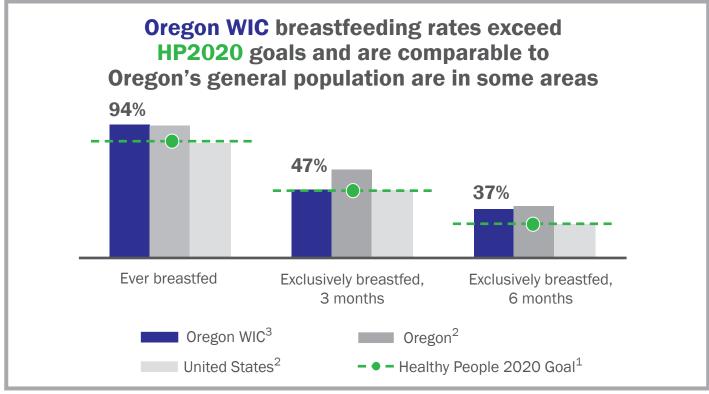
# **STILL ROOM FOR IMPROVEMENT IN OREGON**

Most Oregon women start out breastfeeding (93.2%). The majority of Oregon babies, however, are not breastfed in accordance with the American Academy of Pediatrics (AAP) and World Health Organization (WHO) recommendations that babies be fed only breastmilk for their first 6 months and continue breastfeeding with complementary foods for at least 1 year (at least 2 years and beyond according to WHO).<sup>22, 23</sup> Many women are not able to meet their breastfeeding goals due to an overall lack of support; only 6 in 10 are able to do so for as long as they initially planned.<sup>24</sup>

# THE CDC BREASTFEEDING REPORT CARD <sup>15</sup>

	Oregon	Nation	HP 2020 Goals
Ever Breastfed	93.5%	82.5%	81.9%
Exclusive Breastfeeding at 3 months	62.7%	46.6%	46.2%
Breastfeeding at 6 months	70.0%	55.3%	60.6%
Exclusive Breastfeeding at 6 months	38.3%	24.9%	25.5%
Breastfeeding (any breastmilk) at 1 year	45.4%	33.7%	34.1%
Live Births at Baby Friendly Hospitals	32.4%	18.3%	8.1%
Formula Supplementation of Breastfed Infants within 2 days of birth	14.0%	15.5%	14.2%
mPINC overall score (75% of Oregon birth facilities)	86	79	NA
mPINC sub-scores needing improvement:			
Current staff receive appropriate breastfeeding education	31%	NA	NA
Staff provide appropriate discharge planning	37%		
Breastfeeding policy includes all 10 model policy elements	39%		

CDC's national <u>survey of Maternity Practices in Infant Nutrition and Care (mPINC)</u> is administered every two years to monitor and examine changes in practices over time at all hospitals and birth centers with registered maternity beds in the United States and Territories. Additional information here: <u>www.cdc.gov/breastfeeding/data/nis\_data/index.htm.</u>



1. Healthy People 2020 Goals 2. National Immunization Survey, 2014 cohort 3. Oregon WIC Administrative data, 2016

# **RECOMMENDED STATE AND LOCAL ACTIONS**

Women and their families need improved support so that they are able to breastfeed according to recommendations and their own breastfeeding goals by creating breastfeeding-friendly communities, workplaces, hospitals and healthcare systems.<sup>2, 4, 16</sup>

# STATE PROGRAMS

Create a supportive environment through policy and legislation, supportive regulations and programs such as:

- Support implementation of lactation services and supplies coverage before, during and after pregnancy and throughout the neonatal period
- Support and promote evidencebased maternity care practices such as Baby-Friendly hospitals
- Facilitate linkages between hospitals, local health agencies and community-based resources
- Provide health care provider training to support exclusive breastfeeding
- Support and promote community-based strategies to support exclusive breastfeeding such as peer support programs
- Ensure implementation of lactation accommodation laws to support breastfeeding upon return to work
- Update Oregon child care regulations to address support for breastfeeding families
- Support paid parental leave

# LOCAL HEALTH AGENCIES AND COMMUNITY PARTNERS

# Create a supportive environment through:

- Increase enrollment of WIC-eligible women and babies
- Help CCOs increase access to qualified breastfeeding support and lactation care providers, and increase access to provision of breast pumps
- Promote evidence-based maternity care practices such as Baby-Friendly hospitals
- Support health care provider training
- Ensure strong linkages between hospitals and local public health agencies
- Provide community-based peer support programs that help empower women to succeed in breastfeeding
- Support implementation of lactation accommodation laws for women returning to work
- Promote breastfeeding-friendly child care provider practices
- Address aggressive and inappropriate marketing of breast milk substitutes (infant formula)





# REFERENCES

- 1. Rollins, N.C., Bhandari, N. et al. Why invest, and what it will take to improve breastfeeding practices? The Lancet; 2016; 387: 491-504.
- 2. The First 1,000 Days: Nourishing America's Future. http://thousanddays.org/about/resources/. Accessed 2017.
- 3. Victora, C.G., Aluisio, R.B. et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet.* 2016; 387: 475-490.
- 4. Surgeon General's Call to Action to Support Breastfeeding. <u>https://www.cdc.gov/breastfeeding/promotion/calltoaction.htm</u>. Published 2011. Accessed 2017.
- 5. Healthy People 2020. Retrieved from: https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health/objectives.
- World Health Organization. Global Nutrition Targets 2025: Breastfeeding Policy Brief. WHO/NMH/NHD/14.7. Published 2011. Accessed 2017.
- 7. Centers for Disease Control and Prevention. Winnable Battles. <u>https://www.cdc.gov/winnablebattles/targets/index.html</u>. Accessed 2017.
- 8. Oregon Health Authority, Public Health Division. Public Health Modernization. https://public.health.oregon.gov/About/Pages/index.aspx. Accessed 2017.
- Oregon Health Authority, Public Health Division, Maternal and Child Health Title V Block Grant. <u>https://public.health.oregon.gov/HealthyPeopleFamilies/DataReports/MCHTitleV/Pages/index.aspx</u>. Accessed 2017.
- 10. Oregon Health Authority, Public Health Division, WIC Program. Oregon WIC Breastfeeding Support and Education. https://public.health.oregon.gov/HealthyPeopleFamilies/wic/Documents/hcpt-bf-support-education.pdf. Accessed 2017.
- 11. WIC Infant and Toddler Feeding Practices Study 2: Infant Year Report. https://www.fns.usda.gov/wic/wic-infant-and-toddler-feeding-practices-study-2-infant-year-report. Published 2017.
- 12. Oregon Health Authority, Public Health Division, Breastfeeding. Strategies for Providing Lactation Services: An Evidence-Based Guide for CCOs. <u>https://public.health.oregon.gov/HealthyPeopleFamilies/Babies/Breastfeeding/Documents/strategies-lactation-services.pdf</u>. Published 2016.
- Bartick, M.C. and Reinhold, A. The Burden of Suboptimal Breastfeeding in the United States: A Pediatric Cost Analysis. *Pediatrics*. 2010; 125: e1048-1056.
- 14. Bartick, M.C., Stuebe, A.M., et al. Cost Analysis of Maternal Disease Associated with Suboptimal Breastfeeding. Obstetrics & Gynecology. 2013; 122: 111-119.
- Centers for Disease Control and Prevention. Breastfeeding Report Card. <u>http://www.cdc.gov/breastfeeding/pdf/2016breastfeedingreportcard.pdf</u>. Published 2016. Accessed 2017.
- 16. Baby-Friendly USA. http://www.babyfriendlyusa.org/. Accessed 2017.
- 17. Centers for Disease Control and Prevention. Maternity Practices in Infant Nutrition and Care (mPINC), Oregon Report. https://www.cdc.gov/breastfeeding/data/mpinc/state\_reports.html. Published 2015. Accessed 2017.
- U.S. Preventive Services Task Force. (2016). Primary Care Interventions to Support Breastfeeding. JAMA 316:1688-1693. Retrieved from: <u>http://jamanetwork.com/journals/jama/fullarticle/2571249</u>.
- Kapinos, K.A., Bullinger, L. and Gurley-Calvez T. Lactation Support Services and Breastfeeding Initiation: Evidence from the Affordable Care Act. *Health Serv Res.* 2016;doi:10.1111/1475-6773.12598.
- 20. Bartick, M.C., Jegier, B.J. et al. Disparities in Breastfeeding: Impact on Maternal and Child Health Outcomes and Costs. *J Pediatr*, 2017; 181:49-55.e6.
- 21. Jones, K.M., Power, M.L., Queenan, J.T., Schulkin, J. Racial and Ethnic Disparities in Breastfeeding. Breastfeed Med. 2015; 10:186-196.
- 22. American Academy of Pediatrics. Breastfeeding and the Use of Human Milk. http://pediatrics.aappublications.org/content/pediatrics/129/3/e827.full.pdf. Published 2012. Accessed 2017.
- 23. World Health Organization. (2003). Global Strategy for Infant and Young Child Feeding. http://apps.who.int/iris/bitstream/10665/42590/1/9241562218.pdf.
- 24. Odom E.C., Li R., Scanlon K.S., Perrine C.G., Grummer Strawn L. (2013). Reasons for earlier cessation of breastfeeding. *Pediatrics*, 131(3):e726-32.