

# Breastfeeding

## Science Summary

Breastfeeding is a protective factor for breast cancer, with lower risk associated with longer duration of breastfeeding in most studies. Social and cultural barriers lead to lower rates of breastfeeding for U.S.-born Black babies.

## What the Foundational Documents Say

Overall, our foundational documents agreed that breastfeeding reduces the mother's risk of breast cancer. The AICR's review concluded that there is strong evidence that breastfeeding reduces the risk of both pre-menopausal and post-menopausal breast cancer for the mother. Overall, the data support a 2% decrease in risk for every 5-month increase in breastfeeding duration.<sup>1</sup> The IBCERCC noted that breastfeeding leads to protective physiological changes in the breast.<sup>2</sup>

The IOM report also noted that breastfeeding reduces risk; however, they indicate that breastfeeding does not occur equally among all women. In the U.S., White women are twice as likely to breastfeed as Black women and their cumulative time breastfeeding is longer.<sup>3</sup> CBCRP notes that lesbians are less likely to breastfeed than heterosexual women (who are also more likely to give birth).<sup>4</sup> The structural inequities that underlie these disparities are addressed in our interventions section.

Other foundational documents discuss concerns that chemicals can be found in breast milk, and as a result, chemicals may make their way to the next generation through breast milk. The unique vulnerability of young children to chemical exposures makes this a particular concern, though breast milk is still the healthiest option for infants compared to formula.<sup>5</sup> Three of the documents further note that some chemical exposures may impair lactation.<sup>2,4,6</sup> The Endocrine Society, in particular, notes that the breast is especially sensitive to endocrine-disrupting compounds (EDCs) "because its complex development involves growth, differentiation, secretory activity, and regression, all orchestrated by hormones, growth factors, and stromal factors."<sup>6</sup> For a brief description of the stages of breast development see BCPP's webpage on this subject.<sup>7</sup>

## The Current State of the Evidence

Studies of breastfeeding and breast cancer risk measure breastfeeding in three different ways: duration of breastfeeding, exclusive breastfeeding compared to mixed feeding or formula feeding, and ever versus never breastfeeding. In all cases, the evidence suggests that breastfeeding is protective against breast cancer.

However, in the U.S., Black babies have 20% lower rates of ever being breastfed and of being breastfed at six months. They are half as likely to be breastfed exclusively at six months—14.6% of Black babies are exclusively breastfed at 6 months compared to 26.8% of White babies.<sup>8</sup> Black women may face barriers such as lack of social and cultural acceptance in their communities, inadequate support from health care providers, and unsupportive work environments.<sup>8</sup> For instance, hospital facilities in zip codes with higher than average Black residents had lower rates of five out of the ten recommended Maternity Practices in Infant Nutrition and Care.<sup>8,9</sup> The greatest disparities were found in practices supporting early initiation of breastfeeding, limited use of breastfeeding supplements, and rooming in (allowing mother and child to stay in the same room).<sup>9</sup> While barriers to breastfeeding are common for many mothers, Black mothers have unique or disproportionate barriers. For example, 19.5% of Black mothers reported returning to work as a reason to stop breastfeeding, compared to 8.8% of White mothers.<sup>8</sup>

**Duration of Breastfeeding:** Most recent studies of breastfeeding and breast cancer risk examine the duration of breastfeeding during a woman's lifespan and associated risk. In a meta-analysis of 27 studies including nearly 30,000 cases of breast cancer, the risk of breast cancer was reduced by more than half among women who breastfed the longest compared to those with the shortest time breastfeeding.<sup>10</sup> A case-control study in Tunisia found a significant trend in risk reduction for increasing duration of breastfeeding.<sup>11</sup>

The protective effects of breastfeeding appear to be additive with the risk reduction conferred from having children. The European Code Against Cancer (a set of personal practices to reduce risk) estimates that breast cancer risk is reduced by about 4% for every 12 months of breastfeeding over and above the risk reduction resulting from parity.<sup>12</sup> In one study, the combination of two or more childbirths and breastfeeding for more than 13 months reduced breast cancer risk by 49% compared to a 20% risk reduction among women who had two or more childbirths regardless of breastfeeding duration.<sup>13</sup>

Multiple studies report reduced overall risk of breast cancer among women who breastfed for longer than 12 months. One meta-analysis of 100 studies found that breastfeeding for more than 12 months resulted in roughly 25% lower risk and that breastfeeding for a shorter duration still conferred reduced risk of 7-9%.<sup>14</sup> Another meta-analysis found that breastfeeding for more than 12 months was associated with 28% lower risk, but that breastfeeding for fewer than 12 months conferred no protection.<sup>15</sup>

- **Longer Duration of Breastfeeding:** Studies of very long total duration of breastfeeding have found mixed results. One study reports that breastfeeding for more than 24 months was associated with 69% lower risk,<sup>16</sup> while another study found that breastfeeding for only 1-2 years was protective compared to longer duration.<sup>17</sup>

Yet another study found a non-statistical reduction in risk among women who breastfed for 74-108 months, and 58% lower risk among women whose cumulative duration of breastfeeding exceeded 109 months (9 years).<sup>11</sup> One study found a 78% decreased risk of luminal B breast cancer among women who breastfed for less than 12 months compared to those who did not breastfeed, but more than doubled risk of Luminal A breast cancer among women who breastfed for more than 12 months.<sup>18</sup>

- **Age/Menopausal Status:** One study found that breastfeeding for 1-12 months reduced the risk of breast cancer among pre-menopausal women but not post-menopausal women.<sup>13</sup> Another study found a non-significant reduced risk of post-menopausal breast cancer among those who started to breastfeed between ages 20-24 and took HRT (as conjugated equine estrogen).

However, there are some inconsistencies in the research. Post-menopausal women who last breastfed after age 35 had 50% higher risk of breast cancer in the Women's Health Initiative study.<sup>19</sup> In a study of Black women, risk was non-significantly lower among those who breastfed, regardless of age or duration.<sup>20</sup>

- **Subtypes:** Emerging research suggests that breastfeeding may differentially protect against different subtypes. Findings for Luminal A (the most common subtype) have been mixed, with one study finding no effect<sup>18</sup> and one study finding 22% lower risk.<sup>21</sup> For luminal B breast cancer, the first of these studies found a protective effect for breastfeeding up to 12 months but not for breastfeeding for more than 12 months.<sup>18</sup>

For triple-negative breast cancer (TNBC) however, findings are more consistent and striking. Two studies found overall reduced risk of TNBC ranging from 75% to 31% depending on the study and duration of breast cancer.<sup>21,22</sup> This reduced risk may be especially important for Black women who have higher overall incidence of TNBC. One study found 45% lower risk of TNBC among Black women who breastfed for more than 12 months and no effect on TNBC risk among White women.<sup>21</sup> In another study, Black women aged 22-44 who breastfed for six or more months had 82% lower risk of TNBC.<sup>21</sup>

In a small, multi-ethnic pooled case-control study of TNBC in California, younger women who had one or more live births and breastfed for more than 24 months had a non-significant decreased risk of TNBC.<sup>23</sup> In the same study, women who had three or more pregnancies but breastfed for less than 12 months or not at all, had more than double the risk of TNBC compared to women who had 1-2 children and breastfed for more than 12 months. In addition, women who had one or more live births and did not breastfeed had double the risk of TNBC compared to nulliparous women (women who did not give birth).<sup>23</sup> While the study sample was too small to stratify the results by ethnicity, the authors report that the prevalence of TNBC among women with 3 or more live births and little or no breastfeeding, was highest for Latinas (22%), Black women (18%), and Asian-American women (15%), and much lower for White women (6%).<sup>23</sup>

**Exclusive Breastfeeding:** Some studies have measured breastfeeding by comparing exclusive breastfeeding to formula feeding and a mix of formula and breastfeeding. A meta-analysis of 65 studies found that exclusive breastfeeding reduced risk by 28%. Breastfeeding, whether it was exclusive or part of mixed feeding, reduced risk for both pre-menopausal women (14% lower risk) and post-menopausal women (11% lower risk).<sup>24</sup>

A study of women in Japan found no difference in risk among women who fed both breast milk and formula, but 80% increased risk among women who fed their babies only formula.<sup>25</sup> One study in Iran found no differences in exclusive breastfeeding during the first six months of life, compared to mixed feeding.<sup>26</sup> Findings from a cohort study in Mexico suggested that if the rate of exclusive breastfeeding in the first six month increased from 14% to 95%, then the burden of breast cancer cases and economic costs would drop by 14%.<sup>27</sup>

**Ever Versus Never Breastfeeding:** Studies that assess breastfeeding as “ever breastfeeding vs. never breastfeeding” consistently report that ever having breastfed was associated with reduced risk of breast cancer,<sup>10,14,15,28</sup> and that never having breastfed was associated with a higher risk of breast cancer.<sup>29,30</sup> In a meta-analysis, breast cancer risk was 16% lower among White women and 45% lower among Asian women who ever breastfed.<sup>15</sup>

One study found that among Black women who had ever breastfed, risk of ER- breast cancer was 19% lower, but that breastfeeding had no effect on ER+ breast cancer. Further, ER- breast cancer risk increased with each additional birth among women who did not breastfeed. Women who had four or more births and did not breastfeed had 68% higher risk of ER- breast cancer than women who had one birth and breastfed.<sup>31</sup> In a meta-analysis of 27 studies examining ever breastfeeding and risk of breast cancer subtypes, breastfeeding was associated with 10% lower risk of ER- and PR- breast cancer and 22% lower risk of triple-negative breast cancer among parous women, but no change in risk of hormone-receptor positive breast cancers.<sup>32</sup>

One study estimated that 1.7% of breast cancer cases in Australia could be attributed to breastfeeding for fewer than 12 months.<sup>33</sup>

## Nuances and Emerging Considerations

**Breastfeeding in Women with BRCA Mutations:** The reduced risk conferred from breastfeeding may apply to women with BRCA1 mutations. In one study, breastfeeding for at least one year reduced breast cancer risk by 32% and breastfeeding for two more years reduced risk by 49% compared to women with BRCA1 mutations who never breastfed. Risk among women with BRCA2 mutations was not affected by breastfeeding in this study.<sup>34</sup>

**Breastfeeding Infants and Later-Life Risk of Breast Cancer:** In addition to reducing the risk of breast cancer for the mother, one study found that Japanese women born prior to 1950 who were exclusively breastfed had a 43% lower risk of breast cancer.<sup>35</sup>

**Interaction of Having Children and Breastfeeding on Breast Cancer Subtype Risk:** Parity and breastfeeding interact to shape patterns of risk for different breast cancer subtypes. In a small case-control study of Black women, the findings showed intriguing patterns, although none of the findings were statistically significant. Having

children was associated with 18% lower risk of ER+ breast cancer but 92% higher risk of triple-negative breast cancer. However, ever breastfeeding led to 34% lower risk of triple-negative breast cancer, and this pattern held regardless of duration.<sup>36</sup> One hypothesis that the higher rate of triple negative breast cancer in Black women may be associated with lower rates of breastfeeding in this population.

### Take-Home Messages

- Breastfeeding appears to be protective for breast cancer, and longer duration is more protective.
- Women who have children and do not breastfeed may have higher risk for ER- breast cancer and triple-negative breast cancer than women who breastfeed, and higher risk than women who do not have children.

### Breastfeeding: Context for Interventions

The Centers for Disease Control and Prevention reports that in 2015, 87% of infants born in California were ever breastfed, 67% are breastfed to 3 months old and 40% make it to 6 months being breastfed.<sup>37</sup> These rates are all above the national average, but still leave room for improvement.

Table 3. Centers for Disease Control and Prevention Breastfeeding Rates, 2015<sup>37</sup>

	National	California
Ever Breastfed	83.2%	87.2%
Breastfeeding at 6 months	57.6%	66.7%
Breastfeeding at 12 months	35.9%	40.2%
Exclusive breastfeeding through 3 months	46.9%	53%
Exclusive breastfeeding through 6 months	24.9%	26.3%
Breastfed infants receiving formula before 2 days of age	24.9%	26.3%

Table 4. California In-Hospital Breastfeeding (first 24-48 hours after birth) 2017<sup>38</sup>

	Any Breastfeeding (may include formula and breastfeeding)	Exclusive Breastfeeding
<b>CALIFORNIA</b>	<b>93.9%</b>	<b>69.6%</b>
African American	86.7%	61.4%
American Indian	89.5%	70.1%
Asian	95%	63.8%
Multiple Race	93%	76.6%
Pacific Islander	88.8%	65.1%
Other	89.9%	64.6%
White	95.3%	81.1%
Hispanic	93.7%	65.5%

Breastfeeding plays a critical role in protecting both the infant and the mother’s health, yet like many other breast cancer risk factors, disparities exist. One study by BreastfeedLA found that infants of color in the Los Angeles area are less likely than White infants to be exclusively breastfed at hospital discharge,<sup>39</sup> which has a significant impact on establishing breastfeeding.<sup>40</sup>

What hospital a baby was born in can have a significant impact on whether a baby is breastfed or is breastfed exclusively. The BreastfeedLA study also found that hospitals that did not maintain their Baby-Friendly Status (a successful program to promote breastfeeding launched by the World Health Institute and UNICEF in 1991) saw a decrease in breastfeeding rates, especially for infants of color.<sup>39</sup>

Additionally, how babies are born can impact breastfeeding rates. Babies born at full term and babies born to women who had multiple children had the highest initiation rates for breastfeeding. Important to policy is that

babies born vaginally had a 90.2% rate of breastfeeding initiation, whereas birth by cesarean section had an initiation rate of 73.3%.<sup>41</sup> Hospitals and birthing centers need to practice moderation in providing cesarean births, encouraging live births whenever possible.

California is one of the few states in the nation to provide paid family leave. Studies have found that this six-week, partially paid leave of absence can help increase breastfeeding rates. These increases were noted immediately after the policy was put in place. However, the benefits were mostly available to higher-income working women.<sup>42</sup> One study found that California's paid family leave increased the overall duration of breastfeeding by nearly 18 days and the likelihood of breastfeeding for at least six months by 5%.<sup>43</sup>

Another factor that may influence breastfeeding rates is recent information about the presence of environmental chemicals in breast milk, which may discourage mothers from breastfeeding out of concern for their child's health. While these exposures are certainly of concern, the consensus among researchers and health professionals is that any risk from chemical exposure is significantly outweighed by the benefits of breastfeeding, which include decreased risks of infection, allergy, asthma, arthritis, diabetes, obesity, cardiovascular disease, and various cancers in both childhood and adulthood.<sup>44,45,46</sup>

Despite the clear scientific evidence that breastfeeding is one of the best things women can do for their baby's and their own health, many very personal decisions and factors contribute to whether or not women breastfeed. Some women do not give birth, which may be by choice or may not be medically possible. Some women establish breastfeeding very easily, whereas some babies have a very difficult time breastfeeding for a wide variety of reasons. Some women have a hard time producing enough milk, a factor that can be impacted by chemical exposures.<sup>47</sup> Some women very much want to breastfeed, but do not have a job that allows them to, or they try to work and breastfeed and find it nearly impossible to juggle the many responsibilities. An endless number of factors can influence breastfeeding outcomes. These are extremely personal decisions and experiences, and while all efforts to support babies being breastfed should be made, no woman should be made to feel ashamed for how she ultimately feeds her baby.

### **Community Input on Breastfeeding**

Participants in community listening sessions strongly supported eliminating barriers to breastfeeding. Recommendations were related to a wide range of interventions ranging from systemic to specific changes. Women wanted the security of paid family leave for all kinds of workers whether contract workers or formal employees, whether U.S. citizens or undocumented immigrants. This would allow women the stability to breastfeed and bond with their baby in the early weeks, which is a critical window for establishing breastfeeding. Additionally, they called for a wide range of supports in the workplace to continue breastfeeding.

Just as important was addressing the cultural barriers to breastfeeding, which include discrimination against women who breastfeed in public, sexualizing breasts, relationship pressure to focus on the partnership, the time commitment of breastfeeding and other issues.



## Different populations have different breastfeeding support needs

In recent years, breastfeeding rates have improved overall in California; however, the improvements are not equally distributed between different populations. There are unique cultural, historical, logistical and economic barriers for different groups of women in California to breastfeed. Attention should be dedicated to meeting each community's specific needs when promoting breastfeeding and offering support services. For example, lactation support should be offered by people from the same community, in the language of the women seeking support, and financial resources should be dedicated to training women to offer those services. Some specific considerations include:

- **Black Women:** Black babies have the highest infant mortality rate in the country.<sup>48</sup> Breastfeeding can lower mortality rates, and should be highly encouraged.<sup>49,50</sup> However, some Black women experience historical trauma at the thought of breastfeeding as there were extensive practices of forcing enslaved women to breastfeed the White slave owners' children at the expense of her own. Supporting, publicizing and engaging in Black Breastfeeding Week<sup>51</sup> is one important step to support increasing breastfeeding in Black women.
- **Asian Women:** Many Asian-American women face cultural barriers to breast feeding, for example believing that infant formula is better than breast milk or that women should stop breastfeeding sooner than they might want.<sup>52</sup> There is a significant lack of Asian American lactation consultants, and in general, adequate language or cultural support for the varied ethnic backgrounds of Asian American women in California is not always available. The Asian Breastfeeding Taskforce is one effort trying to address these issues.<sup>53</sup>
- **Latinas:** Generally, Latinas tend to initiate breastfeeding at higher rates than the national average, but it varies as to how long they continue. They may experience specific barriers, especially as it relates to how long ago their family immigrated to the U.S.: the longer Latina immigrants have lived in the U.S., the more likely they are to use formula because it is seen as the American way and/or because they see breastfeeding as a practice of poor people. Other barriers specific to lower income Latinas include the need to return to school or work as quickly as possible and not having the support in those places to sustain the practice.<sup>54</sup>
- **Native-American Women:** Native-American women have the second lowest breastfeeding initiation rate when considering race/ethnicity (Black women have the lowest).<sup>55</sup> Generations of trauma from violence, U.S. government's assimilation policies, forcing indigenous people to end their traditional cultural practices, and many other levels of violence are thought to have contributed to decreased breastfeeding rates.<sup>56</sup> This is particularly concerning as Native Americans have especially high rates of obesity and diabetes, which breastfeeding can protect against.<sup>56</sup> Fortunately, there is increasing interest in promoting breastfeeding in Native-American communities,<sup>56,57</sup> and specific resources to support these efforts. See *An Easy Guide to Breastfeeding for American Indian and Alaska Native Families* as an example.<sup>58</sup>
- **LGBTQI and Gender Queer People:** This community experiences both cultural barriers to breastfeeding (for example, education and promotion of breastfeeding is generally done through a heteronormative and cis-normative lens, leading to feelings of invisibility) and structural barriers (for example, reduced access to health care due to factors such as lower earnings and/or not having access to gender and culturally appropriate medical care).<sup>59</sup> Additionally, very little research has been done on trends and possible interventions to better serve this community.



- **Women with Disabilities:** Women with disabilities may have specific challenges with breastfeeding, including: lack of support, disability-related health considerations, limited information, difficulties with milk production, and difficulties latching.<sup>60</sup> This is a largely understudied area, and research on how to best support women with disabilities who want to breastfeed is greatly needed.
- **Women in Jail, Prison, and Immigration Detention:** California's laws generally grant incarcerated women the right to breastfeed (most often this means they are provided the means to pump breast milk and have a designated family member deliver it to the baby). However, these laws need to be consistently applied. See the Breastfeeding and Lactation Advocacy Toolkit<sup>61</sup> for more details.
- **Young Mothers:** Young mothers, especially teenage mothers, experience particular challenges to breastfeeding. The exceptional stigma for young mothers can make it difficult to breastfeed at work or school. In romantic relationships, concerns about body image and sexual desirability may be a concern while breastfeeding. More emphasis is needed on lactation education for healthcare providers to serve young mothers, and greater enforcement of lactation accommodation laws in schools and workplaces.<sup>62</sup>
- **Low-Income Women:** Numerous challenges exist for low income women, who often need to work multiple jobs, lack adequate health care coverage and maternity leave, lack access to adequate childcare that supports breast feeding, and may face other barriers. Programs to help women get the support they need should be aggressively pursued. *Overcoming Barriers to Breastfeeding in Low Income Women*<sup>63</sup> offers a range of potential solutions.

There are unique cultural, historical, logistical, and economic barriers for different groups of women in California to breastfeed.

## INTERVENTIONS

**Overarching Goal:** Remove all legal and cultural barriers to maximizing women’s ability to breastfeed their babies.

### Intervention Goal 1

Create public education campaigns that promote breastfeeding and minimize use of infant formula and include information on the health benefits of breastfeeding to both the child and the mother, including reduced breast cancer risk.

**Objective 1:** Conduct public education campaigns, including using social media, to promote breastfeeding to pregnant women and young mothers, fathers, and the general public to build general societal support for breastfeeding, while also respecting the right of women to make decisions about their own bodies.

- **Strategy 1:** California Department of Public Health and county public health agencies should aggressively market breastfeeding as the healthiest option for babies and mothers. Materials and ad campaigns should represent the full diversity of California’s population and target communities with the lowest rate of breastfeeding.
- **Strategy 2:** The Ad Council should produce and promote culturally appropriate and racially diverse breastfeeding campaigns, developed in consultation with target communities. In addition to pregnant women, messages should be directed to fathers and the general public.

**Objective 2:** Regulate infant formula advertising in California to prevent targeting of vulnerable communities and require a disclaimer in all ads stating that breastfeeding is the healthiest method of feeding babies.

### Intervention Goal 2

Pass and implement policies that support pregnant women and new mothers and offer optimal health benefits for the mother and baby.

**Objective 1:** Adopt six-month paid parental leave for all new parents employed in California. See Governor Gavin Newsom’s proposal as a potential model.

**Objective 2:** Support the ongoing legislative efforts such as requiring MediCal and health care service plans to provide reimbursement for a variety of breast pumps and ensuring lactation facilities are available in a variety of public locations (see legislation (AB 752) passed in 2019 requiring lactation facilities in certain transit centers). For more policies and legislation that support breastfeeding, see CA advocacy groups including the California Breastfeeding Coalition<sup>65</sup> and BreastfeedLA.<sup>66</sup>

### Intervention Goal 3

Create breastfeeding-supportive workplaces for all workers, regardless of employment classification or status.

**Objective 1:** Adopt a workplace-wide Breastfeeding Friendly Workplace Lactation Accommodation Policy. See BreastfeedLA<sup>66</sup> and LA Best Babies Network<sup>67</sup> for examples.

- **Strategy 1:** Offer employees flexible schedules and possibly flexible assignments to accommodate pumping and breastfeeding needs.
- **Strategy 2:** Create workplaces with the resources and equipment necessary to allow all women (whether employees or contract workers) returning to work to breastfeed. Elements of a breastfeeding-friendly workplace include:
  - Adequate designated lactation rooms that are clean and readily available and have a comfortable seat and preferably a sink. For women who work outdoors, for example farmworkers, ensure easy access to shaded, clean, adequately equipped areas with privacy to pump and an electricity source for pumps and refrigeration.
  - Adequate break time for women to travel to the lactation site, set up, pump, clean up, and refrigerate milk.
  - Access to a refrigerator for breast milk storage.
  - Access to childcare at or near the worksite to allow for breastfeeding, which brings the additional benefit of mother-child bonding. Where feasible, allow babies at the workplace.
- **Strategy 3:** Provide resources to support breastfeeding, such as employee wellness programs, discounted pump rental or purchase programs, and healthcare benefits with lactation services covered.
- **Strategy 4:** Ensure all employers have workplace breastfeeding policies and that employees understand and respect those policies.
- **Strategy 5:** Enforce a zero-tolerance policy for discrimination and retaliation for breastfeeding and/or pumping in the workplace.

**Objective 2:** Broaden employer understanding of the needs and increase support for breastfeeding and pumping in the workplace. This is particularly important for predominately male-oriented workplaces.

- **Strategy 1:** Hold a summit of employers, business organizations, and other key decision makers to develop a strategy to implement high-quality breastfeeding support programs in the workplace.
- **Strategy 2:** Work with county and state public health departments to implement an employer education program on the benefits of breastfeeding, the business case for breastfeeding<sup>68</sup> and the steps to adopt a breastfeeding-positive workplace.

## Intervention Goal 4

Improve breastfeeding-supportive maternity care practices in health care facilities.

**Objective 1:** Develop a written breastfeeding policy that increases breastfeeding and reduces or eliminates barriers to breastfeeding at all health care facilities. Provide the training and support needed to fully implement the strategies listed below.<sup>69</sup>

- **Strategy 1:** Minimize invasive medical interventions as much as possible, including Cesarean delivery, which can interfere with establishing breastfeeding.<sup>70</sup>
- **Strategy 2:** Unless medically necessary, keep newborns and their mother in the same room post-delivery (“rooming in”)<sup>71</sup> and maintain skin-to-skin contact between mother and baby after birth.<sup>70</sup>
- **Strategy 3:** Encourage early breastfeeding initiation<sup>70</sup> and educate new mothers on how to read a baby’s cue when they want to breastfeed.<sup>70</sup>
- **Strategy 4:** Discourage distribution of infant formula in birth facilities for postpartum stays and prohibit formula gift packs.<sup>71</sup> Supplement or substitute breast milk with formula or water only when medically necessary or at the mother’s specific request.<sup>71</sup>
- **Strategy 5:** Ensure new mothers are aware of options for post-discharge follow-up to support ongoing breastfeeding.<sup>70</sup>

**Objective 2:** Improve breastfeeding-supportive professional education for doctors, nurses, midwives, nurse practitioners, nutritionists, lactation consultants, doulas and other health care professionals working in maternity care.

- **Strategy 1:** Require participation in in-person and online training opportunities on breastfeeding by health care professionals in this area.
- **Strategy 2:** Distribute clinical protocols developed by experts, such as the Academy of Breastfeeding Medicine, to health care professionals.
- **Strategy 3:** Develop scholarships and grants to support and train women from under-represented groups to offer lactation support to women in health care settings and in their community, including community health educators, doulas, promotoras, and others.

**Objective 3:** Develop a statewide approach to increasing participation in breastfeeding.

- **Strategy 1:** Encourage healthcare providers and community advocates to participate in community and statewide conferences and events, such as the California Breastfeeding Summit, to learn about current issues and problem solving for California’s diverse population.<sup>65</sup>
- **Strategy 2:** Develop scholarships to ensure that health care providers who serve low-income families and women, who are less likely to breastfeed due to systemic or cultural barriers, can receive proper culturally relevant training to increase participation in breastfeeding.
- **Strategy 3:** Develop local and regional working groups in partnership with departments of public health, clinics and other public health care facilities to address the specific breastfeeding needs of the communities.

## Intervention Goal 5

Increase new mothers' access to support for breastfeeding after leaving the birthing center.

**Objective 1:** Ensure new mothers have access to existing support services.

- **Strategy 1:** Eliminate fees for new mothers to receive lactation support and/or medical equipment and supplies (for example, breast milk pumps and milk storage containers).
- **Strategy 2:** Provide free home and/or phone visits with lactation support staff for as long as it takes to establish breastfeeding and with the goal of maintaining breastfeeding until at least 6 months old and longer if desired.
- **Strategy 3:** Ensure services and educational materials are available in all languages represented at the health care facility. CA Dept. of Public Health should take the lead in translating materials into multiple languages.
- **Strategy 4:** Develop and disseminate a resource directory of local lactation support services available to new mothers.<sup>70</sup>
- **Strategy 5:** Improve quality of and access to one-on-one and group peer support programs for breastfeeding that include education, emotional support, encouragement, and problem solving. Whenever possible, these support services should be offered by mothers from the same community, who have breastfeeding experience, and who have been trained in offering peer support.<sup>70</sup>
- **Strategy 6:** Train staff at childcare centers, Head Start programs and other places and institutions where babies spend significant amounts of time to support breastfeeding.<sup>70</sup>

**Objective 2:** Work with institutions to develop better post-birth services.

- **Strategy 1:** Collaborate with state Medicaid and insurance commissioners to explore ways to increase access to lactation services.<sup>70</sup>
- **Strategy 2:** County health departments should develop walk-in breastfeeding clinics that are available to all new mothers in the community and staffed by trained breastfeeding professionals who are reimbursed for all services provided.<sup>70</sup>
- **Strategy 3:** Create comprehensive, statewide networks to provide home-based or clinic-based follow-up care to newborns in the state.<sup>70</sup>
- **Strategy 4:** Promote the efforts of the California Women, Infants, and Children Association<sup>72</sup> to maximize awareness and access to breastfeeding support services for low income women.

## Intervention Goal 6

Expand research on ways to increase women's commitment and participation in breastfeeding and reduce cultural barriers and challenges to breastfeeding.

**Objective 1:** Expand research on the barriers and possible solutions to promoting breastfeeding in general, as well as focusing on the unique needs of specific populations, such as the Black community, young mothers, women with disabilities, incarcerated mothers and others (See "Different Populations Have Different Breastfeeding Support Needs" text box for more details).

**Objective 2:** Expand research on the role of breastfeeding in reducing breast cancer risk, with a specific emphasis on understanding whether there is a recommended length of breastfeeding that is especially protective for breast cancer given variables such as age or number of children.

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