

Counseling Guidelines: Breastfeeding and Maternal Alcohol, Tobacco and Other Drug Use

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These guidelines were developed by
the Sonoma County Breastfeeding Coalition and
the Sonoma County Perinatal Alcohol and Other Drug Action Team.

For information on Sonoma County treatment and cessation resources, please visit:

www.sonoma-county.org/mcah
or call 1-800-427-8982



Recommendations

1. Mothers at risk for tobacco, alcohol or other drug use must be assessed individually to determine the risks and benefits of breastfeeding. The American Academy of Pediatrics cautions "before advising against breastfeeding or recommending premature weaning, the practitioner should weigh thoughtfully the benefits of breastfeeding against the risks of not receiving human milk" (American Academy of Pediatrics [AAP], 2001).
2. Every woman should be asked about tobacco, alcohol, and other drug use during pregnancy and postpartum. Parents should be asked about family use during routine pediatric appointments. Interviewing techniques that are sensitive, supportive, and non-judgmental will allow women to disclose without experiencing shame and guilt. There are a variety of evidence-based screening tools and brief intervention tools available to the clinician.
3. Breastfeeding women who use alcohol or tobacco must be assessed and counseled about harm reduction measures.
4. Breastfeeding is safe with the therapeutic use of methadone and should be supported.
5. Mothers should be instructed and assisted to stop the ingestion of amphetamine, cocaine, heroin, and/or marijuana. Breastfeeding must be discontinued if it is not possible to discontinue all drugs of abuse.
6. Clean and sober women in recovery should be encouraged to consider breastfeeding. Breastfeeding can strengthen maternal attachment and sustain recovery. Adequate support during the immediate postpartum period is critical, since establishing breastfeeding can be especially frustrating for women in recovery. Many treatment experts recognize that an isolated episode of use is not a predictor of long-term relapse. A single relapse incident should prompt an assessment and not be judged as an absolute contraindication to breastfeeding.

Screening Questions

- Did either of your parents ever have a problem with alcohol or other drugs?
- Does your partner ever use tobacco, alcohol or other drugs?
- Before you knew that you were pregnant, how many cigarettes or joints did you smoke?
- When was the last time you had a glass of wine, beer or other drink with alcohol?
- Do you have any concerns about other drugs you were exposed to before you found out that you were pregnant?

Source: Sonoma County Drug Free Babies Program

Alcohol

A safe level of alcohol in breast milk has not been established. "An occasional celebratory single, small alcoholic drink is acceptable, but breastfeeding should be avoided for two hours after the drink." (AAP, 2005). Alcohol affects the central nervous system of both the breastfeeding mother and the infant. The ability of the caretaker to respond to the needs of the infant may be compromised if under the influence of alcohol.

Alcohol is rapidly absorbed into the blood stream. On an empty stomach, peak levels occur within 30-60 minutes of alcohol ingestion. With food, peak levels occur within 60-90 minutes of alcohol ingestion.

The concentration of alcohol in maternal milk rises and falls in response to maternal serum levels. Alcohol is not trapped in breast milk but is continually removed as it diffuses back into maternal blood. Drinking water, resting, and pumping will not accelerate the elimination of alcohol from breast milk. "Pumping and dumping" is not necessary unless the mother is going to miss several feedings and wants to maintain her milk supply and/or relieve engorgement.

Table 1 in the Appendix indicates the length of time from the beginning of drinking to the complete elimination of alcohol from breast milk.

Limited information is available on the long-term effects of exposure to alcohol through breast milk. Acetaldehyde, the metabolite of alcohol which is believed to have teratogenic effects during pregnancy, does not pass into breast milk even when at measureable levels in maternal blood (Kesaniemi, 1974). One study showed a slight but significant detrimental effect on motor development following chronic exposure when the lactating mother had as little as one drink daily (Little et al., 1989).

With 55% of women of childbearing age in California using alcohol, the following points may assist the provider when giving anticipatory guidance:

- Differentiate between drinking a celebratory glass of wine and using alcohol as a means of relieving stress.
- Ask specific questions about use - *how much does she drink each day, each week, each month?*
- Give personalized advice on the length of time required to eliminate alcohol from breast milk.
- Discuss the impact of alcohol on the ability to care for an infant. Bed sharing is especially risky when caregivers have used alcohol.
- Barley in beer has been reported to stimulate milk production. (Koletzko, 2000). However, non-alcoholic beer will increase milk production without exposing the infant to ethanol, which is known to decrease prolactin levels and block the release of oxytocin (Anderson, 1993).

Tobacco

Maternal tobacco use should be strongly discouraged, but it is not an absolute contraindication to breastfeeding (AAP, 2001). Breastfeeding mothers who smoke should be advised to smoke only after a feeding and to limit smoking as much as possible. Parents should be strongly advised to provide a smoke-free environment in the home and car, as exposure to smoke is a proven risk factor for Sudden Infant Death Syndrome (SIDS), as well as asthma, pneumonia, bronchitis, upper respiratory infections, and otitis media.

The level of nicotine in breast milk is two to three times greater than the level in maternal serum. Based on the time required for nicotine to be cleared from the mother's blood stream, and the fact that nicotine clearance in the newborn takes three to four times longer than it does in the mother, smoking should be avoided for two to three hours prior to breastfeeding.

All mothers and family members should be assisted to quit smoking. Cessation programs and telephone quit lines are valuable resources. Approximately half of all women who quit smoking during pregnancy resume smoking within six months of delivery and up to 80% start smoking again within 12 months (National Partnership to Help Pregnant Smokers Quit, 2007). Continued support from pediatric and gynecological providers is vital. Brief cessation counseling can improve cessation rates by 30% to 70%.

5-Minute Smoking Cessation Intervention

Advise – 1 minute

Provide positive, clear, strong, personalized advice to quit.

Assess – 1 minute

Is she willing to attempt to quit within the next 30 days?

If **Yes**, proceed with Assist.

If **No**, use the 5R's:

1. **R**ewards of quitting
2. **R**isks of continuing to smoke
3. **R**oadblocks to quitting
4. **R**elevance of quitting now
5. **R**epetition leads to success

Assist – 3 minutes

Provide parent-specific self-help materials.

Identify smoking triggers and coping strategies.

Set a quit date.

Identify supportive people to ask for help.

Resources for Referral:

Northern California Center for Well-Being: 707-575-6043

California Smoker's Help Line: 1-800-No-Butts

Adapted from U.S. Public Health Service clinical practice guidelines.

Nicotine Replacement Therapy

The AAP makes no recommendation for or against the use of Nicotine Replacement Therapy (NRT) by lactating women (AAP, 2001). Hale cites one small study to conclude that undertaking maternal smoking cessation with the nicotine patch is a safer option than continued smoking (Illett & Hale, 2003).

The use of NRT in the form of oral chewing gum and/or transcutaneous patches eliminates the risks of other chemicals found in cigarettes.

- Transdermal patches produce a sustained nicotine level. Removing the patch at night is recommended to decrease nicotine exposure.
- Nicotine gum produces variations in blood plasma levels similar to the fluctuations caused by smoking. Mothers who choose to use nicotine gum should be counseled to refrain from breastfeeding for two to three hours after using the gum product (Hale, 2006).

NRT can be used as a method of harm reduction while the mother continues her efforts at cessation. Harm reduction can be an important step toward eliminating all tobacco use.

Methadone

Breastfeeding is not contraindicated for infants of mothers on methadone maintenance therapy (MMT) if the mother is not using other drugs (AAP, 2001). For this high-risk population of mothers and infants, breastfeeding is a clear benefit and should be encouraged.

Transfer of methadone into human milk is minimal. One study analyzed breast milk samples of women on MMT doses of 25 to 180 mg/day and concluded that the mean daily ingestion of methadone by a newborn was 0.05 mg/day (McCarthy & Posey, 2000). This finding is consistent with other published reports. This amount of methadone is not enough to prevent neonatal abstinence syndrome and additional opiate treatment may be required (Hale, 2006).

Marijuana

Marijuana/cannabis use by breastfeeding women is contraindicated (AAP, 2001; Hale, 2006).

Tetrahydrocannabinol (THC) in marijuana is rapidly distributed to the brain and adipose tissue and transfers into breast milk (Hale, 2006). THC is fat-soluble and with chronic heavy use it accumulates in breast milk in high concentrations. THC levels can be 8 times higher in breast milk than in the maternal plasma.

Limited research is available on the long-term effects of exposure to marijuana through breast milk. Long-term sequelae have not been documented. One study found an association between the presence of THC in breast milk and a decrease in motor development at one year of age (Astley & Little, 1990). THC is stored in fat for long periods and theoretically can affect brain development. Infants exposed to marijuana via breast milk will have positive urine screens for two to three weeks. Second-hand smoke exposure from marijuana is an additional health risk as it contains over 150 other compounds.

Animal studies suggest marijuana may inhibit the production of prolactin and could inhibit maternal lactation (Hale, 2006). Other maternal effects of marijuana include impaired attention and judgment, which will adversely affect the woman's ability to recognize feeding cues and safely care for her baby.

Methamphetamine and Hallucinogenic Amphetamines

Breastfeeding is contraindicated when there is maternal methamphetamine and/or hallucinogenic amphetamine use. Significant amounts of these drugs are transferred into breast milk from the maternal plasma due to their low molecular weight.

Mothers who intend to breastfeed and are committed to discontinuing drug use may be instructed to use a breast pump to empty their breasts and discard the collected milk for 24 to 48 hours following use. "Pump and dump" is an appropriate intervention for women who are entering a recovery program. This procedure helps ensure the supply of milk when the breast milk is safe to give to the newborn.

Few controlled studies are available on the physiological affects of methamphetamine or hallucinogenic amphetamines on infants exposed through breast milk despite the prevalence of use. The AAP reports irritability and poor sleep patterns in infants exposed to methamphetamine via breast milk. Distribution in the illegal market and the practice of mixing drugs with other toxic chemicals raises additional concerns about the harmful affects to the infant.

Environmental and parenting concerns should be considered when evaluating a mother at risk for use. These drugs impair a mother's ability to respond to feeding cues and other basic needs of her infant. Milk production may suffer due to decreased maternal appetite and resulting poor nutrition, common side effects of methamphetamine use (National Institute on Drug Abuse, 2002).

Appendix 1

Table 1

Time from beginning of drinking until clearance of alcohol from breast milk for women of various body weights, assuming alcohol metabolism is constant at 15 mg/dL and woman is of average height [5'4"] (Anderson, 1995).

***1 drink = 12 oz of 5% beer,
5 oz of 11% wine,
1.5 oz of 40% liquor**

Mother's Weight (lbs)	Number of Drinks* (Hours: Minutes)							
	1	2	3	4	5	6	7	8
	90	2:50	5:40	8:30	11:20	14:10	17:00	19:51
100	2:42	5:25	8:08	10:51	13:34	16:17	19:00	21:43
110	2:36	5:12	7:49	10:25	13:01	15:38	18:14	20:50
120	2:30	5:00	7:30	10:00	12:31	15:01	17:31	20:01
130	2:24	4:49	7:13	9:38	12:03	14:27	16:52	19:16
140	2:19	4:38	6:58	9:17	11:37	13:56	16:15	18:35
150	2:14	4:29	6:43	8:58	11:12	13:27	15:41	17:56
160	2:10	4:20	6:30	8:40	10:50	13:00	15:10	17:20
170	2:05	4:11	6:17	8:23	10:28	12:34	14:40	16:46
180	2:01	4:03	6:05	8:07	10:08	12:10	14:12	16:14
190	1:58	3:56	5:54	7:52	9:50	11:48	13:46	15:44
200	1:54	3:49	5:43	7:38	9:32	11:27	13:21	15:16

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