State of Alaska Epidemiology **Bulletin**

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Emergency Preparedness among Women with Infants — Alaska, 2012–2013

Background

Emergencies, natural disasters, or extreme weather events often happen without warning and can seriously disrupt supplies and services needed for daily living. Pregnant women and families with infants can be especially vulnerable and preparation for such events can be critical to survival. This *Bulletin* looks at data collected for a limited time on emergency preparedness among Alaska women who recently delivered a live birth.

Methods

The Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing, population-based, randomized survey completed annually by about 18% of mothers following delivery of a live-born infant. Results are statistically weighted to represent all mothers who delivered an infant. During 2012–2013, PRAMS asked mothers the following three questions about emergency preparedness: whether they had an emergency plan during their pregnancy, whether they have a current plan, and how often they worry about a disaster happening to their family. We explored preparedness questions by demographic factors, characteristics that may make women more vulnerable during an emergency, and participation in opportunities for intervention (e.g., participation in the Special Supplemental Nutrition Program for Women, Infants, and Children [WIC]; postpartum checkup; or home visitor checks).

Results

During 2012–2013, 1,824 women answered questions about preparedness; 44.8% of mothers reported they had a family emergency plan in case of disaster in place during their pregnancy and 46.1% reported they had a plan at the time of the survey (Table). Overall, 7.4% reported always worrying about the possibility of a disaster happening to them or their family, 52.9% reported sometimes worrying, and 39.7% reported never worrying. Those with a current plan reported a higher prevalence of always or sometimes worrying about a disaster than those who did not have a plan (63.6% vs. 57.4%, respectively; p=0.08). Women who had three or more previous live births were significantly more likely to have an emergency plan in place during their pregnancy and currently, compared with women who had recently delivered their first child and women who had one or two previous live births (Table). Having an emergency plan in place (either during pregnancy or currently) did not differ significantly by any other demographic characteristic examined, including maternal age, region of residence, education, race, ethnicity, or poverty level.

Table. Preparedness among Women who Recently Delivered a Live Birth, by Select Indicators* — Alaska PRAMS, 2012–2013

		% with current plan	% with prenatal plan	% who always or sometimes worry
All Respondents		46.1	44.8	60.3
By # of Previous Live Births				
	None	**45.1**	**41.7**	**57.6**
	1–2	**43.2**	**42.9**	**64.4**
	3 or more	**57.8**	**58.7**	**56.5**
By Ever Breastfed Status				
	No	**34.4**	34.9	53.0
	Yes	**47.1**	45.7	60.5

**Bolded percentages indicate a statistically significant association (p<0.05) between the demographic variable and the preparedness question.*

Women who ever breastfed their infant were more likely to have a current disaster plan than women who never breastfed (p=0.04). Having a prenatal or current emergency plan did not differ significantly by whether the mother regularly took prescription medicines 12 months before pregnancy, had self-reported postpartum depressive symptoms, was on WIC prenatally, or had a postpartum checkup or home visitor check.

Discussion

In this population-representative sample of Alaska mothers with newborns, less than 50% had an emergency plan in place either during their pregnancy or during the first few months postpartum, although most (60%) reported worrying about a disaster. The only maternal characteristic associated with having an emergency plan both prenatally and postpartum was having three or more previous live births. Other factors that might make women more vulnerable during an emergency, such as being on prescription medicines prior to pregnancy or experiencing symptoms of postpartum depression, were not associated with having a plan.

Disasters have been associated with an increased incidence of preterm delivery and other adverse birth outcomes.[1] Women's health care professionals should review the American College of Obstetricians and Gynecologists (ACOG) guidelines on preparing women for disasters,[1] and direct expecting and new parents to disaster safety resources specific to their needs.[2] Other opportunities to educate and counsel new parents are available at prenatal and postpartum health care visits, and through programs like WIC and childbirth classes.

Growing families need to be particularly vigilant about keeping an emergency plan current. In addition to a plan, an emergency kit is critical to weathering a disaster. A recent convenience survey following the November 30, 2018 Southcentral Earthquake revealed than more than half of persons who responded did not have an emergency kit.[3] The Alaska Division of Homeland Security and Emergency Management has a guide for building a 7-day emergency kit, which includes suggested amounts of drinking water supplies per person and changing the water every 6 months.[4] If a family member is pregnant when the kit is prepared, care should be made to include the infant in the "per person" preparations. A clean water supply is critical for preparing formula or so that a breastfeeding mom can remain hydrated. The American Academy of Pediatrics details recommendations regarding breastfeeding and other feeding options for infants during states of emergency.[5] Online resources for clinicians include the Centers for Disease Control and Prevention's Division of Reproductive Health Emergency Preparedness and Response course and the American Academy of Pediatrics' Pediatric Education in Disasters Manual.[6,7]

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