

## Alaska

### Addressing Smokeless Tobacco Use and Adverse Pregnancy Outcomes among Alaska Native Women

#### Public Health Problem

- Tobacco use among Alaska Natives is among the highest in the U.S.
- Smoking tobacco during pregnancy is associated with placental abruption, placenta previa, preterm birth, and fetal growth restriction
- Smoking is responsible for up to 10% of preterm births and 30% of low weight births
- Smokeless tobacco use prevalence in some areas of Alaska exceeds 60% among pregnant women. A homemade mixture of tobacco and ash is commonly used. Addition of ash to the tobacco raises the amount of free-base nicotine in the product, resulting in higher levels of nicotine exposure.

#### Initiative Goal

To develop public health messages for pregnant Alaska Native tobacco users; and to educate medical providers in Alaska about smokeless tobacco health risks.

#### Collaboration and Partnerships to Address a Public Health Problem

For this initiative, CDC's Division of Reproductive Health collaborated with the Alaska Native Tribal Health Consortium (ANTHC), a non-profit health organization owned and managed by Alaska Native tribal governments and their regional health organizations. ANTHC's provides statewide Native health services by working closely with tribes, Native American organizations, and municipalities.

Little is known about the potential adverse effects of maternal smokeless tobacco use on pregnancy outcomes. In response to concerns expressed by local providers in western Alaska about the high prevalence of smokeless tobacco use in pregnant women and the possibility of serious adverse health consequences of the practice, we are conducting a case-cohort study examining Alaska Native women from western Alaska who delivered infants in the past nine years. The study looks at the relationship between smokeless tobacco use and adverse pregnancy outcomes including abruption, preterm birth, preeclampsia, and gestational hypertension. Approximately 850 cases were identified and tobacco exposure in these women will be compared with exposure in a randomly selected cohort of 500 women delivering during the same period.

#### Successful Impact

- This study will help to establish whether maternal smokeless tobacco use is associated with adverse pregnancy outcomes.
- Local collaborators and CDC investigators are addressing one of the major public health priorities in the region by increasing understanding of the health effects of a locally used smokeless tobacco product on pregnant women and their offspring.
- Outreach efforts included presentations at local health centers for healthcare providers and board members on the health effects of smokeless tobacco (including Grand Rounds) and on the status of this research project.
- Local technical capacity of personnel in Western Alaska to carry out research and evidence-based program initiatives has been enhanced.