

An outline map of the state of Alaska, showing its coastline and major islands. The map is positioned behind the main title text.

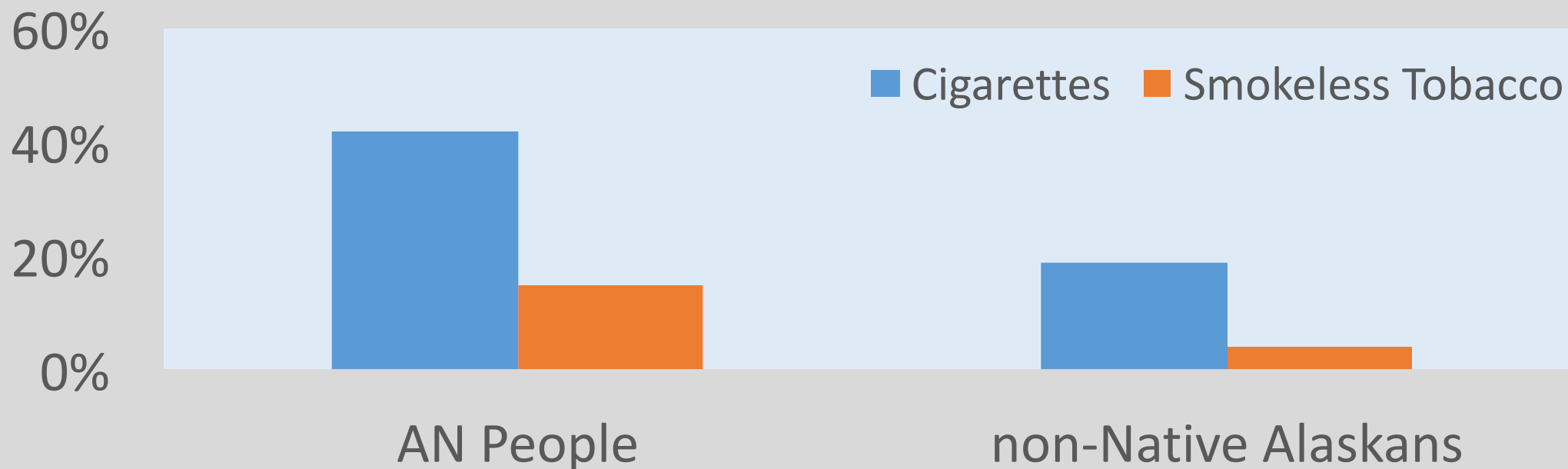
Efforts to Understand Tobacco Use and Increase Cessation among Pregnant Women and Adults Across Alaska

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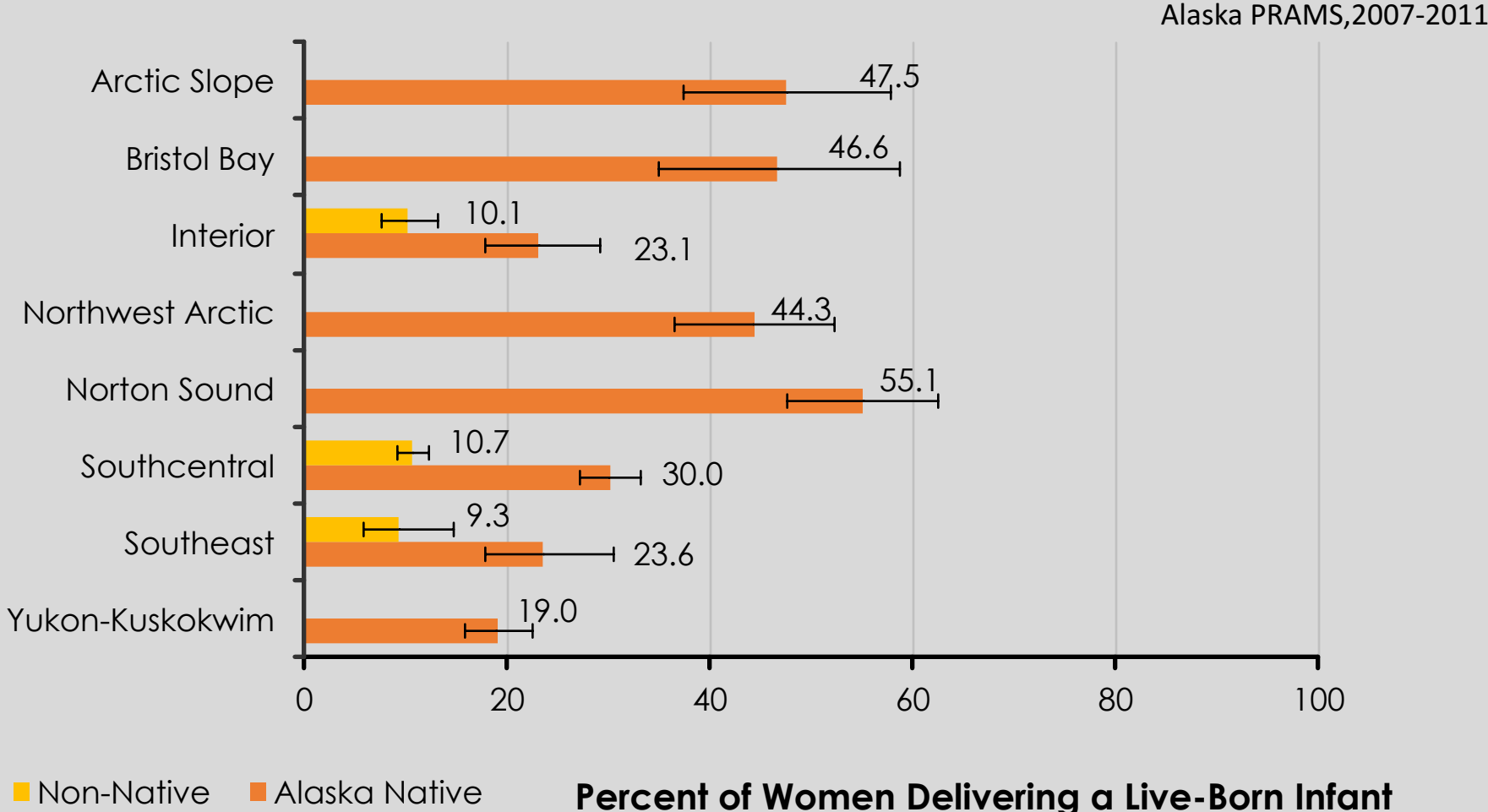
Cheryl Dalena - Alaska Native Tribal Health Consortium, Tobacco Cessation Program

Tobacco use Prevalence in Alaska



- Highest cigarette and smokeless tobacco use prevalence
- Disease and death
 - Cancer and cardiovascular disease leading causes of death

Prenatal Cigarette Use (last 3 months of pregnancy) by Alaska Native Status & Tribal Health Region



What is Being Done to Reduce Tobacco Use Prevalence among AN People in Alaska?

Research

- Biomarker Feedback to Motive Tobacco Cessation among Pregnant Alaska Native Women

Training and Quality Improvement

- CoIIN Tobacco Cessation Efforts in Alaska

Public Outreach

- Closing the Gap at the Top of the World: Reducing Racial Disparities in Smoking in Alaska's North Slope Region



The MAW Study



Biomarker Feedback to **M**otivate Tobacco
Cessation in Pregnant **A**laska Native **W**omen

Presented by Christie Flanagan, MPH, CTTS

Tobacco Use in Pregnancy

- Higher among AN women compared to Alaska white women
- Lower spontaneous quit rates and higher relapse rates postpartum compared to non-Native Alaskan women
- Negative health effects on mother and fetus
- Exposure to tobacco *in utero* can affect offspring dependence in future

Why the MAW Study?

- Previous tobacco cessation research completed with Alaska Native (AN) women
- Participants suggested “objective” information about their prenatal tobacco use and the harmful effects on the infant

Purpose of each Phase

Phase 1

Identify the level of tobacco exposure in mothers and their infants

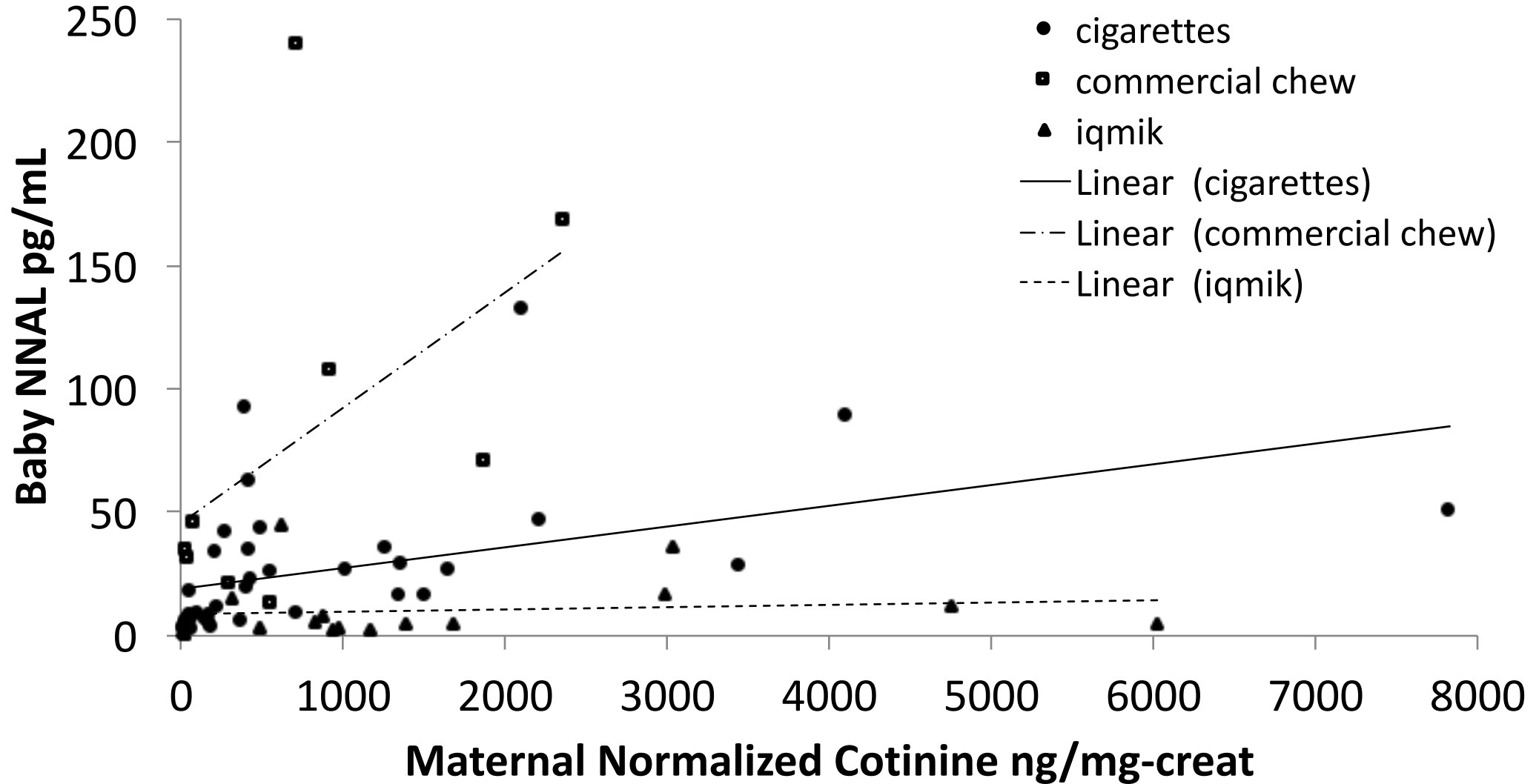
Phase 2

Develop an intervention that provides specific information about an unborn infant's exposure to carcinogens associated with tobacco use

Phase 3

Determine if the intervention is effective in helping pregnant AN women quit tobacco

Correlation for Maternal Urine Cotinine and Infant Urine NNAL Levels among Smokers and Chewers



Results from Interviews to Guide the Development of the Intervention

- Acceptability of biomarker feedback information
- Postpartum women - learning their personal results inspired to want to quit or cut back
- Pregnant women indicated generalized correlation information less helpful in motivating cessation

Results from Interviews to Guide the Development of the Intervention

- After receiving the correlation information, support persons felt strongly prenatal women should quit smoking
- Willingness to help with prenatal smoking cessation
- Acknowledgment barriers to helping pregnant women quit smoking
 - Stress was the most common response
 - Spending a significant amount of time with others who use tobacco

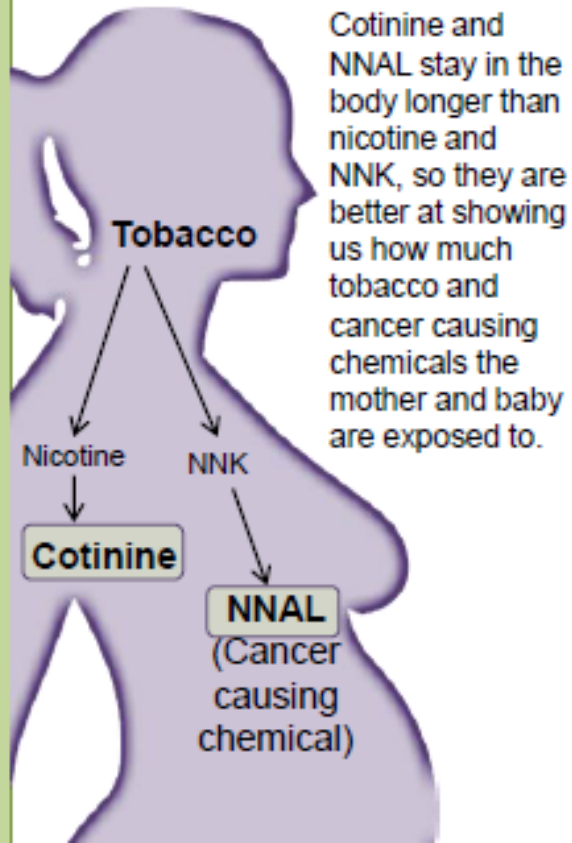
Pilot Intervention

- Partnered with the Southcentral Foundation Quit Tobacco Program to deliver 5-week intervention
- Intervention/control group trial with 60 prenatal participants
- Assess:
 - Feasibility and acceptability through self-report
 - Effectiveness of getting women to stop cigarette use by self-report and testing urine for tobacco-specific chemicals

Types of Tobacco:



When we use tobacco our bodies break down the tobacco into different chemicals like nicotine, cotinine, NNK, and NNAL.



Cotinine and NNAL stay in the body longer than nicotine and NNK, so they are better at showing us how much tobacco and cancer causing chemicals the mother and baby are exposed to.

This information was provided by:



The MAW Study

Biomarker Feedback to Motivate Tobacco Cessation in Pregnant Alaska Native Women

For more information about the MAW Study:
(907) 229-3088



Tobacco and our baby...

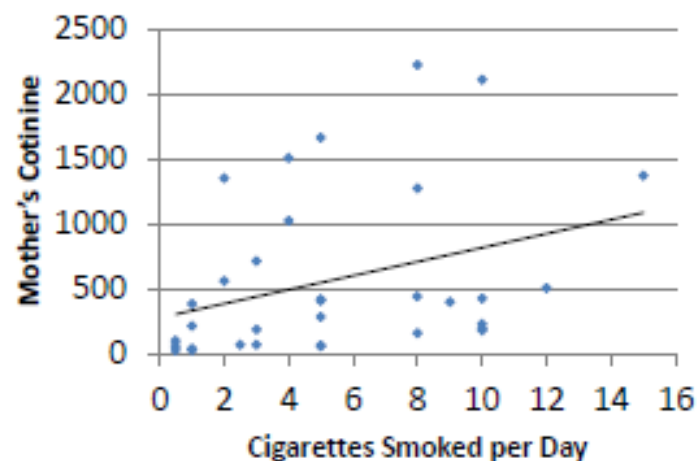


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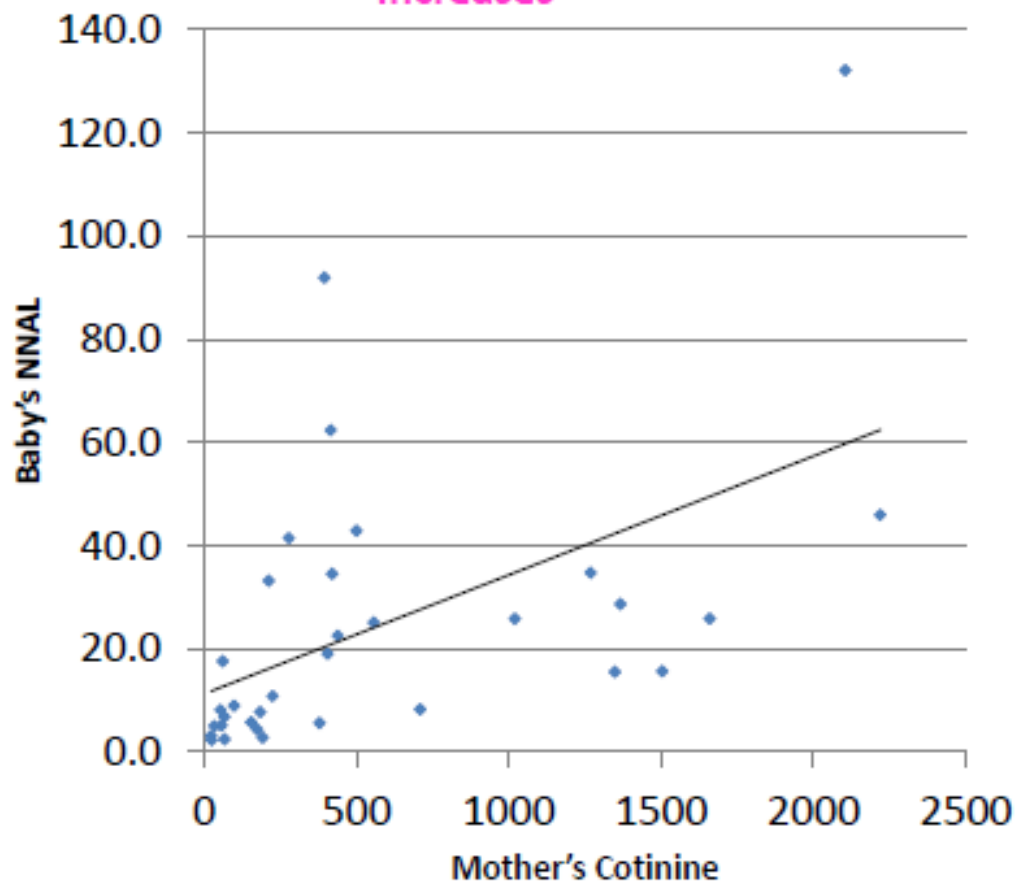
- Cotinine comes from nicotine in tobacco and can be measured in urine.
- The amount of cotinine in a pregnant woman's urine tells how much tobacco she used; the more tobacco she used, the higher her cotinine level in her urine.
- NNAL comes from NNK in tobacco and both chemicals can cause cancer. Like cotinine, NNAL levels can be measured in urine.
- The more tobacco a pregnant woman uses, the more cotinine and NNAL she exposes herself and her unborn baby to.

Cotinine Levels Increase as Number of Cigarettes Smoked Increases



★ The more a person smokes the higher the cotinine level.

Baby's NNAL Increases as Mother's Cotinine Increases



★ The higher the cotinine in mother's urine, the higher the NNAL in the baby.

★ These are results from Alaska Native women.

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