

# Childhood Understanding Behaviors Survey (CUBS): Vaccine Hesitancy among Mothers of 3-year-olds in Alaska



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# Childhood Understanding Behaviors Survey (CUBS)



- Ongoing since 2008
- Follow-up survey to the Pregnancy Risk Assessment Monitoring System (PRAMS)
  - 1/6 of all live births in Alaska
  - Oversample Alaska Native, LBW
  - Telephone and mail survey, 2 to 6 months after birth
- CUBS follows up with PRAMS respondents 3 years after birth
- Primarily mail with telephone survey

# Applicable population



- **Mothers of 3-year-old children born in Alaska during 2006 & 2007**
  - PRAMS unweighted response rate in 2006: 75%
- **Respond to CUBS 2009 & 2010**
  - 2009 unweighted response rate: 50%
  - 2009 & 2010: 1,179 respondents
- **Answers weighted to represent 21,149 women**

# Delayed or decided not to get shots or immunizations among mothers Of 3-year-olds, Alaska, 2009-2010

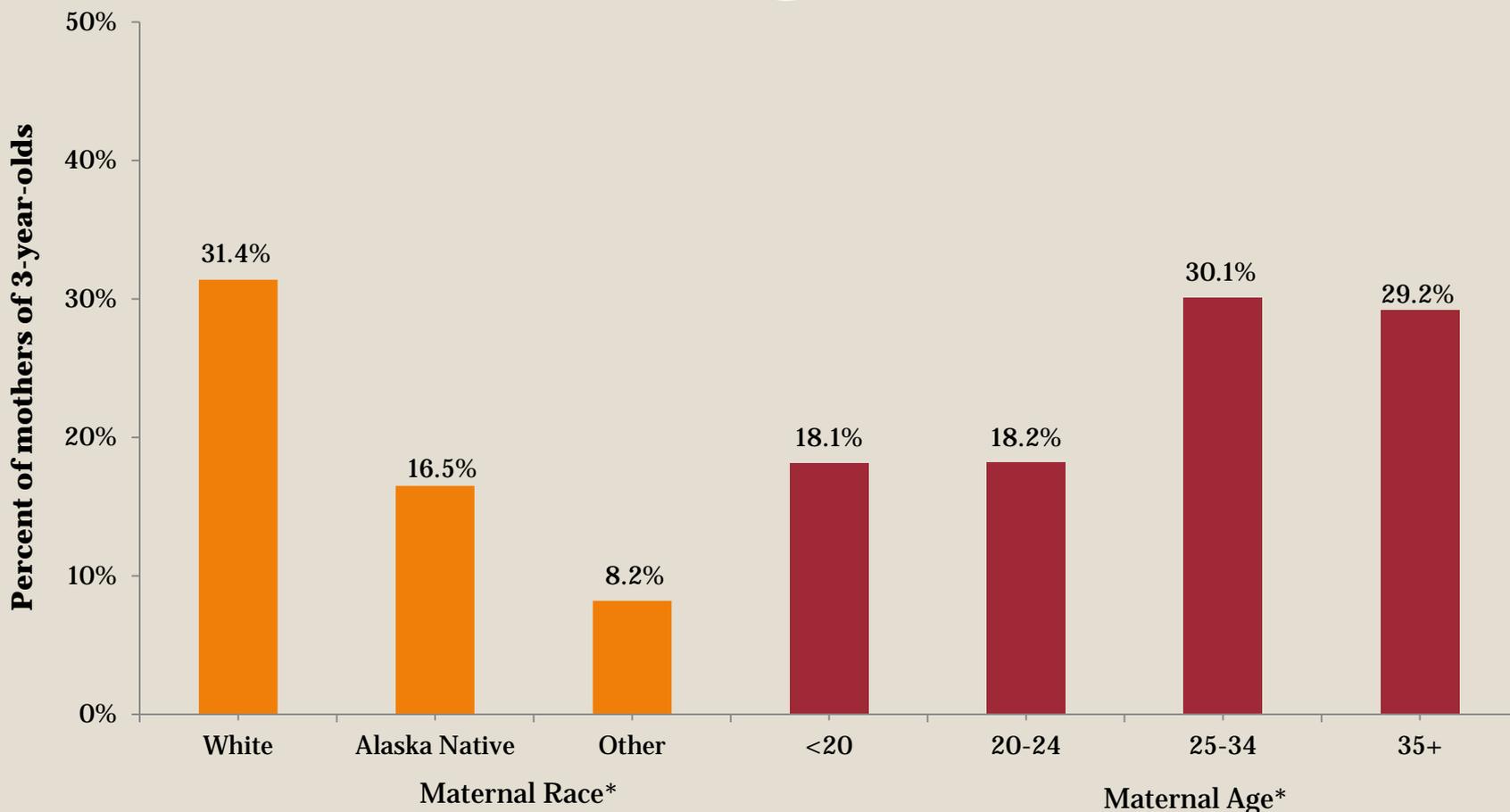


- *Have you ever delayed or decided not to get vaccine shots or immunizations for your child?*

**25.9% said YES**

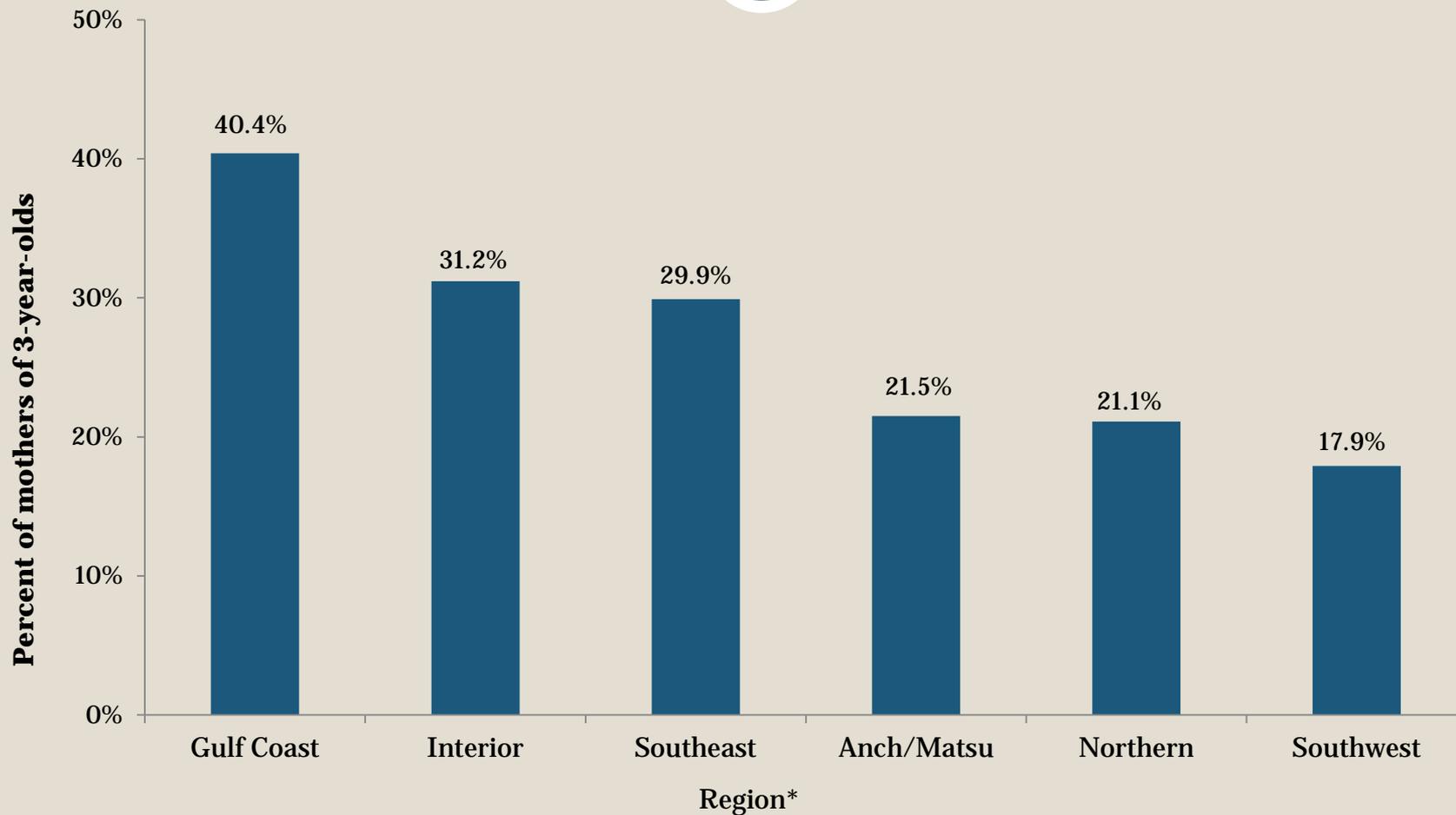


# Delayed or decided not to get vaccine shots or immunizations for child by maternal race and maternal age, Alaska, 2009-2010



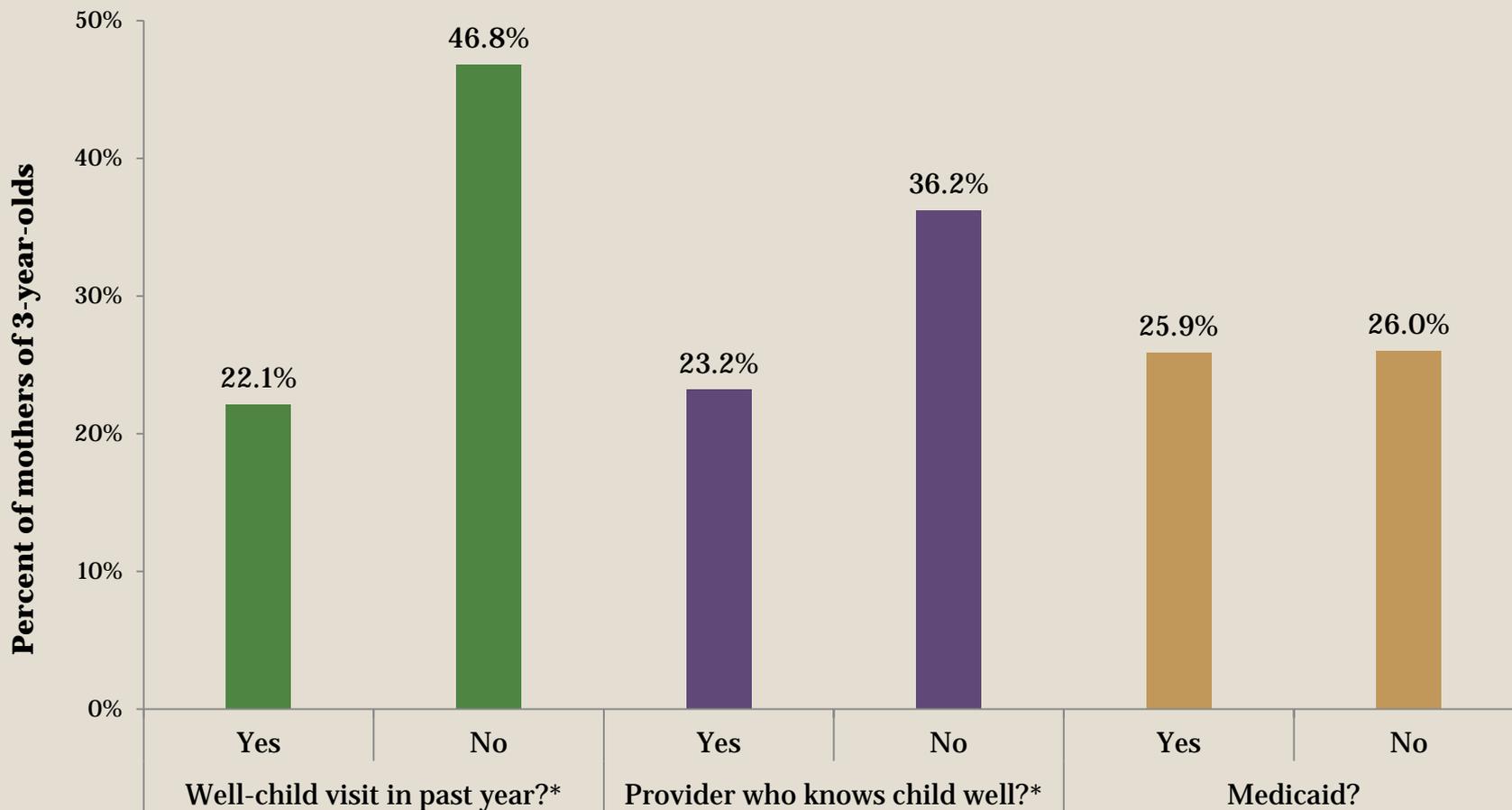
\*Statistically significant difference between categories.

# Delayed or decided not to get vaccine shots or immunizations for child by region, Alaska, 2009-2010



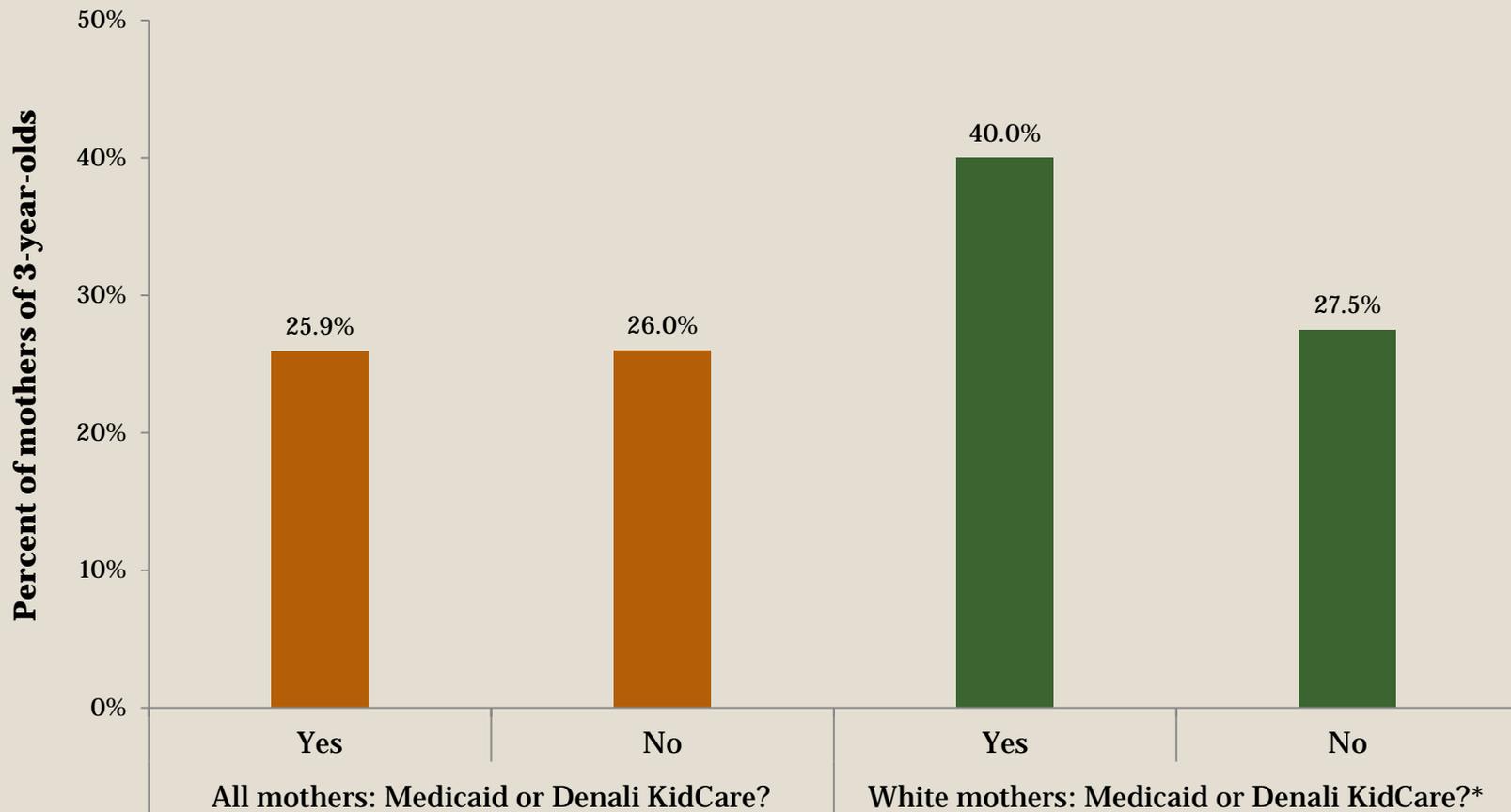
\*Statistically significant difference between categories.

# Delayed or decided not to get vaccine shots or immunizations for child by well-child visit, familiar provider and Medicaid status, Alaska, 2009-2010



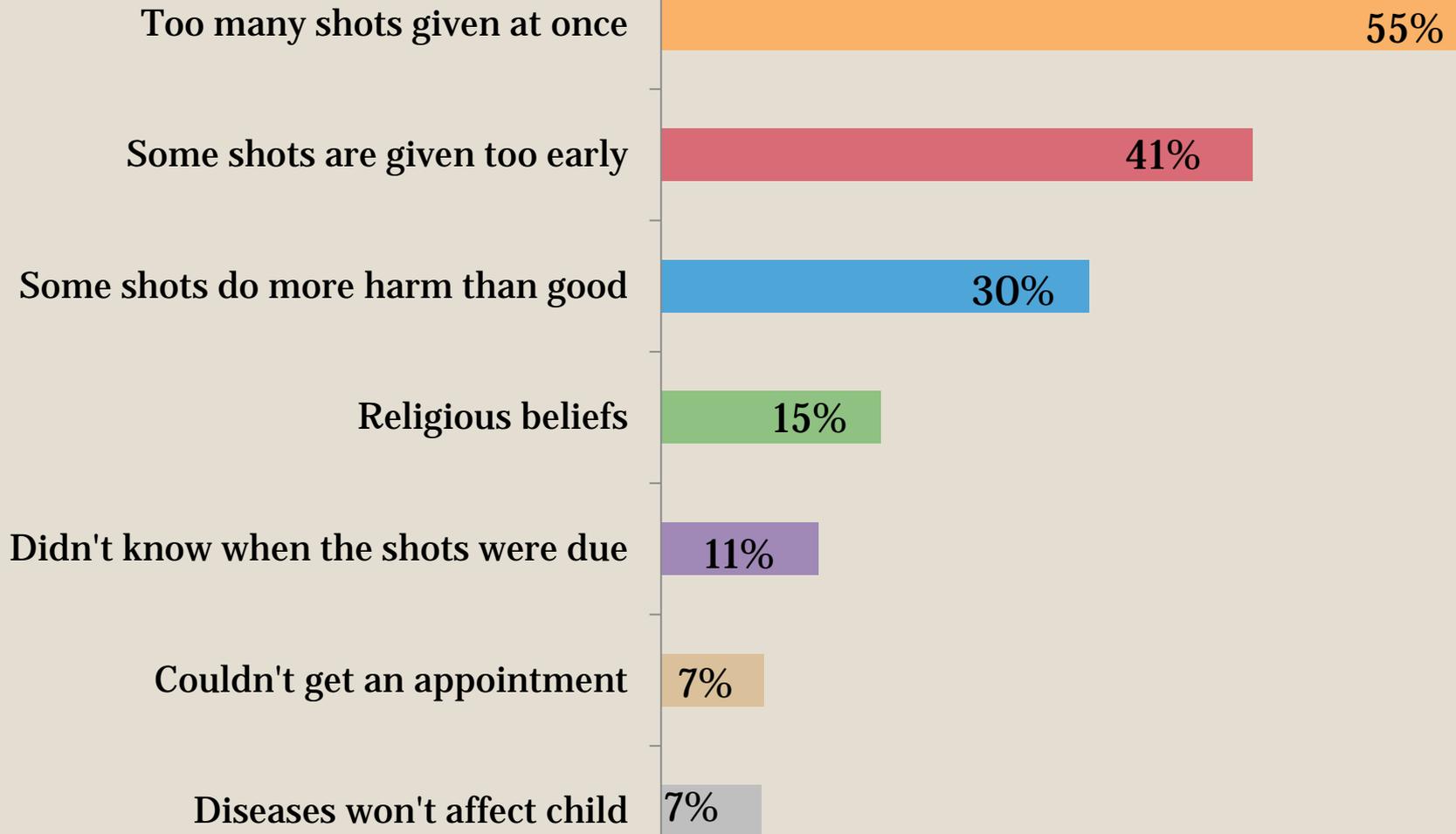
\*Statistically significant difference between categories.

# Delayed or decided not to get vaccine shots or immunizations for child by Medicaid status, Alaska, 2009-2010



\*Statistically significant difference between categories.

# Reasons for Delaying or Declining Vaccines



# Quotes from Mothers



- “I believe they give **too many at once** and they don't give any consideration to when you take your kid to the doctor and they already have a fever and they try to give them to them anyways. I don't agree with that. That's what happened to him he got even worse. 2 of my nephews after receiving shots **got deathly ill**. So there's a fear I suppose. I wanted to **wait until he was a little older**. They were baby's and they got very ill, 106 temperatures.... Just the rumor part, there's a lot of rumors about certain shots causing **autism**. There's a fear in that too.”

*--White mom age 35+, <12 years education, living in the Interior region*

# Quotes from Mothers



- “I went on the recommended monthly thing until he was about 9 months old. Then when he got his 9 month shots **he got really lethargic** and I figured it was **because they shot him up with 3 different needles**. That's when I decided not to go by their recommended time frame.”

*--Alaska Native mom age 20-29 years, living in the Southeast region, 12 years education*

# Quotes from Mothers



- “I just **wasn't fully informed** about them either way so I just **opted to wait** until she was a little older and her body could handle it a little better maybe.”  
*--White mom age 20-29 years, living in Anchorage/Mat-Su, >12 years of education*

# Quotes from Mothers



- “She was congested they wouldn’t give shots.”

*--White mom age <20, <12 years education, living in the Gulf Coast region*

- “Just her size when she was born. The advice of the pediatrician.”

*--Mom with unknown race in Anchorage/Mat-Su region, age 35+ years, 12 years of education*

- “He was ill when he was due for them. When we took him in they told us he was due but we had to wait for his fever to go down before we could give them to him.”

*--Alaska Native mom age 20-29 years, living in the Northern region*

# Access Issues



- “Had to wait for a provider to come out to the village”  
*--Alaska Native mom in Southwest region*
- “The shots were not present in the office when it was time for service.”  
*--White mom in Anchorage/Mat-Su region*
- “We had ordered them from Dillingham and they had not arrived. The health aid had left when they arrived. And when the replacement came the health aid called to tell them they needed the shots.”  
*--Alaska Native mom in Southwest region*
- “I'm a health care worker and I didn't want to give them to her myself.”  
*--Alaska Native mom in Southwest region*
- “I lived in the bush and when I couldn't get in to town when they were needed.”  
*--White mom in the Interior region*

# Conclusions



- **Significant association with:**
  - ✦ Maternal race
  - ✦ Maternal age
  - ✦ Region of residence
  - ✦ Well-child visit in past year
  - ✦ Provider who knows child well
- **No significant association with:**
  - ✦ Maternal education
  - ✦ Maternal smoking status
  - ✦ Birth order
  - ✦ Trimester prenatal care started; number of prenatal visits
  - ✦ Child's Medicaid status
- **Continued data collection**
  - Which shots and why?

# Thank You



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