



SAN DIEGO STATE
UNIVERSITY

Huang, L.,¹ Sandoz, T.,¹ DeMarie, R. C.,¹ Gonzales, M. M.,¹ Azzam, K.,¹ Greiner, L. H.,² Matt, G. E.,² & Record, R. A.¹
¹ School of Communication, ²Department of Psychology



BACKGROUND

Thirdhand Smoke (THS) Residue:

- Mixture of toxic chemicals left behind after someone smokes
- Sticks to surfaces, accumulates in dust, and becomes embedded in furniture and fabrics
- Persists in environments for months to years after smoking stops



Perceptions of Children's Health Risks

- Children are the most at-risk for exposure to THS
- Parental awareness of THS health risks and key prevention behaviors is essential for protecting children
- Past research has thus far only sampled patients as well as their relatives from the clinics
- Roberts et al. (2017) tested participants' perceptions toward 9 potential health risks of environmental tobacco smoking exposures: asthma, poor growth, obesity, frequent colds, pneumonia, ear infections, hearing loss, tonsillitis, and snoring.
- The current study seeks to understand the U.S. general public's perception of the effect of smoking exposure on children.
- By doing so, the current study replicates Roberts et al. (2017), incorporating additional children's health risks that can be brought about by tobacco smoke exposure.

PURPOSE

To explore adult perceptions of the health risks for children who are exposed to THS, three scenarios were presented:

- A person habitually smokes inside a home where a child lives.
- A person habitually smokes outside a home where a child lives.
- A nonsmoking family moves with their child into a home previously occupied by someone who smoked inside for 20 years.

For each scenario, participants were asked, **could the former resident's smoking contribute to the following in the child:**

Asthma	Obesity	ADHD
Poor growth	Frequent colds	Cough
Cough	Pneumonia	Skin rashes
Ear infections	Hearing loss	Poor sleep
Tonsillitis	Snoring	

Methods

Procedures

- Anonymous, closed-ended Qualtrics survey distributed via Prolific $N = 1450$ participants
- Participants were U.S. adults (18+) recruited using quota sampling from five community groups (Black, Hispanic, Asian American/Pacific Islander, LGBTQ+, and white, which served as a reference group).

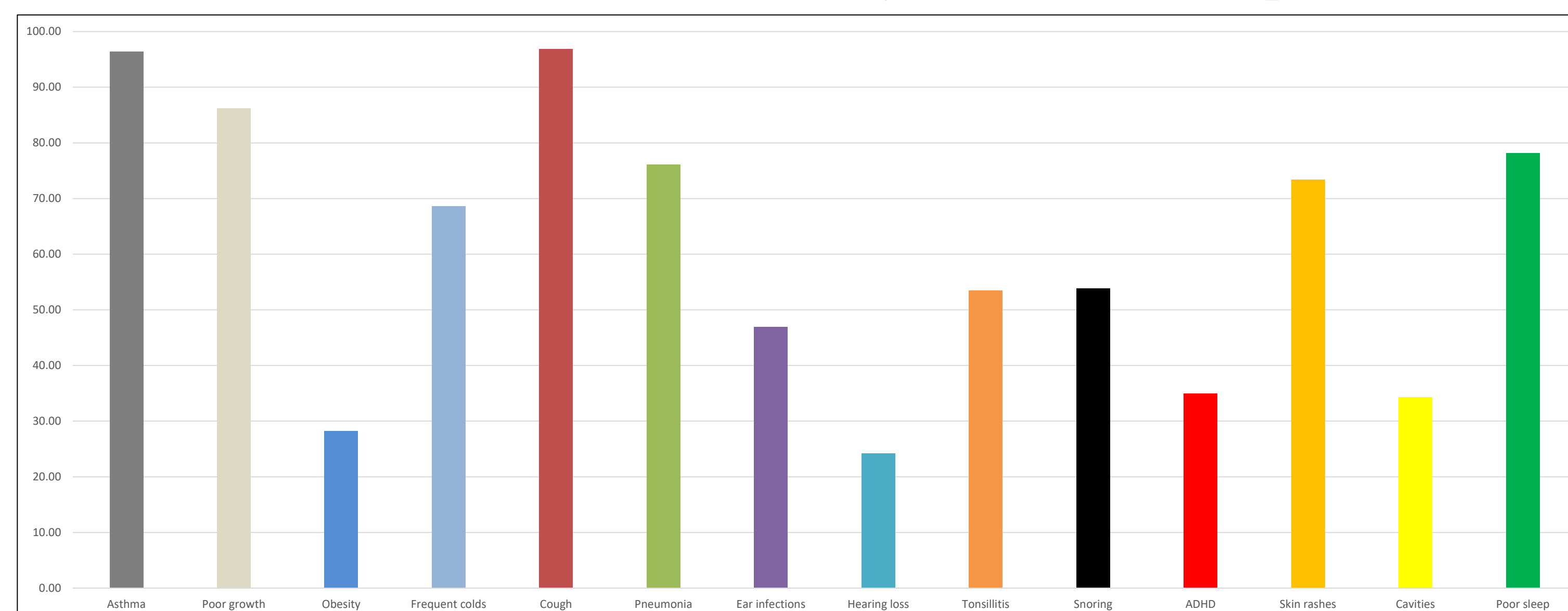
Survey Demographic Characteristics Overall and Across Community Groups

	Overall	Black	Hispanic	AAPI	LGBTQ +	White
N	1,450	286	293	298	283	291
Age: M(SD)	35.49 (11.58)	38.65 (11.69)	33.91 (10.12)	31.43 (9.19)	33.64 (10.52)	40.0 (13.64)
Gender: Female	50.0%	58.3%	39.2%	46.0%	49.8%	57.1%
Education: AA or less	58.3%	62.9%	63.5%	39.9%	59.8%	66.4%
Single-family home	59.6%	51.6%	63.9%	60.1%	54.8%	67.1%
Own home	41.1%	41.7%	42.6%	38.3%	32.2%	50.5%
Employed full-time	55.7%	59.7%	53.6%	55.0%	57.2%	52.9%

RESULTS

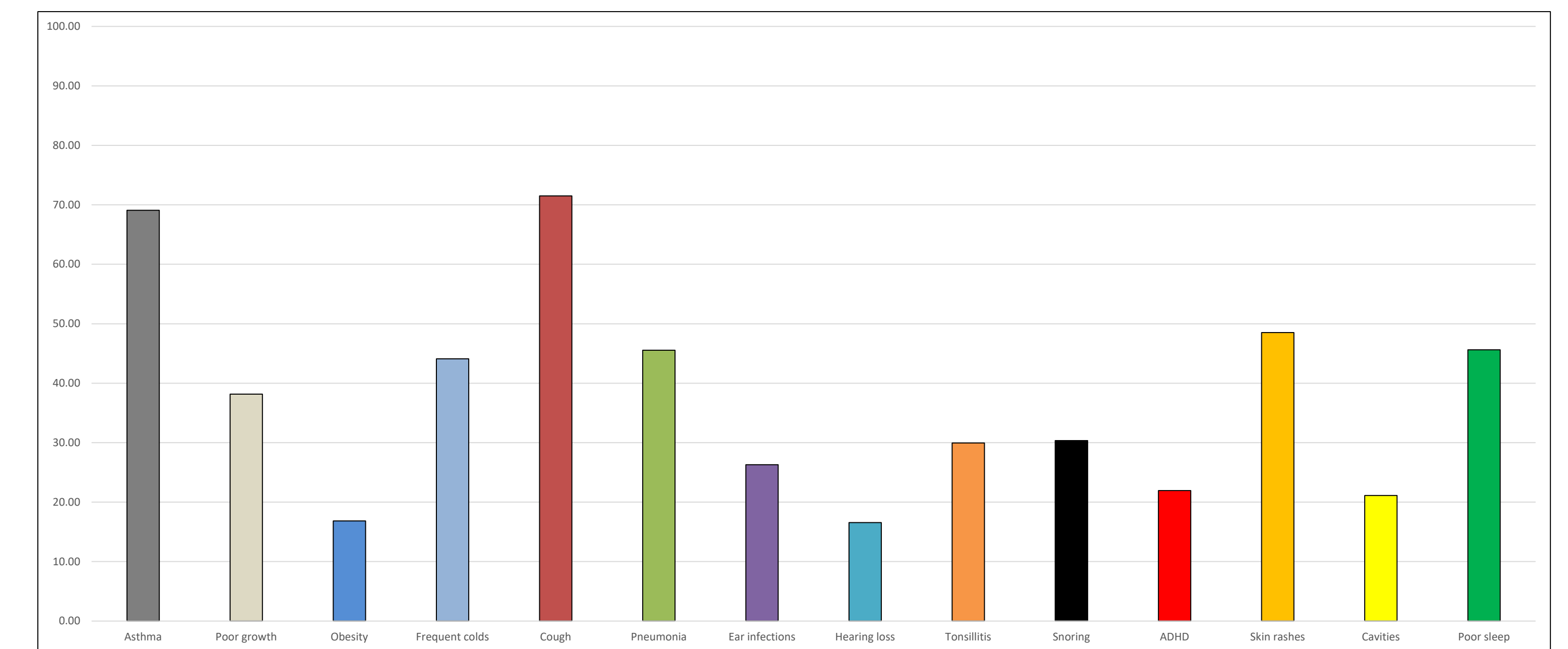
- Participants who believe that children in a household where people smoke **inside** face health risks are also more likely to think that children in households where someone 1) smokes **outside** or 2) has **priorly smoked inside for 20 years** are at risk of the same health issues.
- Participants who believe that children in a house with smoking **outside** face health risks are also more likely to think that children in a home where someone **priorly** smoked **inside for 20 years would face similar risks**.
- **For all health risks, except obesity, hearing loss, ADHD, and cavities**, a majority of participants recognized that **smoking inside increases the health risk for children**.
- Participants recognized a **greater risk of the health risk** being caused by children living in a house where someone **priorly smoked inside for 20 years** than in a house where someone smoked **outside**.

Perceived Child Health Risks Posed by Inside Smoke Exposure (%)

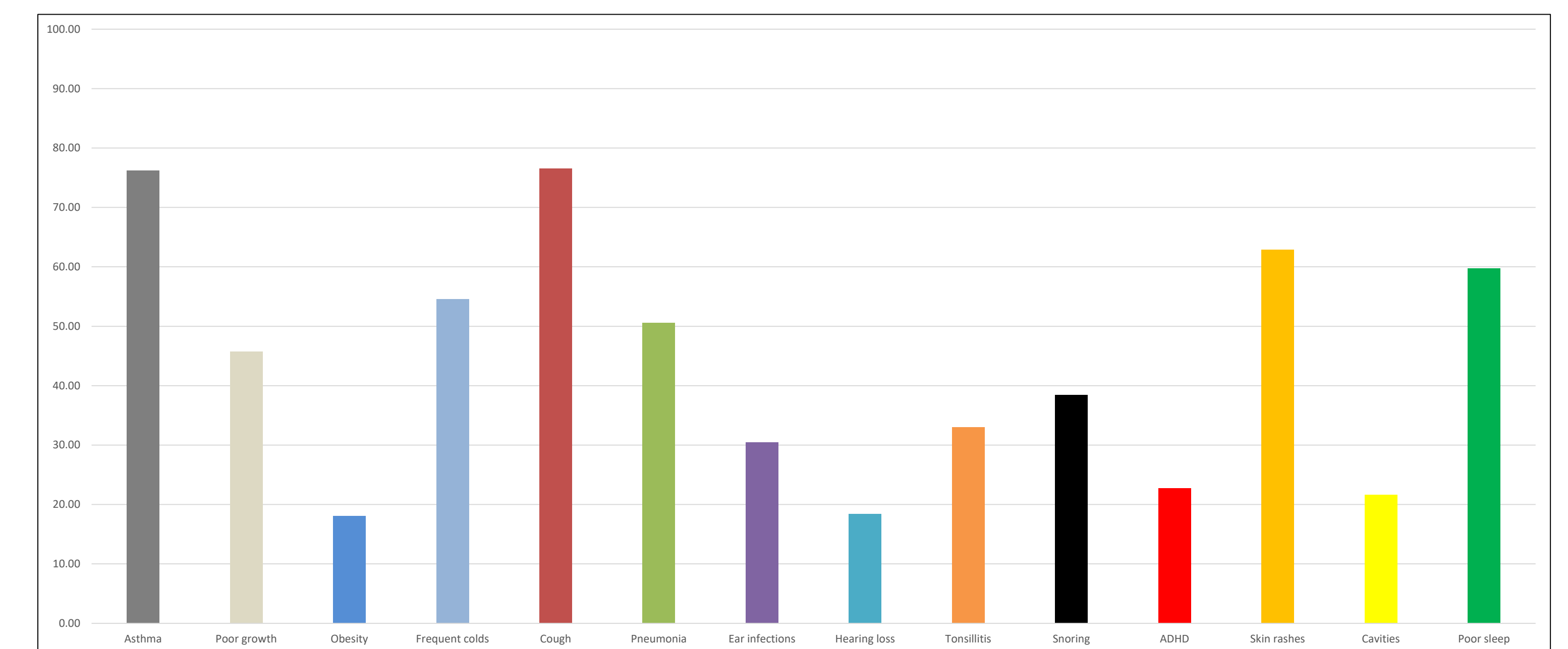


RESULTS, CONT.

Perceived Child Health Risks Posed by Outside Smoke Exposure (%)



Perceived Child Health Risks Posed by Prior Smoke Exposure (%)



IMPLICATIONS OF FINDINGS

- Decades of tobacco education have effectively led to broad awareness of the health effects of smoking indoors, particularly regarding asthma, cough, and poor growth.
 - More than half of participants recognized 9 of the 14 health risks to children from indoor smoking
- Opportunities for education persist regarding health risks for children if someone is smoking outside of the home, with less than 50% of participants recognizing health risks for 12 of the 14 risks from smoking outdoors.
- Interestingly, participants recognized the prior smoking scenario to results in greater health risks for children than the outdoor smoking scenario. This suggests a recognition of the risks of lingering tobacco smoke within enclosed spaces, particularly homes.
- Across all 3 scenarios, knowledge was low regarding tobacco exposure increasing health risks regarding childhood obesity, hearing loss, and cavities.
- Results provide direction for education opportunities that can be addressed in public health campaigns to improve public awareness of well-known harmful children's health risks of THS exposure.
- Opportunities remain for education efforts to inform pediatricians, who serve as important liaisons with parents, about the numerous health risks of various forms of tobacco smoke exposure for children.