



# Identification is Key : Barriers to Regular Usage of Allergy Identifiers

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## Introduction

Prompt recognition of anaphylaxis is challenging but remains paramount for the expeditious administration of life-saving epinephrine. However, the majority of pediatric patients with food allergies do not wear allergy identifiers that can aid in the quick recognition of anaphylaxis in the setting of known allergy. We inquired why patients do not wear allergy identifiers and investigated social determinants of health that may impact patients' adherence.

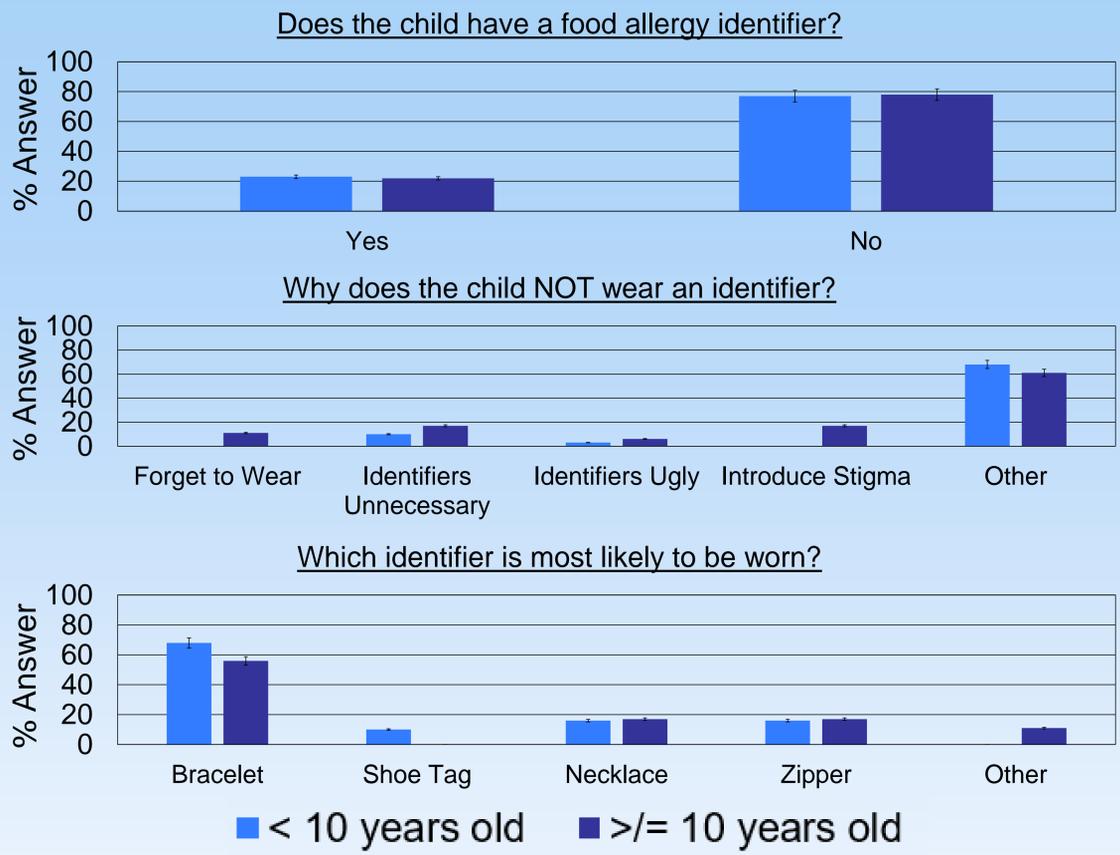
## Methods

In a prospective observational study at the Penn State Hershey Medical Center's Pediatric Allergy/Immunology clinic, surveys were distributed to food allergic patients and their caregivers regarding the use of allergy identifiers. 50 surveys were distributed randomly and 49 families chose to participate. The survey investigated barriers to wearing allergy identifiers as well as patient demographics. Measures of central tendency were used in our analyses. IRB approval was obtained.

Table 1.

		< 10 years of age (n = 31)	>= 10 years of age (n = 18)
<b>Q2 :</b> Does your child have a food allergy identifier?	Yes	23%	22%
	No	77%	78%
	Only for one or more allergies, but not ALL	0%	0%
<b>Q5 :</b> Reasons for not wearing an allergy identifier?	Forget to wear	0%	11%
	Identifiers are unnecessary	10%	17%
	Identifiers are ugly	3%	6%
	Identifiers introduce stigma	0%	17%
	Other (never offered, etc.)	68%	61%
<b>Q6 :</b> Which identifier would your child most likely wear?	Bracelet	68%	56%
	Shoe Tag	10%	0%
	Necklace	16%	17%
	Zipper	16%	17%
	Other	0%	11%

## Results



Analysis of survey data reveals that 41% (p <0.0001) of respondents do not wear an allergy identifier because they either “did not know about allergy identifiers” or “were never offered one”. An additional predictor of decreased adherence to wearing allergy identifiers is socioeconomic status. Decreased adherence is associated with having public insurance (17%, p =0.1661) and household income of less than \$50,000 (10%, p =0.3434) as compared to patients with private insurance (23%, p =0.0059) and patients with a household income of greater than \$50,000 (19%, p =0.0223), respectively.

## Discussion

The progression of an allergic food reaction from subtle to anaphylaxis can occur on the order of minutes to even seconds<sup>1,4</sup>. The presence of an allergy identifier keeps the differential of anaphylaxis at the forefront of lay people, first responders, and medical personnel alike<sup>2,3</sup>. By identifying medical alert jewelry that will be worn with greater regularity, delays in treatment with epinephrine during times of true anaphylactic emergencies may be reduced<sup>3,5</sup>.

## Conclusions

This prospective observational survey underlines the importance that healthcare providers adequately inform and counsel patients on the existence and benefit of allergy identifiers. Important factors to consider that might lead to decreased allergy identifier use include lower socioeconomic status, perceived lack of importance of the role of allergy identifiers, and potential social stigma associated with wearing an allergy identifier. Survey responses suggest that bracelets are the allergy identifier most likely to be worn by patients.

## References

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