Asthma and Allergy Foundation of America

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U.S. House of Representatives Committee on Energy and Commerce, Subcommittee on Health

Hearing on "LEGISLATION TO IMPROVE AMERICANS' HEALTH CARE COVERAGE AND OUTCOMES"

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Introduction

Chairwoman Eshoo, Ranking Member Burgess, and Members of the Subcommittee:

I am Kenneth Mendez, President and CEO of the Asthma and Allergy Foundation of America, or AAFA. AAFA is the leading patient organization for people with asthma and allergies, and the oldest asthma and allergy patient group in the world. Thank you for inviting me to offer testimony in support of H.R. 2468, the School-Based Allergies and Asthma Management Program Act.

This bipartisan bill is an important step in promoting health and learning for the 5.5 million American children living with asthma and the nearly 6 million American children with food allergies. Put differently, 1 in 13 children have asthma, and 1 in 13 have food allergies – meaning that every school in the U.S. is likely to have children with these conditions. The bill would create a preference within the Centers for Disease Control and Prevention's (CDC) existing asthma grant program for states that require schools to take a series of actions to address asthma and food allergy. AAFA strongly supports this legislation.

Background: Asthma and Allergy in Schools

Both asthma and food allergies present serious threats to children's health and learning.

Asthma is the most common chronic disease among children and a major cause of childhood disability.[1] In 2018, an estimated 8.5 million children under the age of 18 had ever been diagnosed with asthma, and 5.5 million were currently living with asthma, translating to about 1 in 13 children in the U.S. living with the condition.[2]

[1] Ferrante G, Grutta SL. The burden of pediatric asthma. *Front Pediatr*. 2018; 6:186.
[2] Centers for Disease Control and Prevention. Summary health statistics: National health interview survey, 2018. Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed December 23, 2019. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/NHIS/SHS/2018_SHS_Table_C-1.pdf

Among children, the highest rates of asthma are seen in those who are school-aged. Eight percent of children aged 5 to 11 years old were living with asthma in 2018, as were 9.9 percent of children aged 12-17.[3]

Asthma disproportionately affects children from low-income families. Poor children are more likely to have asthma, less likely to be able to manage symptoms, more likely to visit the emergency department, and more likely to be admitted to the hospital due to an uncontrolled episode.[4] In 2018, the asthma prevalence for children in poverty was 10 percent; the rate among children not in poverty was 6 percent.[5]

The U.S. also continues to see persistent racial disparities in asthma prevalence. Asthma remains far more common among black and Hispanic children (14 percent and 8 percent, respectively) than among white children (5.6 percent).[6]

Children with asthma miss far more school than those without the disease. One analysis found that school-aged children with asthma miss an additional seven million school days annually.[7] Research shows these asthma-linked absences have many adverse effects on children, including mental and social challenges as well as diminished academic performance.[8] In addition to limiting in-school time, childhood asthma results in a 16 percent increase in missed work days for adult family members.[9]

Asthma among children has been shown to result in significant health resource utilization and both direct and indirect economic costs.[10] Asthma is the third-leading cause of hospitalization among children under the age of 15.[11] Overall, a recent analysis estimated the economic burden of childhood asthma in the U.S. to be $5.92 billion in direct healthcare costs.[12] Approximately

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[3] Centers for Disease Control and Prevention. Summary health statistics: National health interview survey, 2018. Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed December 23, 2019. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/NHIS/SHS/2018_SHS_Table_C-1.pdf

[4] Al-Muhsen S, et al. Poor asthma education and medication compliance are associated with increased emergency department visits by asthmatic children. *Ann Thorac Med.* 2015;10(2):123-131.

[5] Centers for Disease Control and Prevention. Summary health statistics: National health interview survey, 2018. Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed December 23, 2019. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/NHIS/SHS/2018_SHS_Table_C-1.pdf

[6] Centers for Disease Control and Prevention. Summary health statistics: National health interview survey, 2018. Centers for Disease Control and Prevention, National Center for Health Statistics. Accessed December 23, 2019. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/NHIS/SHS/2018_SHS_Table_C-1.pdf

[7] Sullivan P, et al. School absence and productivity outcomes associated with childhood asthma in the USA. *J of Asthma.* 2017; 55(2).

[8] Moonie S, Sterling DA, Figgs LW, et al. The relationship between school absence, academic performance, and asthma status. *J Sch Health*. 2008;78:140–148.

[9] Sullivan P, et al. School absence and productivity outcomes associated with childhood asthma in the USA. *J of Asthma.* 2017; 55(2).

[10] Wang LY, Zhong Y, Wheeler L. Direct and indirect costs of asthma in school-age children. *Prev CH.R.on Dis*. 2005;2(1):A11.

[11] American Lung Association. Asthma & children fact sheet (2014). Available at www.lung.org/lung-health-and-diseases/lung-disease-lookup/asthma/learn-about-asthma/asthma-children-facts-sheet.html

[12] Perry, R., Braileanu, G., Palmer, T. et al. The Economic Burden of Pediatric Asthma in the United States: Literature Review of Current Evidence. *PharmacoEconomics* (2019) 37: 155.

3,600 Americans die from asthma every year, and while asthma deaths among children are relatively rare, they are largely preventable.[13]

Food Allergy and Schools

Food allergies are an immune system response to food that can cause hives, asthma, difficulty breathing, vomiting, diarrhea, anaphylactic shock, and, in rare cases, death.[14]

Today, more than 5.6 million children in the U.S. are estimated to have a food allergy, and approximately 40 percent of children with a food allergy are allergic to more than one food.[15] Roughly 90 percent of childhood food allergies in the US are caused by eight foods: eggs, milk, peanuts, tree nuts, soy, fish, shellfish, and wheat; sesame allergy now ranks a close ninth.[16,17] The CDC reports that since 1997, food allergy prevalence among children has increased by 50 percent,[18] with peanut allergies more than tripling in prevalence.[19] More recent data indicate that prevalence has continued to rise over the past decade.[20]

Childhood food allergies have serious impacts on health and wellbeing. A severe allergic reaction, or anaphylaxis, can be fatal if epinephrine treatment is not administered within minutes. Between 2005 and 2014, there was a nearly 200 percent increase in food allergy-related emergency department visits among children 5-17 years old.[21]

In addition to the health and economic costs, food allergies create social burdens on children and families. Parents often report that food allergies limit their children's participation in summer camp or social gatherings and hinder their ability to eat out or travel.[22,23] Children with food

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[13] Centers for Disease Control and Prevention, "AsthmaStats: Asthma as the Underlying Cause of Death." Available at https://www.cdc.gov/asthma/asthma_stats/documents/AsthmStat_Mortality_2001-2016-H.pdf
[14] Food Allergies in Children. Johns Hopkins Medicine. Available at www.hopkinsmedicine.org/health/conditions-and-diseases/food-allergies-in-children
[15] Gupta RS, Warren CM, Smith BM, Blumenstock JA, Jiang J, Davis MM, Nadeau KC. The Public Health Impact of Parent-Reported Childhood Food Allergies in the United States. *Pediatrics* 2018;142(6):e20181235.
[16] Turke PW. Childhood food allergies: An evolutionary mismatch hypothesis. *Evol Med Public Health*. 2017;2017(1):154–160. Published 2017 Oct 4.
[17] Sicherer SH, Muñoz-Furlong A, Godbold JH, Sampson HA. US Prevalence of self-report peanut, tree nut, and sesame allergy: 11-year follow-up. *J Allergy Clin Immunol.* 2010;125(6): 1322-1326pmid:20462634.
[18] Jackson KD, Howie LD, Akinbami LJ. Trends in allergic conditions among children: United States,1997-2011. NCHS data brief, no 121. Hyattsville, MD: National Center for Health Statistics. 2013.
[19] *Id.*
[20] R. Gupta, C. Warren, J. Blumenstock, J. Kotowska, K. Mittal, B. Smith. OR078 The prevalence of childhood food allergy in the United States: an update. *Annals of Allergy, Asthma and Immunology* November 2017, Volume 119, Issue 5, Supplement, Page S11.
[21] Motosue MS, Bellolio Mf, Van Houten HK, Shah ND, Campbell Rl. Increasing emergency department visits for anaphylaxis, 2005-2014. *J Allergy Clin Immunol Pract*. 2017;5(1):171-175.e3.
[22] Herbert L, Shemesh E, Bender B. Clinical management of psychosocial concerns related to food allergy. *J Allergy Clin Immunol Pract.* 2016; 4(2):205-213.
[23] Bollinger ME; Dahlquist LM, Mudd K; Sonntag C, Dillinger L, McKenna K. The impact of food allergy on the daily activities of children and their families. *Ann Allergy Asthma Immunol*. 2006; 96:415-421.

allergies are more likely to experience bullying, including bullying involving food-related threats.[24]

Like asthma, food allergies pose a major economic burden on families, the healthcare system, and society. The annual estimated cost of food allergies in the U.S. is $24.8 billion, including $4.3 billion in direct medical costs and $20.5 billion in costs experienced by the family, including out of pocket costs, lost labor productivity, and opportunity costs related to leaving or changing jobs.[25]

Children with food allergies have two to four times the risk of asthma or other allergic conditions, and children with both asthma and food allergies may be more likely to experience anaphylaxis and death when exposed to an allergen.[26]

What Schools Can Do

Schools can play an enormous role in supporting children's health. For children with asthma and allergies, schools can help families manage the condition; prepare to address emergency situations; promote awareness among teachers, parents, and children; and provide a safe and healthy school environment that minimizes asthma and allergy triggers.

For many years now, AAFA has developed a "State Honor Roll," which examines policies and programs related to asthma and food allergies in schools. Our 2019 Honor Roll report is attached for the record. To produce this analysis, we comb through changes in state law and regulations to determine if states are meeting 23 key standards; states that meet at least 18 of the 23 join the honor roll.

We have seen a great deal of progress over the years in many areas. Overall, there are now 15 states on our honor roll, compared to 8 in 2013.

However, there are still too many gaps. For example, only 27 states require schools to have emergency protocols for asthma, and only 36 require emergency protocols for anaphylaxis. Only 24 states require schools to maintain allergy and asthma incidence reports, and only 12 require schools to have indoor air quality management plans. And even though school nurses are often the backbone of school efforts to help children with asthma and food allergies, only 8 states set a minimum nurse-to-student ratio for schools.

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[24] Lieberman JA, Weiss C, Furlong TJ, Sicherer M, Sicherer SH. Bullying among pediatric patients with food allergy. *Ann Allergy Asthma Immunol*. 2010 Oct;105(4):282-6.
[25] Gupta R, Holdford D, Bilaver L, Dyer A, Holl JL, Meltzer D. The economic impact of childhood food allergy in the United States. *JAMA Pediatr.* 2013 Nov;167(11):1026-31.
[26] Branum A, Lukacs S. Food allergy among U.S. children: Trends in prevalence and hospitalizations. NCHS data brief, no 10. Hyattsville, MD: National Center for Health Statistics. 2008. Available at https://www.cdc.gov/nchs/data/databriefs/db10.pdf

H.R. 2468, the School-Based Allergies and Asthma Management Program Act

H.R. 2468 would help address these gaps by creating a preference in CDC's asthma grant program for states that require all public elementary and secondary schools to have:

- a nurse or other trained individual who can administer asthma or allergy medication onsite during all operating hours; and
- a comprehensive school-based allergies and asthma management program that
  - identifies all students with asthma or allergies;
  - establishes individual action plans;
  - educates school staff;
  - reduces environmental triggers of allergies and asthma; and
  - coordinates management of allergies and asthma with families and primary care providers.

The act has support from a number of major stakeholder organizations including AAFA, the American Academy of Allergy, Asthma and Immunology; the American College of Allergy, Asthma, and Immunology; the Allergy and Asthma Network; Food Allergy Research & Education; and the National Association of School Nurses.[27]

H.R. 2468 leverages CDC's National Asthma Control Program (NACP), an existing initiative that awards competitive grants to states for efforts aimed at reducing the number of asthma deaths, hospitalizations, and visits to the emergency room; reducing the number of missed school and workdays; and helping people with asthma be active without limitation.

While AAFA believes that CDC's NACP grant program should be expanded to all fifty states, H.R. 2468 would not directly increase spending for the program. Instead, it creates a preference within the existing NACP program. The CDC would establish the specific standards that would allow a state to qualify for the preference. As noted above, our own Honor Roll research has identified some serious gaps that this legislation would help address. For example, given the low number of states that set school nurse standards, it is important for states to require that someone – whether a nurse or other trained individual – be available during all operating hours to administer asthma or allergy medication. Similarly, the components of the school plan that H.R. 2468 establishes would help fill gaps in state requirements related to emergency protocols, indoor air quality, and other preparedness factors. AAFA would be pleased to further discuss our Honor Roll findings and methodology to help CDC develop their criteria. To strengthen their allergy and asthma programs, schools can draw upon many resources developed by stakeholders,

[27] American Academy of Allergy, Asthma & Immunology, "School-Based Allergies and Asthma Management Program Act (H.R. 2468)." Available at www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Advocacy/AAAAI-leave-behind-H.R.-2468-School-Based-Allergies-and-Asthma-Management-Act-FINAL.pdf

including the SAMPRO program developed by the American Academy of Allergy, Asthma & Immunology (AAAAI) in collaboration with AAFA and other stakeholders.[28]

Conclusion

All parents want to send their kids to school knowing that they will be safe, healthy, and ready to learn. H.R. 2468 will help ensure this is a reality for more children and families managing asthma and food allergies. AAFA is grateful for the subcommittee's consideration of this bill, and stands ready to help in any way.

[28] American Academy of Allergy, Asthma and Immunology, School-Based Asthma Management Program (SAMPRO). Available at https://www.aaaai.org/conditions-and-treatments/school-tools/SAMPRO; Lemanske, Robert F. et al.
Creation and implementation of SAMPRO™: A school-based asthma management program.
Journal of Allergy and Clinical Immunology, Volume 138, Issue 3, 711 – 723.