Allergies on the rise in US kids, government study finds

By Steve James

Allergies triggered by food or the environment have risen sharply in U.S. children in recent years, especially among more affluent families, according to a large government study. The "epidemic" rise in allergies, as one expert describes it, is of concern because it increases the risk of potentially fatal respiratory diseases or disfiguring skin conditions that could require long-term care.

The latest data, released on Thursday by the Centers for Disease Control, showed the prevalence of food allergies increased in children under age 18 from 3.4 percent in 1997 to 5.1 percent in 2011. Skin allergies rose from 7.4 percent to 12.5 percent in the same time period.

"Allergic disease is an epidemic and it may not have plateaued yet," said Dr. Sakina Bajowala, an allergist in suburban Chicago, who was not associated with the CDC study. "Every day we get new calls from patients. We see a lot more kids, not with just one allergy, but several."

The CDC numbers show that black children are more likely to suffer skin allergies, while whites are at greater risk of respiratory problems. But the data also reveals that that the prevalence of allergies increases with income level and children whose family income is 200 percent of the poverty level had the highest prevalence rates.

According to the CDC's National Center of Health Statistics, younger children were more likely to have skin allergies, while older children were more likely to have respiratory allergies. Hispanic children had a lower prevalence of food, skin and respiratory allergy than children of other races.

CDC statistician Lajeana Howie, who helped conduct the study, said researchers looked at data from 9,000 to 12,000 people representing a cross section of the U.S. population. But, she said, the study only looked at the prevalence of allergies, it did not determine

the causes.

Howie said she could not speculate why children from more affluent families had higher incidences of allergies, because of the confidential nature of the CDC study.

Dr. Bajowala, whose practice is in the relatively affluent suburb of Aurora, Illinois, said: "There is no hard data to explain why affluence is related to allergies." In an interview with NBCNews.com, she suggested various reasons, ranging from more frequent doctor visits by affluent parents with health insurance, basic differences in diet between poorer and better-off kids, or a higher frequency of antibiotics in some children.

Foods are the most common cause of anaphylaxis—a potentially fatal severe allergic reaction—among children and adolescents, the CDC said.

Just this week, Bajowala said she treated a 6-year-old boy with life-threatening allergies to more than five different foods, a 4-year-old girl with severe eczema over 20 percent of her body and a wheezing 3-year-old child whose parents worry might develop asthma.

That case load is not unusual for Bajowala, who says she is seeing more and more children with skin and respiratory allergies triggered by food, such as eggs, or nuts or shellfish, or by pollution, diesel fumes, dust or even mice and cockroaches.

Bajowala, who is a fellow of the American Academy of Allergy, Asthma and Immunology, said that allergies are caused by a combination of genetics and the environment. "You don't become allergic to something you have not been exposed to," she said. "Some, you inherit from your parents, but the environment has an effect, too.

"You could have identical twins, with the same genes and raise them in different environments, and one may manifest an allergic disease and the other may not."

The key to treating allergies, she said, is determining the allergen that is causing the reaction in a particular patient and then using specific immunology to counter it.

"Immunotherapy has a more than 80 percent success rate," Bajowala said. "I like to explain to my patients that their immune system is overreacting (to an allergen) and we are retraining it to tolerate something it did not tolerate before."

Such treatment is essential to stop the Atopic March -- the typical progression of allergic diseases that often begin early in life. These include atopic dermatitis (eczema), food allergy, allergic rhinitis (hay fever) and asthma.

"I may see a baby with a skin rash and later they get hay fever and that leads to asthma," said Bajowala, who said 60 percent of her patients are children.

"Allergies are not a joke, it is very frightening for families impacted by it – they do not want it to control their lives, but it does."

Dr. Jonathan Silverberg, an allergist in the dermatology department at St. Luke's – Roosevelt Hospital in New York, said he was not surprised by the CDC figures. "We know it is on the rise, it just keeps going."

Silverberg just published a study that showed that children born outside the United States had significantly lower odds of developing allergies than American-born children. "However, foreign-born Americans develop increased risk of allergic disease with prolonged residence in the United States," he said.

He attributed the difference partly to the fact that children overseas are more likely to be exposed to diseases that build up protection against allergies. Also, the Western diet is associated with more allergic disease.

Silverberg said his patients from overseas question him daily. "They say: 'I came here from the Caribbean or Mexico and I never had problems like this. My skin flares up here but if I go back home, the problem is solved.'

"Clearly there is something in the short- or longer-term exposure here," Silverberg said.

He said his study was based on responses from 91,642 children to a National Survey of Children's Health in 2007-08.