

THE BURDEN OF U.S. SESAME ALLERGIES MAY BE HIGHER THAN PREVIOUSLY BELIEVED

According to this study:

- At least 1 million U.S. adults and children may have immunoglobulin-mediated sesame allergy.

Food allergies and their associated psychosocial, economic, and physical health burdens are believed to affect approximately 10% of adults and 8% of children in the United States. The eight most common food and food group allergens—including peanuts and shellfish—are well known, with the U.S. Food and Drug Administration (FDA) mandating the labeling of these on packaged foods. Yet, there is growing recognition that other food allergens, such as sesame, may also have a substantial population-level effect. Last year, the FDA requested information on the prevalence and severity of sesame allergies as it considers mandating the labeling of sesame as an allergen. A cross-sectional study reports the current estimates of the prevalence, severity, symptoms, distribution, use of health care services, and determinants of sesame allergy in the United States.

The researchers sent a food allergy prevalence survey to a nationally representative sample of U.S. households from October 1, 2015, to September 30, 2016. Surveys were completed by 51,819 U.S. households and included data on 40,443 adults and 38,408 children. The authors conclude that an estimated 0.23% of the U.S. population has a current sesame allergy with a history of convincing immunoglobulin E-mediated symptoms (that is, at least one symptom on the stringent symptom list developed by the researchers' expert panel). An additional 0.11% of the population

is estimated to have a current physician-diagnosed sesame allergy without a corresponding history of stringent reaction symptoms. Overall, a total of 0.49% of the U.S. population—more than 1.5 million children and adults—may have a current sesame allergy, indicating a higher perceived burden than previously believed.

Among people reported to have a convincing sesame allergy, 37.2% said they have had a severe reaction, as indicated by multiple organ system involvement. In addition, 62.2% of those who had a sesame allergy had a current epinephrine prescription and 64.6% had visited an ED at least once because of an allergic reaction to food.—KR

Warren CM, et al. *JAMA Netw Open* 2019;2(8):e199144.

THE EFFECTS OF PRIVATE ROOMS ON HOSPITAL-ASSOCIATED INFECTIONS

According to this study:

- Switching to single-patient rooms led to a notable and sustained decrease in the rates of new methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant *Enterococcus* (VRE) colonization and VRE infection, but not of *Clostridioides difficile* or MRSA infections.

Health care–associated infections are common, costly, and harmful to patients. One proposed strategy to reduce the transmission of multidrug-resistant organisms and prevent certain health care–associated infections is to place patients in single-bed rooms. Following the relocation in April 2015 of the Royal Victoria Hospital, a tertiary-care hospital in Montreal, Quebec, Canada, with multibed rooms, to a newly built facility with private rooms, researchers examined the rates of vancomycin-resistant *Enterococcus* (VRE) and methicillin-resistant

Staphylococcus aureus (MRSA) colonization and infection and of *Clostridioides difficile* infection (CDI) using a time-series analysis.

The old hospital rooms were a mixture of three- and four-bed units and a few private rooms. The new hospital includes 350 single-patient rooms with dedicated handwashing sinks, new beds and furniture, and, except for two critical care units, private bathrooms and showers. Surveillance cultures were taken from all medical, surgical, and critical care patients on admission and weekly thereafter, and positive clinical cultures were tracked. The hospital's general infection control practices did not change at the time of the move. Aggregate data from other Quebec hospitals were used to control for temporal trends during the study period.

In 36 months of follow-up, the hospital's incidence of VRE colonization was reduced from 766 to 209 cases, lowering the mean unadjusted rate from 35 to 6.6 per 10,000 patient-days. MRSA colonization incidence dropped from 129 to 112 cases, from a rate of 5.9 to 3.5. VRE infections were also reduced, from 55 to 14 cases, lowering the mean unadjusted rate from 2.5 to 0.4, although MRSA infection rates were not. For CDI, there was no immediate-level change or statistically significant temporal trends. The absolute decrease of nearly 35% in the rates of CDI during the studied years paralleled changes across Quebec and Canada.

The researchers posit that the immediate drop in VRE and MRSA colonization and VRE infection rates was largely due to the switch to single rooms. Quality improvement efforts after the move, they conclude, have been useful in the maintenance of this success.—BT

McDonald EG, et al. *JAMA Intern Med* 2019 Aug 19 [Epub ahead of print]. ▼