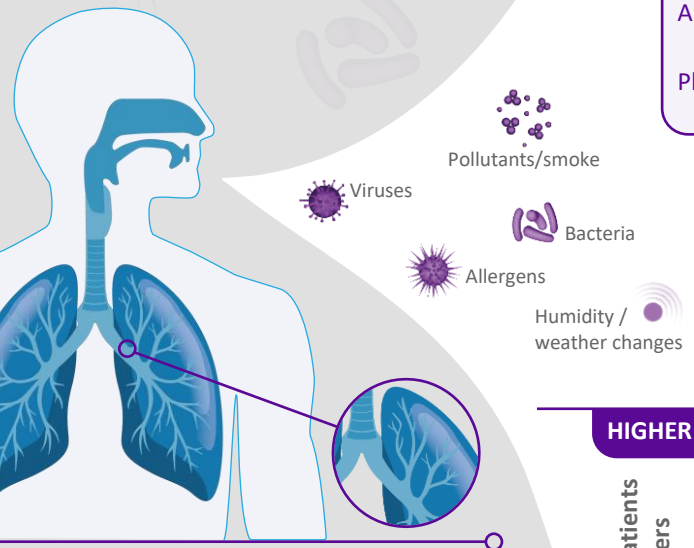
IN US PATIENTS WITH SEVERE ASTHMA:

Number of triggers predicted patients' burden of disease



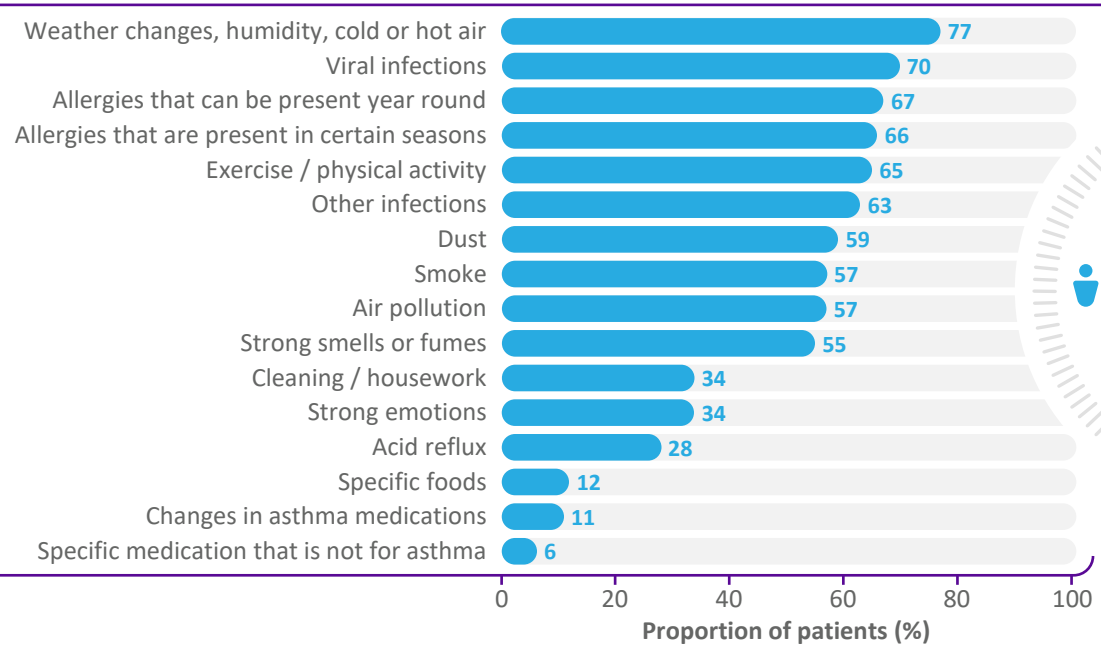
In individuals with asthma, **triggers interact with the airway epithelium** to drive **airway inflammation** and **hyperresponsiveness**[1–3]

Visit EpiCentral to learn more and join the EpiCommunity

2018–2021 analysis of the real-world CHRONICLE study reported data on self-reported asthma triggers* from 1434 adults with specialist-confirmed severe asthma[4]

MOST PREVALENT ASTHMA TRIGGERS WERE:[4]

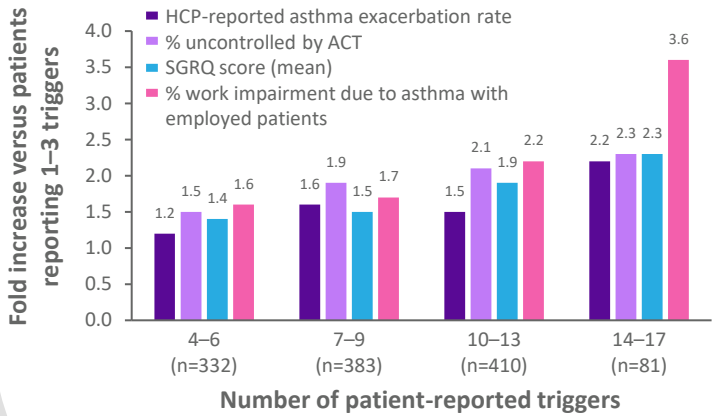
- Air/weather changes
- Viral infections
- Allergies
- Physical exertion



>60%

of patients reported 7+ triggers[4]

HIGHER NUMBER OF TRIGGERS ASSOCIATED WITH GREATER ASTHMA BURDEN[4,5]



MEASURE OF ASTHMA BURDEN

NUMBER OF TRIGGERS

1–3 vs 14–17

	1–3	14–17
Asthma control		
Patients uncontrolled according to GINA questions† (%)	27	61
Mean ACT score	19	11
Quality of life		
Mean SGRQ‡ score	28	62
Work impairment		
Mean work impairment (%)	11	41
Activity impairment		
Mean activity impairment (%)	18	57

EACH ADDITIONAL ASTHMA TRIGGER RESULTED IN A:

7% Higher annualized exacerbation rate§

17% Higher rate of asthma hospitalization§

Trigger number was a **STRONGER PREDICTOR** than blood eosinophil count for exacerbation and hospitalization rates

EpiCentral
UNDERSTANDING THE CENTRAL ROLE OF THE EPITHELIUM IN SEVERE ASTHMA AND BEYOND

Graphs from Chipps BE, et al. *Ann Allergy Asthma Immunol* 2023;130:784–790.e5. Licensed under CC BY-NC-ND 4.0 from: https://creativecommons.org/licenses/by-nc-nd/4.0/deed.en (Accessed 26 June 2024)

*Triggers selected during a self-administered questionnaire using 17 prespecified categories, which were chosen based on prior research[4]; †The following GINA control assessment questions were answered by the subspecialist: Does the patient have daytime asthma symptoms more than twice per week? Does the patient have any nocturnal/awakening symptoms due to asthma? Does the patient require asthma-reliever medication use more than twice per week? Does the patient have any activity limitation due to asthma?[4]; ‡The SGRQ is a standardized, self-administered, airway disease-specific questionnaire divided into 3 subscales: symptoms (8 items), activity (16 items), and impacts (26 items). Scores range from 0 to 100, with 0 representing perfect health and 100 representing maximum impairment; previous studies have estimated total SGRQ scores of approximately 8–13 in healthy individuals. The MCID for the SGRQ is a reduction of 4 units in the total score[4,6]; §Multivariate models for asthma trigger number as a predictor of exacerbation/hospitalization rate reported rate ratios of 1.07 (95% CI: 1.03, 1.11) and 1.17 (95% CI: 1.08, 1.27), respectively among 1296 patients with complete data.[4,5]

ACT, Asthma Control Test; GINA, Global Initiative for Asthma; CI, confidence interval; HCP, healthcare professional; MCID, minimal clinically important difference; SGRQ, St. George's Respiratory Questionnaire

1. Bartemes KR, Kita H. *Clin Immunol* 2012;143:222–235; 2. Chau-Etchepare F, et al. *J Investig Med* 2019;67:1029–1041; 3. Gauvreau GM, et al. *Expert Opin Ther Targets* 2020;24:777–792;
4. Chipps BE, et al. *Ann Allergy Asthma Immunol* 2023;130:784–790.e5; 5. Chipps BE, et al. Poster P110 presented at ACAAI 2022; 6. Ferrer M, et al. *Eur Respir J* 2002;19:405–413

AMGEN AstraZeneca