Cannabis sativa, herbal, is increasingly recognized, but hypersensitivity to cannabis has been understudied. The majority of participants report active marijuana use, compared to 16.7% of Canadians reported by Statistics Canada.

**Background**

- *Cannabis sativa* is an herbaceous plant with many common uses, including in clothing, food and construction.
- Herbal preparations of *Cannabis sativa*, marijuana, are recreationally used, commonly by inhalation, ingestion or topical application.
- Hypersensitivity to cannabis has been reported, with symptoms ranging from mild to life-threatening, usually corresponding to route of exposure.
- Cannabis hypersensitivity may also confer cross-reactivity to many fruits and vegetables through non-specific lipid-transfer proteins.
- Recreational use of marijuana was legalized in Canada in Oct 2018, and Canadian exposure to marijuana is expected to increase.
- The epidemiology of exposure to marijuana, as well as the clinical presentation, severity, and clinical impact of cannabis hypersensitivity in Canadians remain understudied.

**Methods**

- A self-administered questionnaire was developed with adaptation of questions from a previously published study.
- Questions were focused on obtaining information regarding marijuana use – route and degree of exposure, length of use, secondary exposures, and regarding any attributed symptoms, including respiratory, gastrointestinal, and dermatologic.
- Questionnaires were distributed to all adults presenting to a Toronto allergy clinic for 2 weeks immediately after legalization of recreational marijuana in Canada.
- Categorical variables were compared using chi-squared testing where appropriate.

**Objectives**

To characterize marijuana exposure, and to explore the prevalence of symptoms attributable to cannabis hypersensitivity in a Toronto allergic population.

**Results**

- All 179 distributed questionnaires were completed
- 59 (33%) male; mean age 42.8 years
- 46 (26%) participants report active marijuana use, compared to 16.7% of Canadians reported by Statistics Canada

**Conclusion**

- The majority of our study participants have used marijuana, suggesting that many Canadians may have also previously had marijuana exposure.
- A large proportion of marijuana users describe symptoms attributable to cannabis hypersensitivity with exposure.
- Participants continue to use marijuana despite symptoms, suggesting mild severity.
- Future directions include evaluation of sensitization by standardized skin-prick or specific IgE testing, and repeated data collection to monitor trends.