

# Health care visits and out-of-pocket costs in people with Chronic Hand Eczema

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## Objectives

- To analyze health care visits and OOP costs over 12 months in people with mild and moderate to severe CHE in Canada, France, Germany, Italy, Spain, and the UK.

## Results

- In total 1,024 CHE participants completed the questionnaire.
- Seventy-one percent were females; ranging from 60.3% in Italy to 80.5% in Germany.
- No major differences observed between countries in mean age.
- Overall, 40.8% reported moderate to severe CHE symptoms, ranging from 25.3% in Spain to 51.3% in Germany.
- In the past 6 months, 11.6% were treated with systemics or phototherapy, 46.0% with TCS only (with or without other topicals), 7.2% with other topicals and 35.2% were not treated with any treatment listed above in the past 6 months.
- Systemics or phototherapy were used to a larger extent in France (17.5%) and to a lesser extent in the UK (5.9%) (Table 1).
- The overall mean (SD) number of physician visits was 2.3 (3.1); with 1.6 (2.3) amongst those with mild symptoms and 3.2 (3.9) amongst those with moderate to severe symptoms.
- Among those with moderate to severe CHE, the number of visits ranged from 2.5 (2.9) in Canada to 4.3 (5.1) in France (Figure 1).

Table 1. Self-reported CHE participants characteristics, overall and per country

	Total	Canada	France	Germany	Italy	Spain	UK
N	1,024	168	166	113	184	190	203
Age, mean (SD)	45.9 (11.8)	44.6 (11.6)	46.5 (11.5)	46.4 (12.0)	45.7 (12.4)	45.0 (11.8)	47.2 (11.7)
Sex							
Female, n (%)	723 (70.6%)	124 (73.8%)	127 (76.5%)	91 (80.5%)	111 (60.3%)	119 (62.6%)	151 (74.4%)
Male, n (%)	301 (29.4%)	44 (26.2%)	39 (23.5%)	22 (19.5%)	73 (39.7%)	71 (37.4%)	52 (25.6%)
Time since diagnosis							
N	854	135	142	97	158	162	160
Mean (SD)	17.3 (14.7)	20.1 (14.5)	18.6 (15.3)	14.6 (14.8)	14.8 (13.0)	12.2 (11.9)	23.3 (15.6)
Severity in the past week							
Mild, n (%)	606 (59.2%)	104 (61.9%)	90 (54.2%)	55 (48.7%)	96 (52.2%)	142 (74.7%)	119 (58.6%)
Moderate to severe, n (%)	418 (40.8%)	64 (38.1%)	76 (45.8%)	58 (51.3%)	88 (47.8%)	48 (25.3%)	84 (41.4%)
Treatment group							
Systemics or phototherapy	119 (11.6%)	19 (11.3%)	29 (17.5%)	13 (11.5%)	25 (13.5%)	21 (11.0%)	12 (5.9%)
TCS only	471 (46.0%)	65 (38.7%)	75 (45.2%)	40 (35.4%)	106 (57.6%)	101 (53.2%)	84 (41.4%)
Other topicals	74 (7.2%)	5 (3.0%)	12 (7.2%)	13 (11.5%)	14 (7.6%)	16 (8.4%)	14 (6.9%)
Participants not treated with any treatment listed above*	360 (35.2%)	79 (47.0%)	50 (30.1%)	47 (41.6%)	39 (21.2%)	52 (27.4%)	93 (45.8%)

\* Among them, 14 participants did not know which treatments they have been taking, including 1 in Canada, 1 in France, 7 in Germany, 1 in Italy, 2 in Spain and 2 in the UK.

- In the past 12 months, 37.3% had seen a dermatologist (ranging from 14.3% in the UK to 57.5% in Germany).
- About one in three (29.1%) had no visit in the past year (Table 2), (35.5% in mild and 17.7% in moderate to severe participants).

Table 2. Physicians seen in the past 12 months in relation with HE, overall and per country\*\*

	Total	Canada	France	Germany	Italy	Spain	UK
N	1,024	168	166	113	184	190	203
Dermatologist	382 (37.3%)	37 (22.0%)	59 (35.5%)	65 (57.5%)	104 (56.5%)	88 (46.3%)	29 (14.3%)
General Practitioner*	459 (44.8%)	81 (48.2%)	94 (56.6%)	36 (31.9%)	74 (40.2%)	82 (43.2%)	92 (45.3%)
Allergist / Immunologist	43 (4.2%)	7 (4.2%)	1 (0.6%)	3 (2.7%)	21 (11.4%)	8 (4.2%)	3 (1.5%)
Internal Medicine physician	11 (1.1%)	3 (1.8%)	0 (0.0%)	5 (4.4%)	2 (1.1%)	1 (0.5%)	0 (0.0%)
Occupational health therapist	12 (1.2%)	0 (0.0%)	5 (3.0%)	1 (0.9%)	4 (2.2%)	0 (0.0%)	2 (1.0%)
Other	13 (1.3%)	1 (0.6%)	2 (1.2%)	0 (0.0%)	1 (0.5%)	3 (1.6%)	6 (3.0%)
No visit***	298 (29.1%)	63 (37.5%)	38 (22.9%)	25 (22.1%)	36 (19.6%)	45 (23.7%)	91 (44.8%)

\*GP includes also GPwER and GPwFP in dermatology.

\*\*Participants could select multiple types of physicians.

\*\*\*Participants did not visit any of those physicians in relation with HE in the past 12 months, 9 of them did not know.

## Conclusions

- Results show that people living with CHE face a considerable financial burden due to OOP costs for self-managing their disease, including over-the-counter creams and lotions, gloves, bandages special soaps and cleansers.

- A third of individuals with mild CHE did not visit a physician in the past year, which indicate that they can self-manage their disease. In moderate to severe CHE, one in six did not seek health care in the past year, which may suggest a need for improved healthcare access and support.

- The majority of people with moderate to severe CHE had multiple visits per year, which suggest a burden to the health care system and may be due to the lack of suitable treatment options.

## Background

- Chronic hand eczema (CHE) is a burdensome dermatological inflammatory skin disease involving the hands and/or wrists<sup>1</sup>.
- According to the definition of the European Society of Contact Dermatitis (ESCD), CHE is hand eczema (HE) that lasts  $\geq 3$  months or relapses at  $\geq 2$  times a year<sup>2</sup>.
- CHE imposes a significant cost burden on both patients and society<sup>3</sup>, including significant out-of-pocket (OOP) costs for emollients and non-reimbursed treatments and frequent physician visits.
- Real-world evidence regarding the economic burden of CHE is limited, especially in a cohort of patients ranging from mild to very severe disease.
- Previous research is often limited to patient cohorts recruited in hospital settings and restricted to single-country studies<sup>4,5</sup>, sometimes based on assumptions and limited data in models<sup>5</sup> and frequently focusing only on severe CHE patients, refractory to Topical Corticosteroids (TCS)<sup>5,6</sup>.

## Methods

- CHECK (Chronic Hand Eczema epidemiology, Care, and Knowledge of real-life burden) is a population-based survey.
- Adults aged 18 to 69 were recruited in 2023-2024 via online panels in Canada, France, Germany, Italy, Spain, and the UK.
- Participants who self-reported CHE were included in the analyses.
- Outcomes included:

- Health care visits and OOP costs for emollients, moisturizers or topical treatments not reimbursed and for other items relevant for managing the CHE (e.g., gloves, wound care, gauze bandages, special soaps and cleansers), converted to EUR 2024) and over 12 months.
- A previously published photographic guide<sup>7</sup> to assess the severity of CHE during the past week (‘Clear’ and ‘Almost clear’ was categorized as ‘Mild’ and ‘Moderate’, ‘Severe’ and ‘Very severe’ was categorized as the ‘Moderate to Severe’).
- Treatments used were reported for the past 6 months.
- Treatments were analysed by a hierarchical approach with systemic therapies or phototherapy, as the highest group, TCS, but without systemics or phototherapy as the second highest, and the finally participants reporting other topical treatments.

- Data were analysed descriptively as mean with standard deviation (SD) for continuous variables, and frequencies (n) and percentages for categorical variables.

## References

- Quaade AS, Simonsen AB, Halling AS, *et al.* Prevalence, incidence, and severity of hand eczema in the general population - A systematic review and meta-analysis. *Contact Dermatitis.* 2021;84(6):361-74.
- Thyssen JP, Schuttelaar MLA, Alfonso JH, Arents BWM, *et al.* Guidelines for diagnosis, prevention, and treatment of hand eczema. *Contact Dermatitis.* 2022;86(5):357-78.
- Armstrong A, Hahn-Pedersen J, Bartlett C, Glanville J, & Thyssen JP. Economic burden of chronic hand eczema: a review. *American Journal of Clinical Dermatology.* 2022;23(3):287-300.
- Augustin M, Kuessner D, Purwins S, Hieke K, Posthumus J, & Diepgen TL. Cost-of-illness of patients with chronic hand eczema in routine care: results from a multicentre study in Germany. *British Journal of Dermatology.* 2011;165(4):845-851.
- Cortesi PA, Scalone L, Belisari A, Bonamonte D, Cannavò SP, Cristaudo A, De Pità O, Gallo R, Giannetti A, Gola M, Pigatto PD, Mantovani LG. Cost and quality of life in patients with severe chronic hand eczema refractory to standard therapy with topical potent corticosteroids. *Contact Dermatitis.* 2014;70(3):158-168.
- Blank PR, Blank AA, & Szucs TD. Cost-effectiveness of oral alitretinoin in patients with severe chronic hand eczema-a long-term analysis from a Swiss perspective. *BMC dermatology.* 2010;10,1-9.
- Coenraads PJ, Van Der Walle H, Thestrup-Pedersen K, Ruzicka T, Dreno B, De La Loge C, *et al.* Construction and validation of a photographic guide for assessing severity of chronic hand dermatitis. *British Journal of Dermatology.* 2005 Feb;152(2):296-301.

## Disclosures

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