ITCH IN ATOPIC DERMATITIS

2021 Survey Report
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INTRODUCTION

Atopic dermatitis (AD), commonly referred to as eczema, is a chronic, inflammatory skin condition characterized by dry, red, itchy skin that can crack, ooze, and bleed. Atopy refers to the genetic tendency to develop conditions such as allergic rhinitis, asthma and AD. Patients with AD experience acute worsening of their condition, which are referred to as flares.

AD flares can be extremely itchy and painful and can lead to psychological distress and negatively impact the individual and their family. AD can range from mild to severe, and while people living with AD can experience periods of remission, some never experience relief from these life-altering symptoms.

AD is typically managed by primary care physicians and paediatricians, whereas patients with more severe or unmanaged forms of the condition are often managed with the help of a dermatologist. While reliable estimates are not available for Canada, AD is estimated to affect 11% of children, and 7% of adults in the US.

ABOUT THE ECZEMA SOCIETY OF CANADA

Eczema Society of Canada (ESC) is a registered Canadian charity dedicated to improving the lives of Canadians living with eczema by providing education, support, awareness, advocacy, and research. For more information, visit eczemahelp.ca.
Itch is frequently reported as the most bothersome symptom of AD. In 2020 ESC endeavored to better understand the impact of itch on patients and their caregivers and developed an online survey to further explore the impact of itch. ESC received survey responses from 604 AD patients and caregivers from across Canada. These respondents self-identified their or their child’s AD severity using the definitions below.

**DEFINITIONS OF ATOPIC DERMATITIS SEVERITY**

**MILD**
Areas of dry skin, infrequent itching, with or without small areas of redness.

**MODERATE**
Areas of dry skin, frequent itching, and redness with or without broken skin or localized skin thickening.

**SEVERE**
Widespread areas of dry skin, incessant itching, and redness with or without broken skin, extensive skin thickening, bleeding, oozing, cracking and alteration of pigmentation.

**SURVEY RESPONDENT DEMOGRAPHICS**

13% suffer with **mild** atopic dermatitis
59% suffer with **moderate** atopic dermatitis
28% suffer with **severe** atopic dermatitis

Respondents were from all provinces

85% were adults with AD
15% were caregivers of children with AD

**ACKNOWLEDGEMENTS**
ESC sincerely thanks the patients and caregivers who shared their expertise and insights for this project, as well as the Canadians who took the survey. ESC also extends sincere gratitude to Dr. Panteha Eshtiaghi, MD, for her review of the survey and data analysis. The creation of this report was supported in part through funding from Pfizer Canada.
Patients report that itch is a persistent and distressing symptom of AD. The frequency and severity of itch varies greatly from patient to patient. Survey respondents report having difficulty falling asleep and staying asleep due to their itch, as well as discomfort from other AD symptoms.

**FREQUENCY OF ITCH**

<table>
<thead>
<tr>
<th>Percentage of adult respondents who feel itchy:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MULTIPLE TIMES A DAY</strong></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>41%</td>
</tr>
<tr>
<td>Moderate</td>
<td>72%</td>
</tr>
<tr>
<td>Severe</td>
<td>95%</td>
</tr>
<tr>
<td><strong>ALL THE TIME</strong></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>10%</td>
</tr>
<tr>
<td>Severe</td>
<td>44%</td>
</tr>
</tbody>
</table>

**INTENSITY OF ITCH**

Itch is rated as severe for the majority of survey respondents. 71% of all adult respondents with moderate or severe AD rate their overall itch as 7 out of 10 or greater. When their itch is at its worst, 42% of adult respondents with moderate or severe AD rate it as 10 out of 10.

**QUALITY OF LIFE IMPACT**

Itch negatively impacts concentration, mood, relationships, intimacy, and ability to exercise. It also impacts work through both absenteeism and presenteeism. This negative impact is positively correlated with disease severity.

**Percentage of adult respondents who report that itch negatively impacts:**

- **MENTAL HEALTH**
  - Mild: 17%
  - Moderate: 45%
  - Severe: 71%

- **STRESS**
  - Mild: 55%
  - Moderate: 69%
  - Severe: 87%

- **WORK/SCHOOL**
  - Mild: 18%
  - Moderate: 27%
  - Severe: 49%

**Adults with moderate or severe AD describe their itch as:**

- Unpredictable: 78%
- Debilitating: 46%
- Underestimated: 72%
Controlling the urge to scratch can be challenging. 30% of respondents with moderate AD and 54% of respondents with severe AD report rarely being able to control their urge to scratch.

Scratching also causes skin damage and bleeding. Respondents report finding blood on their clothing, bedding, and skin.

**Percentage of adult respondents who have scars or marks on their skin due to scratching:**

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>42%</td>
</tr>
<tr>
<td>Moderate</td>
<td>62%</td>
</tr>
<tr>
<td>Severe</td>
<td>87%</td>
</tr>
</tbody>
</table>

**54% of respondents with severe AD report rarely being able to control their urge to scratch.**

**TRIGGERS**

Adult respondents with moderate or severe AD experience the following triggers for their itch:

- Stress: 73%
- Exercise/sweating: 57%
- Cold weather: 57%
- Warm weather: 46%
- Certain fabrics: 51%
- Dust: 41%
- Pet dander: 32%
- Seasonal allergies: 48%
- Sometimes there is no trigger: 76%

Sometimes there is no trigger.
SLEEP AND ITCH

Itch impacts sleep despite the severity of AD. 52% of respondents with mild AD, 63% of respondents with moderate AD, and 86% of respondents with severe AD report that itch negatively impacts their sleep.

Respondents with AD also report being woken every night due to itch, with 6% of respondents with mild AD, 18% of respondents with moderate AD, and 55% of respondents with severe AD reporting this experience.

Percentage of adult respondents who report being woken every night due to itch:

<table>
<thead>
<tr>
<th>Severity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>18%</td>
</tr>
<tr>
<td>Severe</td>
<td>55%</td>
</tr>
</tbody>
</table>

IMPACT OF ITCH: IN THEIR OWN WORDS

Once it starts it’s an unconscious impulse you have no control over. You realize you are doing damage to yourself but literally cannot resist doing more.

My son has suffered from AD since birth. Anything can set off his scratching. Even just things rubbing against his skin. Stress is the worst.

It feels like the scratching can’t be controlled. It’s frustrating to have to keep on it so much that if I miss a day of moisturizing, I will suffer in days to come.

The ITCH that my son suffers from all day, every day, affects all aspects of his life. I worry when he misses school that he may not be learning as well as he should.

Most people do not understand that it is almost impossible not to scratch. It can feel like hundreds of flies biting at the same time.
CHILDREN’S SURVEY RESULTS

The itch of AD negatively impacts children's mood, behaviour, attention at school, ability to participate in sports, and sleep. The survey data revealed that the more severe a child’s AD, the more likely they are to miss school.

FREQUENCY OF ITCH

Percentage of children who feel itchy:

<table>
<thead>
<tr>
<th>Intensity of Itch</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple Times a Day</strong></td>
<td>14%</td>
<td>80%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>All the Time</strong></td>
<td>0%</td>
<td>15%</td>
<td>38%</td>
</tr>
</tbody>
</table>

INTENSITY OF ITCH

The intensity of itch is also significant for children with AD. 59% of children with moderate or severe AD experience overall itch that is rated as 7 out of 10 or greater. 29% of children with severe AD rate their overall itch as being 10 out of 10, the worst possible itch imaginable.

QUALITY OF LIFE IMPACT

Percentage of children with moderate or severe AD whose itch negatively impacts:

- Mood: 55%
- Concentration: 47%
- School: 23%

Caregivers also report that their child/children have marks or scars on their skin due to scratching. 50% of mild AD respondents, 75% of moderate AD respondents, and 100% of severe AD respondents report marks or scars from scratching. Itching also impacts the child’s quality of life. Caregivers of children with moderate or severe AD report their child’s itch is debilitating, unpredictable, and underestimated by others.

Percentage of children with moderate or severe AD whose itch is described as:

- Unpredictable: 71%
- Debilitating: 37%
- Underestimated: 60%

For 37% of children with moderate or severe AD their itch is debilitating.
**ITCH IN ATOPIC DERMATITIS**

While all symptoms of AD can be painful, uncomfortable, and challenging to manage, itch remains a burdensome aspect of the condition. Itch significantly impacts sleep, concentration, work, productivity, learning, and relationships. The physical act of scratching the skin causes skin damage, marking, and scarring, among both children and adults with AD.

**TRIGGERS**

<table>
<thead>
<tr>
<th>Trigger</th>
<th>Percentage of children with moderate or severe AD who experience the following itch triggers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>36%</td>
</tr>
<tr>
<td>Exercise/sweating</td>
<td>55%</td>
</tr>
<tr>
<td>Cold weather</td>
<td>54%</td>
</tr>
<tr>
<td>Warm weather</td>
<td>52%</td>
</tr>
<tr>
<td>Certain fabrics</td>
<td>54%</td>
</tr>
<tr>
<td>Dust</td>
<td>23%</td>
</tr>
<tr>
<td>Pet dander</td>
<td>25%</td>
</tr>
<tr>
<td>Seasonal allergies</td>
<td>39%</td>
</tr>
<tr>
<td>Sometimes there is no trigger</td>
<td>72%</td>
</tr>
</tbody>
</table>

**SLEEP AND ITCH**

Bedtime and sleep routines can be another challenging area for children with AD. Caregivers who report on their child’s sleep loss are woken and affected by AD’s impact as well. Sleep is important for general health and growth for children. Caregivers report that sleep is negatively impacted by itch.

**REFERENCES**


**RESULTS / SUMMARY**

Bedtime and sleep routines can be another challenging area for children with AD. Caregivers who report on their child’s sleep loss are woken and affected by AD’s impact as well. Sleep is important for general health and growth for children. Caregivers report that sleep is negatively impacted by itch.

**SUMMARY**

While all symptoms of AD can be painful, uncomfortable, and challenging to manage, itch remains a burdensome aspect of the condition. Itch significantly impacts sleep, concentration, work, productivity, learning, and relationships. The physical act of scratching the skin causes skin damage, marking, and scarring, among both children and adults with AD.