

# About Migraine

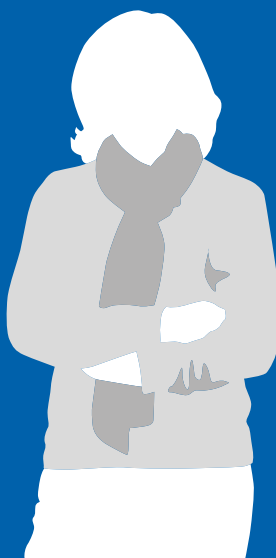
## What is migraine?



Migraine is a distinct neurological disease.<sup>1</sup>



Migraine is the third most common disease in the world and is one of the top ten causes of disability.<sup>1</sup>



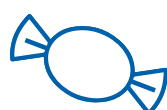
10%

More than 10% of people are affected by migraine worldwide.<sup>2</sup>



It remains under-recognized and under-treated with more than 40% of people going undiagnosed.<sup>2</sup>

## Four distinct phases



### Prodrome

Warning signs before migraine begins - such as tiredness, craving sweet foods, mood changes, feeling thirsty and a stiff neck.<sup>3</sup>



### Aura

Visual disturbances that appear as flashing lights, zig-zag lines or a temporary loss of vision.<sup>4</sup>



### Headache Phase

This is the actual migraine attack, pain, nausea, vomiting, sensitivity to light, sound and odor.<sup>4</sup>



### Postdrome

Many people mention feeling "hungover" after a migraine with poor concentration and "brain fog".<sup>5</sup>

The main headache phase of migraine typically lasts for 4-72 hours.<sup>6</sup>

## What might cause migraine?



### Calcitonin Gene-Related Peptide

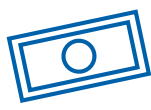
Although the causes and triggers of migraine are not fully understood, Calcitonin Gene-Related Peptide (CGRP) has been long thought to play a role in its underlying mechanisms.



### Levels of CGRP

Levels of CGRP have been found to increase at the onset of migraine symptoms, and to return to normal when the migraine pain subsides.<sup>7</sup>

## Impact of migraine



### Financial

The cost of migraine in Europe is estimated at **€27 billion** annually.<sup>8</sup>



### Quality of Life

Migraine results in disability and reduced quality of life. It is the **6th most disabling** disease in the world.<sup>1</sup>



### Everyday Tasks

**51%** reported that work or school productivity was reduced by at least 50%.<sup>9</sup>

### Family Milestones

**61%** of migraine sufferers thought their migraine attacks significantly impacted their families.<sup>12</sup>



### Work

Every year, almost 20% of men and 30% of women report losing more than **10%** of workdays as a result of the disease.<sup>10</sup>



### Leisure

**45%** of individuals report missing social and leisure activities.<sup>11</sup>



### Function

90% of people report they cannot work or function with a migraine.<sup>1</sup>



## Treating migraine



### Self Medicate

About half of individuals with migraine self-medicate with over-the-counter pain relief (acute treatment).<sup>13</sup>



### Prevent

Preventive treatments currently available were generally developed for other diseases, such as epilepsy, heart conditions and depression.<sup>14</sup>



### Discontinuation and Dissatisfaction

Up to 80% of people with migraine discontinue preventive treatment within one year.<sup>15</sup>



### Expert Opinion

Only 4% of migraine sufferers who seek medical care consult headache and pain specialists.<sup>1</sup>

### References:

1. Migraine Research Foundation. Migraine Facts. <https://migraineresearchfoundation.org/about-migraine/migraine-facts/>. Accessed March 2018
2. Stovner L, et al. The global burden of headache: a documentation of headache prevalence and disability worldwide. *Cephalalgia*. 2007;27(3):193-210
3. The Migraine Trust. Symptoms and stages of migraine. <https://www.migrainetrust.org/about-migraine/migraine-what-is-it/symptoms-and-stages/> Accessed February 22 20218
4. National Institute for Neurological Disorders and Stroke. Headache: Hope Through Research
5. Migraine.com. Migraine Phases. <https://migraine.com/migraine-basics/migraine-phases/>. Accessed February 22 20218
6. Lipton et al. Migraine in the United States. *Neurology* 2002; 58:885-894
7. Lassen et al. CGRP may play a causative role in migraine. *Cephalalgia*. 2002 Feb;22(1):54-61. Available <http://www.ncbi.nlm.nih.gov/pubmed/11993614>. Accessed March 2018
8. Stovner LJ, Andree C, Eurolight Steering Committee Impact of headache in Europe: a review for the Eurolight project. *J Headache Pain*. 2008;9(3):139-146. doi: 10.1007/s10194-008-0038-6.
9. Lipton et al. Prevalence and burden of migraine in the United States: data from the American Migraine Study II. 2001
10. Steiner TJ, et al. The impact of headache in Europe: principal results of the Eurolight project. *J Headache Pain* 2014;15:31:1146-1158
11. Lipton et al. The family impact of migraine: population-based studies in the USA. *Cephalalgia* 2003; 23: 229-240
12. Migraine.com. Migraine and Social Life. Available: <https://migraine.com/living-with-migraine/migraines-and-social-life/> Accessed April 2018
13. World Health Organization. Headache disorders. <https://www.who.int/mediacentre/factsheets/fs277/en/>. Accessed August 2016
14. Diamond S et al. Patterns of Diagnosis and Acute and Preventive Treatment for Migraine in the United States: Results from the American Migraine Prevalence and Prevention Study. *Headache*. 2007; 47(3):355-63
15. Hepp Z, et al. Adherence to oral migraine-preventive medications among patients with chronic migraine. *Cephalalgia*. 2015;35(6):478-88