



A Nation *Under Pressure*

Uncovering the UK's Blood Pressure Divide

The 2025 Hilo Report is designed to investigate the British public's awareness, understanding, and perceptions of the risks associated with hypertension. To provide this comprehensive overview, we combined findings from an online survey with proprietary data from Hilo – the world's first medical-grade, continuous, wrist-worn blood pressure monitor. Backed by European and FDA approval, more than two decades of research, and data from over 40,000 registered users in Britain, our evidence base is both robust and reliable.

These datasets, coupled with our unrivalled expertise in blood pressure measurement and monitoring, provide unique insights into public perceptions of blood pressure and enable us to identify gaps in awareness. This report aims to equip individuals and healthcare professionals alike with the knowledge needed to take control of blood pressure and advance Hilo's mission to protect the nation's heart health for the future.



High blood pressure isn't complex. It's just not talked about enough. That *needs to change*.

Stefan Petzinger
CEO at Hilo

Message from *Stefan Petzinger*

CEO of Hilo

"We commissioned this study for a simple reason: blood pressure is our core domain, and we wanted a clear, fact-based view of how the UK actually understands, manages, and engages with it. What came back was very revealing. Awareness is low, behaviour change is rare, and most people don't grasp the risks they're living with.

A third of UK adults have high blood pressure. It's one of the biggest drivers of strokes and heart attacks – conditions that destroy lives but are largely preventable with early detection and consistent management. Yet the data show many people don't know what "high blood pressure" really means, whether they might have it, or what to do about it.

There is a gap between risk and action that is a real problem. And the scale of it surprised us. This isn't a niche health issue; this affects millions.

Publishing this report is our way of putting the issue on the table. Yes, our mission is to develop tech that helps people control their blood pressure – but the findings point to a broader responsibility. This needs more attention from media, policymakers, clinicians and, frankly, from all of us. Ignoring it just guarantees more avoidable sad events and more avoidable tragic loss.

If this report does one thing, it should be to raise the urgency level. High blood pressure isn't complex. It's just not talked about enough. That needs to change."

Hypertension

A Silent Health Emergency

The UK is facing a silent health emergency – one with no obvious warnings, signs or symptoms. A single, often preventable, condition is thought to cause more than half of all strokes and heart attacks in the UK¹, and is a known risk factor for heart disease, kidney disease, and vascular dementia. Yet public awareness of these risks remains worryingly low. This serious medical issue is rarely discussed until a major health event occurs – by which time it may already be too late. The cause? High blood pressure, known medically as hypertension.

But hypertension isn't a condition that affects only others. It's a global health challenge,² impacting up to 33% of adults aged 30–79 (around 1.4 billion people worldwide), with estimates suggesting that half are completely unaware they have it. And it isn't picky about who it affects – people in high-, middle- and low-income groups are all at risk. Chances are someone close to you has it – perhaps even without realising. In fact, the lack of symptoms and low public awareness of the dangers make this a public health crisis waiting to happen. The kicker? In most cases, it's entirely preventable.

Because all populations are affected, this isn't a disease the UK can afford to ignore – and global trends are consistently reflected in national data:

- An estimated 30% of UK adults have hypertension,³ but 15% (around 4.2 million people) are either undiagnosed or not receiving treatment.⁴
- Incidence rises with age: more than half of adults aged 65 and over are affected, compared with just 9% of those aged 16–44.³
- Ethnicity also plays a role, with people from African, Caribbean or South Asian backgrounds at higher risk of developing high blood pressure than the rest of the population.⁵



More than
50%
of all strokes & heart attacks
in the UK are caused by
hypertension

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15%
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With this in mind, Hilo set out to evaluate public attitudes and perceptions towards hypertension using two approaches: proprietary polling through an online UK survey (n = 2,000) and analysis of data from long-term UK users of the Hilo app (n = 8,950). We wanted to understand:

- What people really know about hypertension;
- How seriously it's taken as a public health condition;
- Public perceptions of symptoms;
- Whether high blood pressure is a worry;
- Whether wearing a Hilo Band influences blood pressure measurements.

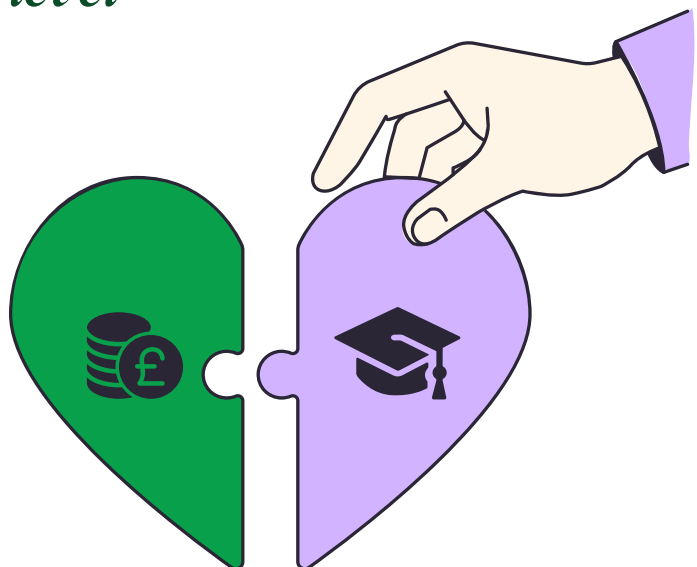
Our research revealed significant gaps in public knowledge and understanding of hypertension – particularly when compared across monthly income and education levels. Worryingly, the findings suggest that many people only take action

once hypertension is already established. Yet, for the first time, our data shows that engagement with medical-grade wearable technology brings real benefits: blood pressure increases that are considered normal in later life can be halted or even reversed, challenging the long-held belief that rising blood pressure is an inevitable part of ageing.

The findings from our research were grouped into three main themes: awareness, behaviours, and the impact of long-term monitoring.

However, a fourth theme emerged consistently throughout the analysis: awareness and behaviours around blood pressure are closely related to monthly income and level of education. Our data revealed that people from lower-income households, or with lower levels of completed education, are less likely to understand the dangers of high blood pressure and are therefore at greater risk of serious illness from this condition.

Awareness and behaviours around blood pressure are closely related to monthly income and level of education



Awareness

Age, Income and Education Are Key Factors

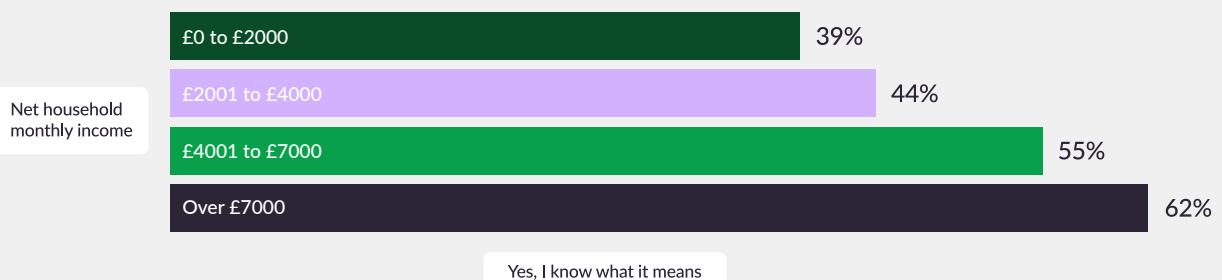
Understanding hypertension: the socioeconomic divide

Although hypertension causes more than half of all strokes and heart attacks in the UK, and affects one in three people, only 47% of the public had heard the term ‘hypertension’ and understood what it means.⁶ Despite this, just over half of respondents recognised it as a serious medical condition, and most could identify its major health risks, such as stroke and heart attack. However, far fewer were aware of its link with other serious illnesses, including kidney disease and vascular dementia.⁷

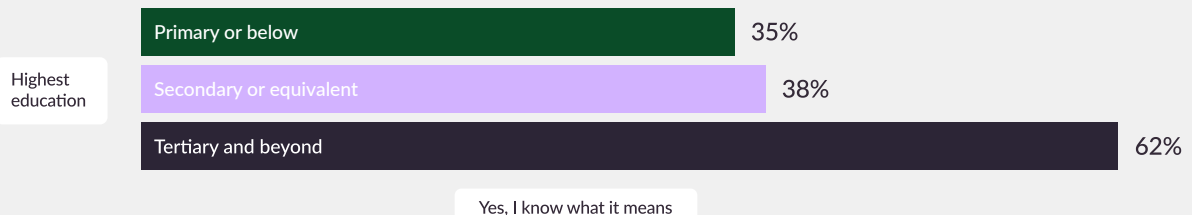
These statistics are concerning in themselves, but when monthly income and level of completed education were taken into account, the disparities were striking:

- Those households with lower net monthly income, or those where education was completed only up to secondary level, were significantly less likely to understand what hypertension is or the impact that it has on health.⁶

Have you heard the term hypertension, and do you know what it means?



Have you heard the term hypertension, and do you know what it means?



Know your numbers: the generational divide

UK government guidance states that a diagnosis of hypertension applies when blood pressure is above 140/90 in a medical setting.⁸ Most people surveyed (55%) stated that they knew what a high blood pressure reading was, with younger adults more likely to make this claim.⁹ However, when asked to give a value, the median response across all participants was 162/92 mmHg – and even higher for those under 34 – revealing a clear disconnect between medical guidelines and public perception.

And while 52% of respondents correctly recognised that high blood pressure can only be detected through measurement, nearly a quarter believed it had obvious symptoms – a figure that rose to 39% among young adults aged 16–24.¹⁰

While most Britons were able to link hypertension with the risk of heart attack and stroke, its association with other diseases was far less well-known. Understanding was directly related to education and monthly income – households with lower income or education levels were less likely to understand the term ‘*hypertension*’ or its impact on health. Worryingly, almost 40% of young adults believed they could ‘*feel*’ when their blood pressure was high, despite hypertension typically being symptomless.



Did *you* know the *lesser known effects* of hypertension?

- Vision loss and blindness
- Chronic kidney disease and kidney failure
- Vascular dementia and cognitive impairment
- Aortic aneurysm and dissection
- Sexual dysfunction and erectile dysfunction
- Pregnancy complications (preeclampsia, eclampsia)
- Hypertensive crisis with severe headache and nosebleeds



Behaviour

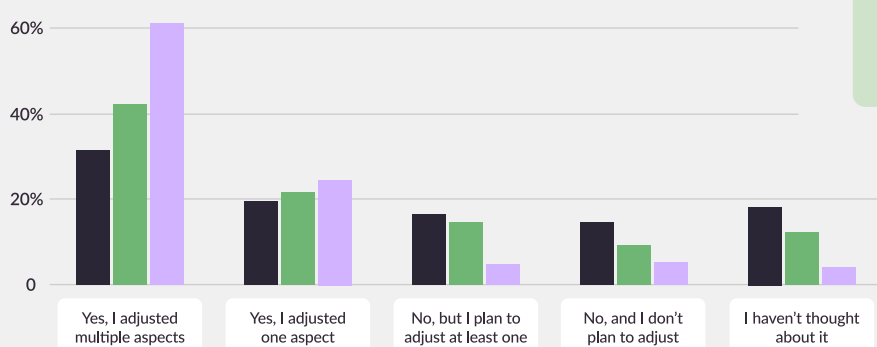
Diagnosis Brings Change but There's a Diagnosis Gap

It's estimated that around one third of adults in the UK have hypertension,³ with incidence increasing with age. About 50% of those living with the condition are thought to be unaware of it and therefore aren't receiving treatment. This pattern was reflected in our findings: just under a quarter of respondents recalled having a diagnosis, while the majority (over 70%) said they have never received one – indicating that up to 10% of participants may have high blood pressure without knowing it.¹¹

Hypertension diagnosis was closely linked to age – consistent with current research³ – with 40% of adults over 65 having received a diagnosis, compared to just 9% of those aged 16–24.¹¹ Age was also associated with lower awareness: younger people were less likely to measure their blood pressure or understand its long-term health implications, such as the increased risk of serious disease.⁸

Education and income play an important role in shaping understanding and lifestyle choices. Those from lower-income backgrounds or with a lower level of education were far less likely to have considered the link between lifestyle and blood pressure. The greatest influence on behaviour¹² was a hypertension diagnosis – either their own or that of a close family member¹³ – although this often came with increased worry.¹⁴

Are you adjusting your lifestyle to support a healthy blood pressure?



Insight

Diagnosis prompts most people to make lifestyle changes that support heart health, but without that nudge, many might never consider doing so.

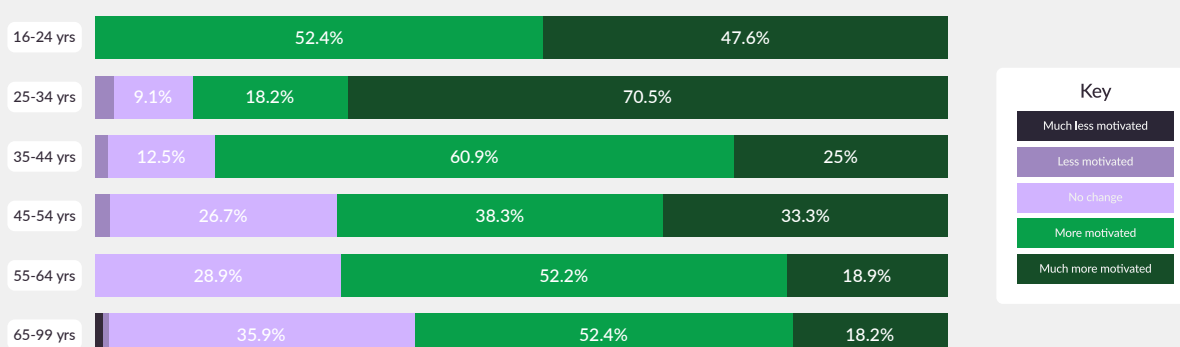
Households with lower income or lower levels of completed education were far less likely to make lifestyle changes to support long-term heart health without a hypertension diagnosis. The key driver for change was either a personal diagnosis or that of a close family member.

Impact

Measurement Habits and the Use of Technology

Complacency toward blood pressure monitoring was clear from the frequency of measurement. More than 70% of respondents hadn't checked their blood pressure within the previous month, and almost one in five had either gone more than two years without doing so, or could not recall when they last measured it.¹⁵ Regularity of measurement was related to age, income and education: younger adults, those on lower incomes, and those with lower levels of completed education were less likely to have measured their blood pressure in the past month. However, in line with lifestyle behaviours, diagnosis was a key motivator: regardless of socioeconomic group, people with hypertension, or with a family member who had been diagnosed, were likely to measure blood pressure more regularly.

How does monitoring your blood pressure affect your motivation to care for your heart health?

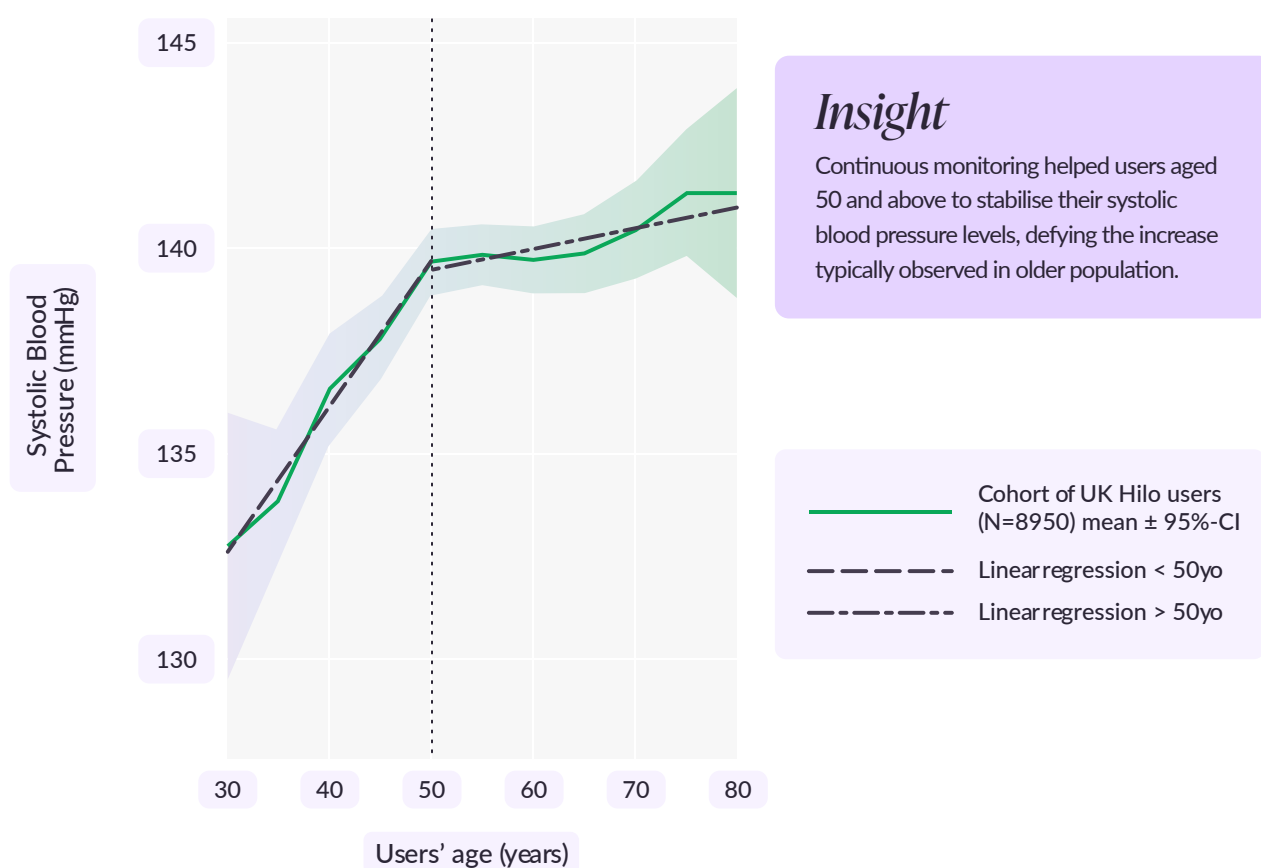


Access to a home blood pressure monitor was also linked to age, socioeconomic status and education. Monitors were more likely to be owned by older, more affluent and better-educated households. However, ownership didn't always translate into use – while nearly half of households owned a monitor, only a quarter took their last measurement at home, with most relying on a visit to the doctor.¹⁶ In our opinion, this represents a missed-opportunity: our survey findings suggest that regular monitoring encourages people to take better care of their heart health across all age groups, particularly among younger adults.¹⁷

Households with lower income or lower levels of education, as well as younger adults, were far less likely to measure their blood pressure regularly or own a monitor. Active monitoring, however, was strongly associated with positive lifestyle changes and healthier heart habits.

Stopped in its tracks: The Hilo effect

This finding – that blood pressure monitoring can motivate people to look after their heart health – is also reflected in our proprietary user data.



Among Hilo users aged 30–50, both men and women showed the expected gradual, age-related increase in systolic blood pressure, consistent with the general population.¹⁸ However, with continuous monitoring, users aged 50 and above saw their systolic blood pressure levels stabilise – defying the upward pattern typically observed in clinical practice.

In addition to these physiological trends, We also observed that hypertensive and older individuals remained engaged with the wearable monitor for longer periods compared to normotensive and younger individuals – a sign of more proactive blood pressure monitoring and greater awareness of cardiovascular risk.

Individuals who monitored their blood pressure continuously with a medical-grade wearable device showed better blood pressure control over time. In particular, older users appeared able to prevent the age-related rise in systolic blood pressure typically seen in the general population – potentially reflecting greater awareness, stronger treatment adherence, and lifestyle changes prompted by continuous feedback.

Key Takeaways

A Nation Under Pressure

In addressing our original objectives – to understand what the public knows about hypertension, how seriously it's taken as a health condition, what people know about its symptoms, and whether high blood pressure is a concern – our survey revealed a range of valuable insights and notable socioeconomic differences, grouped into three main themes: awareness, behaviour, and measurement habits and the impact of technology. Across these themes, education and income emerged as the defining factors shaping awareness and behaviour. People from lower socioeconomic backgrounds were less likely to be aware of the dangers of hypertension, less likely to have considered lifestyle changes to reduce their risk, and less likely to have monitored their blood pressure in the past month.



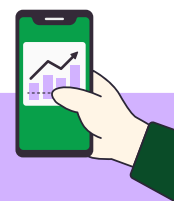
Awareness

While most of the public were able to identify the major health risks associated with hypertension – stroke and heart attack – only about half understood the term 'hypertension' or recognised it as a risk factor for other serious disease. This lack of understanding was particularly evident among households with lower income or lower levels of education.



Behaviour

A personal hypertension diagnosis – or that of a close family member – had the biggest impact on awareness and understanding. Without this nudge, people from lower socioeconomic backgrounds were far less likely to have recently measured their blood pressure or considered its link with lifestyle, creating a potentially dangerous diagnosis gap.



Measurement habits and the impact of technology

Around half of respondents owned a blood pressure monitor, but ownership didn't always translate into use. Younger adults – even in households with a monitor – were less likely to have measured their blood pressure recently, or to have considered taking readings, compared with older adults. They were also the most likely to believe that hypertension has noticeable symptoms. Interestingly, however, younger adults were the most likely to agree that monitoring blood pressure motivated them to care for their heart health – yet they remained the least likely to do it regularly.

Our proprietary data reinforces the patterns observed in public attitudes and the behaviours described above. Using a medical-grade device to monitor blood pressure continuously can drive meaningful change and deliver tangible improvements, particularly in systolic blood pressure – halting or reversing the rise in systolic blood pressure typically seen with age in control populations, as reported by large cohort studies.¹⁸ Although the reasons are likely multifactorial, continual exposure to blood pressure data appears to increase awareness, prompting positive lifestyle changes that support heart health. Crucially, this behavioural shift doesn't depend on a diagnosis of hypertension, when high blood pressure and associated risks may be already present. Unlike a traditional blood pressure monitor that provides only a single reading, the Hilo app enables users to track trends and patterns over time, empowering them to take active steps to improve their health. Both men and women benefit from this approach, but women have even more to gain due to their higher likelihood of developing hypertension after the age of 65.

Raising awareness of blood pressure increases motivation – and with greater motivation comes real change. At Hilo, we believe that continuous blood pressure monitoring can make a meaningful difference to people's lives, protecting their hearts and significantly reducing risk of serious long-term illness.

Using a medical-grade device to monitor blood pressure continuously can drive meaningful change and deliver tangible improvements, particularly in systolic blood pressure.



For deeper insights, additional data or expert interviews, contact press@aktiia.com. If this report prompts you to consider your own blood pressure, regular monitoring is a powerful first step. To learn how continuous monitoring works and how the Hilo Band can support evidence-based action, visit hilo.com.

Disclaimer: The Hilo Blood Pressure Monitoring Device is not intended to diagnose hypertension. Measurements provided by the device are for informational purposes only and should not be used as a basis for medical diagnosis or treatment decisions. Users should always consult their physician or qualified healthcare professional regarding any questions or concerns about their health or before making any changes to medication or treatment.



Only **47%**

of the UK public have heard of 'hypertension' and understand what it means, and the rest, over half, are unsure.

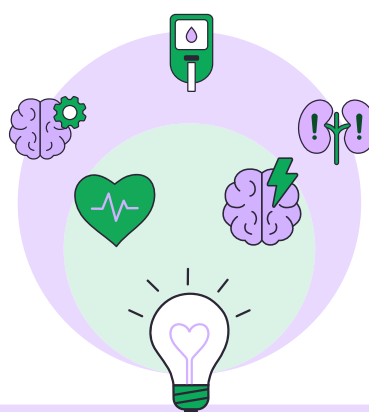


Most people **only** make lifestyle changes once they have a **diagnosis**, and having the condition makes them very worried.

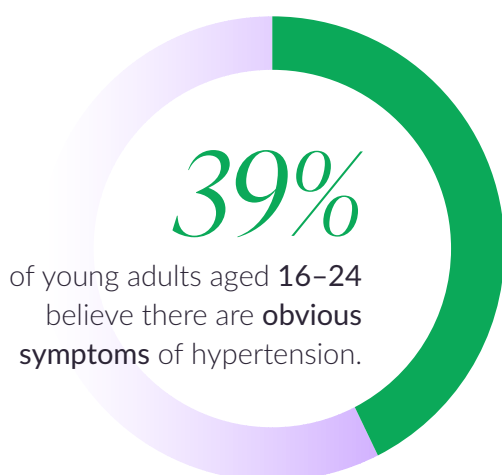


Only **25%**

of UK adults have had a diagnosis, but government data suggest that **up to a third of adults** are known to be affected – a significant **diagnosis gap**.



The relationship between **hypertension, heart attack and stroke** is known by most people, but knowledge of the **risk of other serious diseases**, such as diabetes, kidney disease and vascular dementia, is less widespread.



of young adults aged **16-24** believe there are **obvious symptoms** of hypertension.



Use of a **continuous monitoring device** is associated with tangible **reduction of blood pressure**.

Data collected shows that users can halt the dangerous increase in systolic blood pressure usually seen in the over 50s.



The *Hilo Band* and what it does

Hilo is a clinically validated, CE-marked Class IIa medical device for monitoring blood pressure in adults at home. It includes two core components that work together:

1. Hilo Band

The Hilo Band is a wearable device that acquires optical data via the user's wrist. Blood pressure is calculated using Pulse Wave Analysis, following an initial calibration with a digital BP monitor (using a conventional cuff). The band tracks blood pressure and heart rate automatically, about 25 times per day, without requiring any action from users. There are no lights or alerts as it's designed to be worn continuously, even while sleeping.

2. Hilo App

The Hilo App syncs with the band and gives continuous access to user's data on their smartphone. The app shows how blood pressure changes throughout the day and night, with trends linked to user's activity, meals, stress, sleep, and medication. Reports can also be shared directly from the app with family or healthcare practitioners.

Note The Hilo Band and App are not diagnostic tools. Don't rely on them to interpret or treat any condition. Always speak to a doctor about results obtained.

About Aktia

Founded in 2018 and headquartered in Neuchâtel, Switzerland, Aktia is the global leader in continuous, cuffless blood pressure monitoring. The company combines advanced optical sensing technology with proprietary algorithms and data-driven insights to empower individuals and clinicians to better monitor and manage hypertension – the world's leading silent killer. Aktia's technology is clinically validated, FDA-cleared and CE-marked (Class IIa) as a medical device. Its flagship product, the Hilo Band, provides continuous, effortless and accurate blood pressure monitoring through a sleek wrist-worn wearable, integrated with the Hilo companion app. Operating in 12 markets worldwide, Aktia's mission is to help manage the world's blood pressure through innovation, accessibility and scientific rigor.

Methodology

To collect and analyse the data, we used several sources:

- UK poll – Nationally representative survey (Appinio, October 2025; n = 2,000).
- Internal data – Anonymised data from long-term UK Hilo users (n = 8,950).

Anonymised data from an external survey:

The external survey was conducted by Appinio through their online platform over four days in October 2025 on behalf of Aktia SA. Use of data entered by users was included in the Terms & Conditions and Privacy Policy during account setup. UK users were invited to take part in the survey through a notification, and when the threshold of 2,000 responses was met, the poll closed. Participants were aged 16 or over and the survey population was deemed representative of the national UK population. Data were then pooled and analysed.

Proprietary, anonymised data from existing users of the Hilo Band:

British users (n = 8,950) provided informed consent for the retrospective analysis of their anonymised data by voluntarily accepting Hilo's Terms & Conditions and Privacy Policy during account setup. These documents define the scope, purpose, and lawful basis for the use of such data in retrospective and anonymised research and analytical activities. For inclusion in the study, subjects must have used the Hilo Band for at least six months between 2022 and 2025. Data interrogated included BP values, demographic data (age, gender, BMI) and engagement – i.e., how often they accessed the Hilo app and were exposed to their own BP values. Several analyses were conducted, comparing BP values and engagement within different demographic groups.

References

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2. Hypertension. World Health Organization, 25 September 2025. <https://www.who.int/news-room/fact-sheets/detail/hypertension> (Accessed November 2025)
3. Health Survey for England, 2021 part 2, NHS England, 16 May 2023, <https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2021-part-2/adult-health-hypertension> (Accessed November 2025)
4. A. Leadsom, Get your blood pressure checked, Department of Health and Social Care, UK Government, 11 March 2024. <https://www.gov.uk/government/news/get-your-blood-pressure-checked> (Accessed November 2025)
5. Your ethnic background and your blood pressure. Blood Pressure UK. <https://www.bloodpressureuk.org/your-blood-pressure/how-to-lower-your-blood-pressure/healthy-eating/your-ethnic-background-and-your-blood-pressure/> (Accessed November 2025)
6. Have you heard of the term hypertension and do you know what it means? Yes, I know what it means, (46.6%); Yes, I've heard of it but I'm not sure what it means, (46.4%); I've not heard of it (7.1%). Filtered by age/income (n = 2000)
7. Which of the following health risks associated with high blood pressure are you aware of? Stroke; hair loss; kidney disease/failure; diabetes; vision loss; increased risk of skin cancer; heart attack; tooth decay/gum disease; vascular dementia/cognitive decline; arthritis/joint pain; none of the above; other. Filtered by age (n = 2000)
8. High Blood Pressure. National Health Service (NHS), UK. <https://www.nhs.uk/conditions/high-blood-pressure/> (Accessed November 2025)
9. Do you know what values are considered as high blood pressure? Yes (55%); no (45%). Filtered by age (n = 2000)
10. How straightforward is it to detect high blood pressure without heaving it measured? Straightforward – it has obvious symptoms in most cases; difficult – it often has no symptoms in most cases; not sure. Filtered by age (n = 2000)
11. Regardless of your current blood pressure, have you ever been diagnosed with high blood pressure by a healthcare professional? Yes, I have been diagnosed (23.6%); No, I was never diagnosed (71.3%); I don't know (4.5%); Prefer not to say (0.7%). Filtered by age (n = 2000)
12. Are you adjusting your lifestyle to support a healthy blood pressure (e.g. sports, diet, stress)? Multiple answers filtered by hypertension diagnosis (n = 2000).
13. Do you have any family members with high blood pressure? Yes (49.1%); No (38.9%); I don't know (12.1%) (n = 2000)
14. To what extent does your blood pressure concern / worry you? Not at all concerned; Slightly concerned; Moderately concerned; Very concerned; Extremely concerned; Not sure. Filtered by family or personal hypertension diagnosis (n = 2000)
15. When did you last have your blood pressure measured? Less than 1 month ago; 1–6 months ago; 6 months–2 years ago; more than 2 years ago; never; I don't know; prefer not to say. Split by age or diagnosis (n = 2000).
16. Where did you have your blood pressure measured last? At home (26.5%); doctor (59%); pharmacy (11%); prefer not to say (0.5%); other (3%). (n = 1821)
17. How does monitoring your blood pressure affect your motivation to care for your heart health? Filtered by age or net household income (n = 471)
18. S. Cheng, V. Xanthakis, L. M. Sullivan et al. (2012), Hypertension, 60, 1393. <https://doi.org/10.1161/HYPERTENSIONAHA.112.201780>



hilo



For deeper insights, additional data or expert interviews, contact press@aktia.com.
If this report prompts you to consider your own blood pressure, regular monitoring is a powerful first step. To learn how continuous monitoring works and how the Hilo Band can support evidence-based action, visit hilo.com.