

# HTM<sup>o</sup> Solutions

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# Current methods for measuring body's core temperature are **DISTASTEFUL**

- Rectal thermometer
- Swallowable pill
- Wearable unit size of a mobile phone

**All trying to solve a real PROBLEM**

*But failing... Too expensive, Not suitable for everyday use*

**2.2% of total working hours worldwide is estimated to be lost by 2030 due to heat stress**



# **It's not just about working hours It's about our health**

**After SURVIVING just one heat  
stroke person has:**

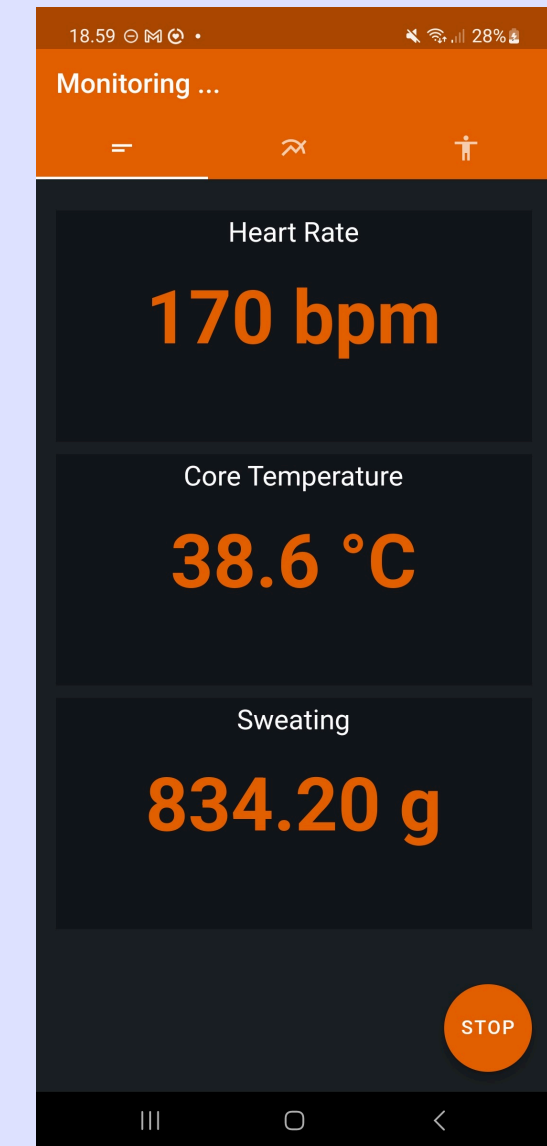
- Damage to liver, heart, kidney and muscle tissue
- Possibility of central nervous system dysfunction
- Possibility of compromised immune system
- Increased change of premature death



# Introducing Cee°

**Research-based non-invasive body's core temperature application - From pulse to data**

- Body temperature calculated by our Science-based algorithms
- Real time temperature data straight to your phone
- Notifications of increased heat stroke risk
- Accurate - anytime, anywhere
- Mobile and desktop monitoring
- Remote monitoring



**Utilizing most common  
sport trackers**

**No additional new hardware  
needed**



# Competition



	BodyCAP	greenTEG	Dräger	HTM
Sensors outside a human body only		✓	✓	✓
Drinking/eating allowed during monitoring		✓	✓	✓
Individual analysis (e.g., body composition)				✓
Core temperature estimation	✓	✓	✓	✓
Other physiological parameters* included				✓
Low purchase costs				✓
Low operation costs		✓	✓	✓
Enables new digital services*				✓

\* Sweating Rate, Blood Flow Rates, Oxygen Consumption, Physiological Strain Index (PSI), Thermal Sensation index (TSI)

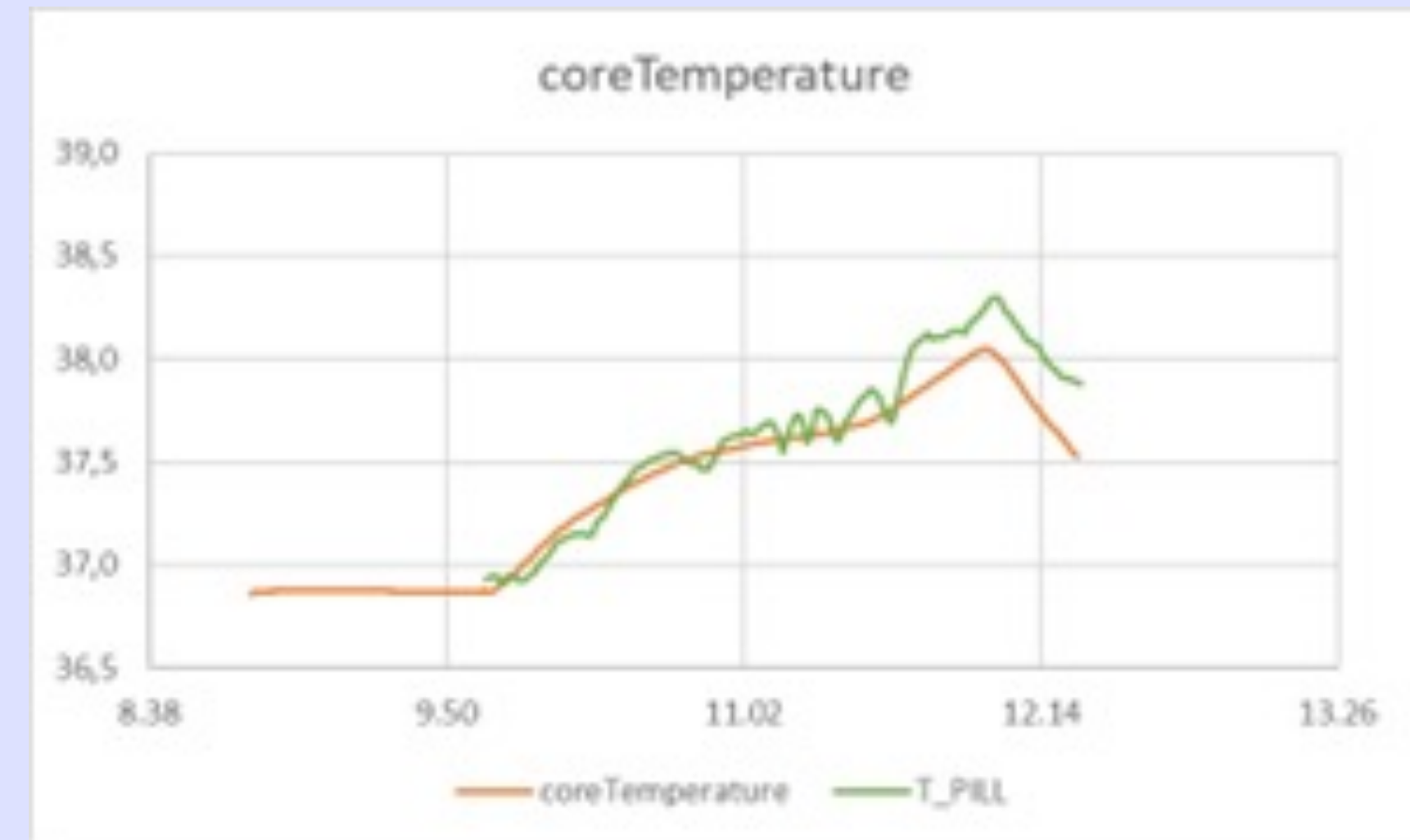
# Research proven

- Real time, all the time
- With non-invasive methods reaching the standards of invasive measurements
- Based on individual body composition, not on the “average user”

## The parties responsible for tests

- The institute of Occupational Health
- Emergency Services Academy Finland
- KIHU - Finnish Institute of High-Performance Sport
- VTT - Technical Research of Finland

## HTM vs pill measurements



RMSD = 0,146 °C



## Current status

- Garmin Health partner status
- Co-operation with industry leading smartwatch manufacturers
- Movesense integration completed
- 4 LOIs (value €200k in 2024)
- 12+ month Runway
- Software ready for hardware implementation
- Private money €335k
  - Grants €65k

## LOIs (2024)

**HTM Solutions x IDP – ingenieria (Spain)**



**HTM Solutions x R2M SOLUTION (Italy)**



**HTM Solutions x Waves Groups  
(Middle East)**



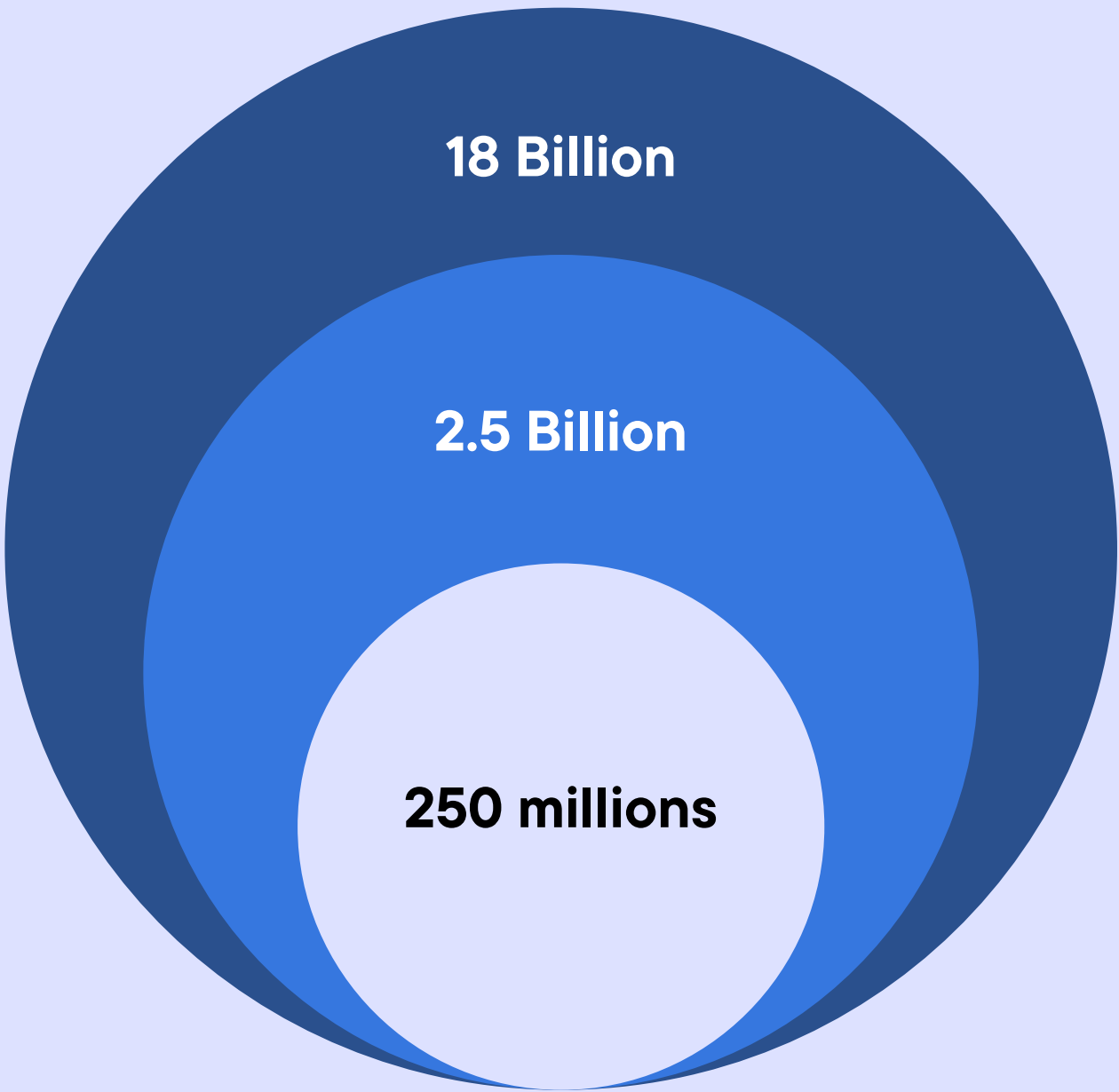
**HTM Solutions x NOATECH (Australia)**



# Occupational health and safety market (2023)

Occupational health market (CAGR) of 6.5% from 2023 to 2030

Occupational safety market (CAGR) of 12.2% from 2022 to 2031



\* Total Available market (TAM):  
\$18B

\* Serviceable Available Market (SAM):  
\$2.5B

\* Serviceable Obtainable Market (SOM):  
\$250 millions



# Team

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## Board:



**Harri Lehti, CEO, Board Member**

Harri Lehti, CEO/Founder of HTM Solutions, holds an M.Sc. in CS, with global expertise from IBM to Lenovo and a key role in Savox's public and industrial safety tech.



**Pekka Tuomaala , CTO, Chairman**

CTO, Founder, Principal Scientist in VTT, D.Sc. (Tech.), Thermodynamics, HTM modelling, service design for different user cases (project leader, HumanTool, Smart Clothing 2.0)



**James T Samuel, Board Member, Investor**

James is responsible for international business and holds industry expertise in public safety segment. His extensive knowledge and wide-ranging experience have positioned him as a valuable player in the global arena. He excels at fostering international relationships.

## Business Development:



**Juho Niemi**

Business Developer and Start-up enthusiast with a proven track record of making ideas into reality. Juho is eager to contribute his expertise to research-based start-up, leveraging his extensive experience in the start-up ecosystem.

## Senior Advisories:



**Antti Kuljukka, Investor**

Evli Oyj Board Member, previously worked as CEO of Fennia Group and as CEO of Henki-Fennia. Antti is the first investor in HTM, and he is involved in business development and applying for investors.



**Sirkka Rissanen**

Chief Researcher at FIOH, DOS D.Sc. Sirkka is a nationally and internationally leading occupational safety researcher in hot and cold work environments. HTM validation in different extreme work environments.

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Investors:  $\geq$  INNOVESTOR



Matti Härkönen  
Partner, Corporate Venturing



Piia Maaranen  
Managing Partner, Corporate Venturing

## Q2 2024 - Call to Action

Integration to smartwatch completed  
1 pilot customer outside of Finland  
Commercial readiness on CRI 2 level  
1000 active users

**Seeking partners for**  
€600k seed funding round  
€600k in loans and grants

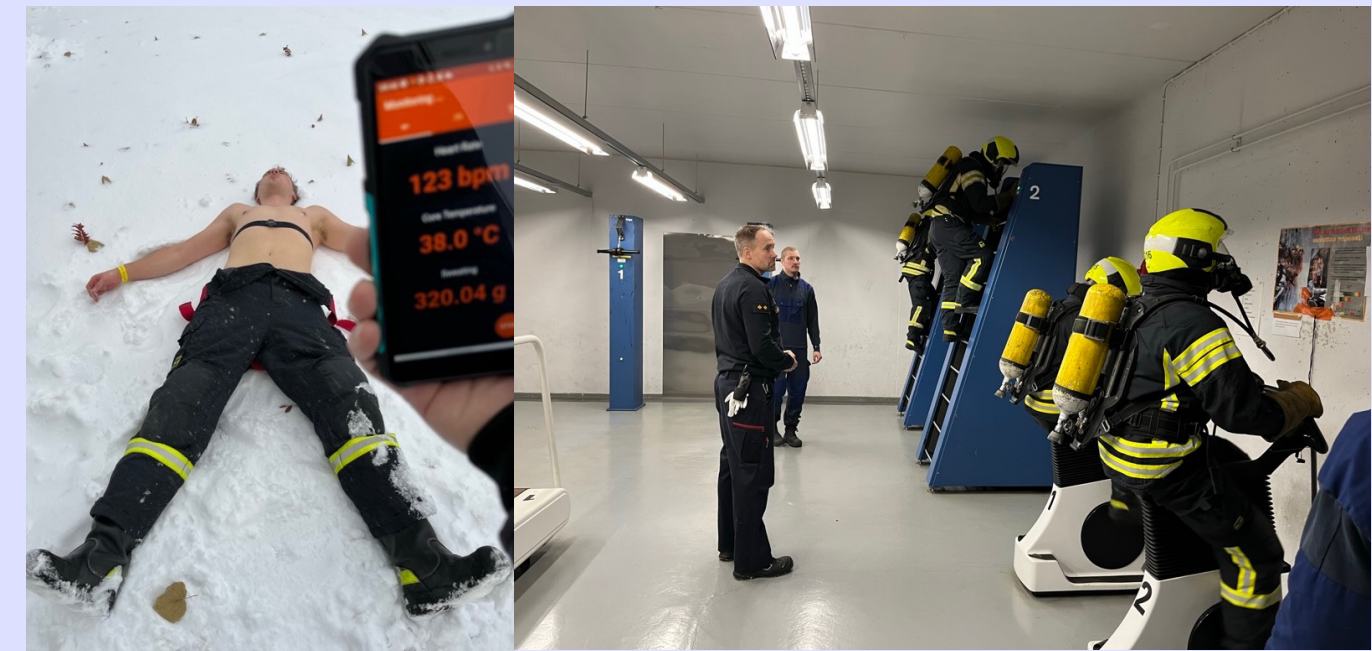


**Thank you !**

**We are happy to tell more.**

**Welcome to join us in developing and enhancing our innovative approach !**

**Cee° for Human Thermal Status Monitoring**





# Appendix 4

## Sources

- <https://www.coherentmarketinsights.com/industry-reports/occupational-health-market>
- <https://www.alliedmarketresearch.com/workplace-safety-market-A31780>
- <https://www.nbcnews.com/business/business-news/why-are-workers-u-s-still-dying-heat-exhaustion-n1270417>
- <https://www.theguardian.com/world/2021/jul/08/extreme-temperatures-kill-5-million-people-a-year-with-heat-related-deaths-rising-study-finds>
- [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_711917/lang--en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_711917/lang--en/index.htm)