

People's Democratic Republic Of Algeria  
Ministry Of Higher Education And Scientific Research  
Dr Moulay Tahar University of Saïda

**INTERNATIONAL METABOLIC HEALTH DAY TO BE HELD ON OCTOBER 10<sup>th</sup> 2023**

**Dr.Nasr-Eddine Kebir Phd Nutrition & Health**



**FACULTY OF LIFE AND NATURAL SCIENCES**



**THE FIRST INTERNATIONAL METABOLIC HEALTH DAY.  
THIS INITIATIVE, WHICH WILL BE A YEARLY EVENT, IS AIMED AT RAISING GLOBAL AWARENESS AND SUPPORT FOR METABOLIC  
HEALTH AND RESEARCH.**



ON OCTOBER 10, 2023, AN INNOVATIVE EVENT THAT WILL CHANGE LIVES AND PAVE THE WAY TO A HEALTHIER FUTURE.



## THE CRISIS OF CHRONIC DISEASE & METABOLIC DISORDERS

Metabolic Health Day – have you ever heard of it? No? That's probably because, in a world full of celebratory days like "donut day," "margarita day" and even "love your pizza day," the most crucial one was missing. While we bask in the glory of these delightful days, if we neglect our metabolic health, the joys of all other celebrations may be short-lived.

After attending over 30 conferences in 2023, a clear trend began to emerge. From diabetes to obesity, cardiovascular disease, mental illness and even Alzheimer's disease, there is a common thread that connects them: metabolic health. It's surprising how many of these diseases, including autism and cancer, are actually metabolic in nature. However, many are unaware of this connection.

## A Day to Empower and Inform

So why set aside a day specifically dedicated to raising awareness about metabolic health?

The answer is simple: such a day did not exist! At the Metabolic Terrain Institute of Health (MTIH), we recognized this gap. Instead of waiting for someone else to fill it, our team decided to lead the charge. Together with our partners around the world, we are now on a mission to bring metabolic health to the forefront of public consciousness.

In developed countries like the United States, less than 7% of people are considered metabolically healthy. And while conventional medical standards give us a basic understanding of metabolic health through factors like waist-to-hip ratio, blood pressure and blood sugar levels, and the current definition goes much further.

## Redefining Metabolic Health

Metabolic health isn't just about having blood sugar below 100 or triglycerides below 150. At MTIH, we raise the bar, advocating for markers below 85 for fasting blood sugar and triglyceride levels below 90: These are the values required to PREVENT metabolic disease, not just to walk the tightrope to a diagnosis.

But metabolic health isn't just about numbers. It's about how our bodies interact with the world around us – how we absorb and transmit information through light, sound, food, water, breathing and even energies of those with whom we come into contact. Everything we consume or surround ourselves with can influence our metabolic health.

The essence of our metabolic function lies deep within our cells, in an organelle called the mitochondrion. It is a powerhouse that senses, transforms and transmits energy and signaling pathways essential to our daily functioning.

Over time, poor diet, modern lifestyle, toxins, genetic factors and more can overwhelm our mitochondria, leading to various metabolic imbalances.

## A Critical Shift – Turning Awareness Into Action

It's time for transformative change. Instead of just treating the symptoms, we need to deepen our understanding of the root causes of metabolic imbalances. By understanding the “why,” we are able to navigate the “how.” Addressing these root causes is essential to defending our metabolic health.

To help you in this critical shift from awareness to action, stay tuned to [metabolicalhealthday.life](http://metabolicalhealthday.life) and MTIH social media. With the support of our global community of sponsors and partners, we will provide you with invaluable guidance to guide and support your journey to strong metabolic health.

On Metabolic Health Day, and every day thereafter, let's prioritize better understanding our bodies and achieving optimal metabolic health. Because by doing so, we guarantee the health and happiness not only of ourselves, but also of future generations.

*Dr. Nasha Winters, ND, FABNO*

*Executive Director and Co-Founder, Metabolic Terrain Institute of Health*

# THE NEED FOR METABOLIC HEALTH RESEARCH



## Unmasking Metabolic Health: The Case for Change

In today's fast-paced, stressful society, the prevalence of chronic and complex metabolic diseases – such as diabetes, cardiovascular disease, neurodegenerative diseases and cancer – is increasing. Each of these conditions is a manifestation of dysregulation of the body's metabolic pathways, causing imbalances leading to disease progression. The Metabolic Terrain Institute of Health (MTIH) is at the forefront of addressing these challenges with a commitment to transformative research and clinical applications.



## A Crisis in Desperate Need of Resources

The data is clear: a staggering proportion of the world's population unknowingly lives in the shadow of poor metabolic health, living with or on the brink of chronic disease, and only a small minority of the world's population can claim true metabolic health. Yet, despite the scale of this problem, the resources and research devoted to understanding and combating metabolic diseases remain woefully insufficient. This glaring disparity highlights the urgent and compelling need for research and solutions – which is what fuels the research at the Metabolic Terrain Institute of Health.



## From Sick Care to True Health Care

Investing in metabolic health research also paves the way for a proactive approach to healthcare. Currently, our health systems are focused on disease management rather than health promotion. By understanding and maintaining metabolic health, we can anticipate potential risks, prevent the onset of disease, and improve overall well-being.

This paradigm shift, from a reactive healthcare system to a proactive healthcare model, can fundamentally change our approach to health and well-being, influencing the lives of individuals across the world in the most positive ways



## Revolutionizing Healthcare Through Research

The pioneering research vision focuses on developing innovative approaches for the prevention, diagnosis and treatment of complex diseases. By translating laboratory discoveries into clinical practice, we aim to develop new safe and effective therapeutic paradigms that will benefit everyone. At the heart of our efforts is the goal of developing and validating novel metabolic biomarkers and metabolic therapies. Using these tools, we hope to identify people at high risk of developing such diseases, enabling early intervention and prevention. These biomarkers will also shed light on the pathogenesis of these diseases, leading to personalized treatment plans and better patient outcomes.





## Pave the Way To a Healthier Tomorrow

As we celebrate International Metabolic Health Day, let us remember the crucial role metabolic health plays in our overall well-being and the urgent need for more research and solutions in this area. Your generous gift and support can spearhead a revolution, moving our health systems from one focused on caring for the sick to a more personalized, proactive approach that prioritizes prevention and cultivates true health. It's not just about donating; it's about investing in a healthier and more dynamic future for everyone. By championing metabolic health today, we can create a future where individualized health solutions are the norm, preventing disease before they start, and where everyone can access the tools and knowledge needed to live their fullest healthiest lives.

## FACTS ABOUT METABOLIC HEALTH DISORDERS

**18 MILLION NEW  
CANCER  
DIAGNOSES**

GLOBALLY PER YEAR

Approximately

**160.84% HIGHER  
INCIDENCES**

GLOBALLY OF ALZHEIMER'S  
DISEASE FROM 1990 TO 2019

ESTIMATED

**93.6%**

US ADULTS SUFFER FROM AT  
LEAST ONE METABOLIC  
HEALTH DISORDER

ESTIMATED

**530 MILLION  
ADULTS  
WORLDWIDE**

SUFFER FROM TYPE II  
DIABETES, A METABOLIC  
DISORDER

ESTIMATED

**17.9 MILLION LIVES  
LOST YEARLY**

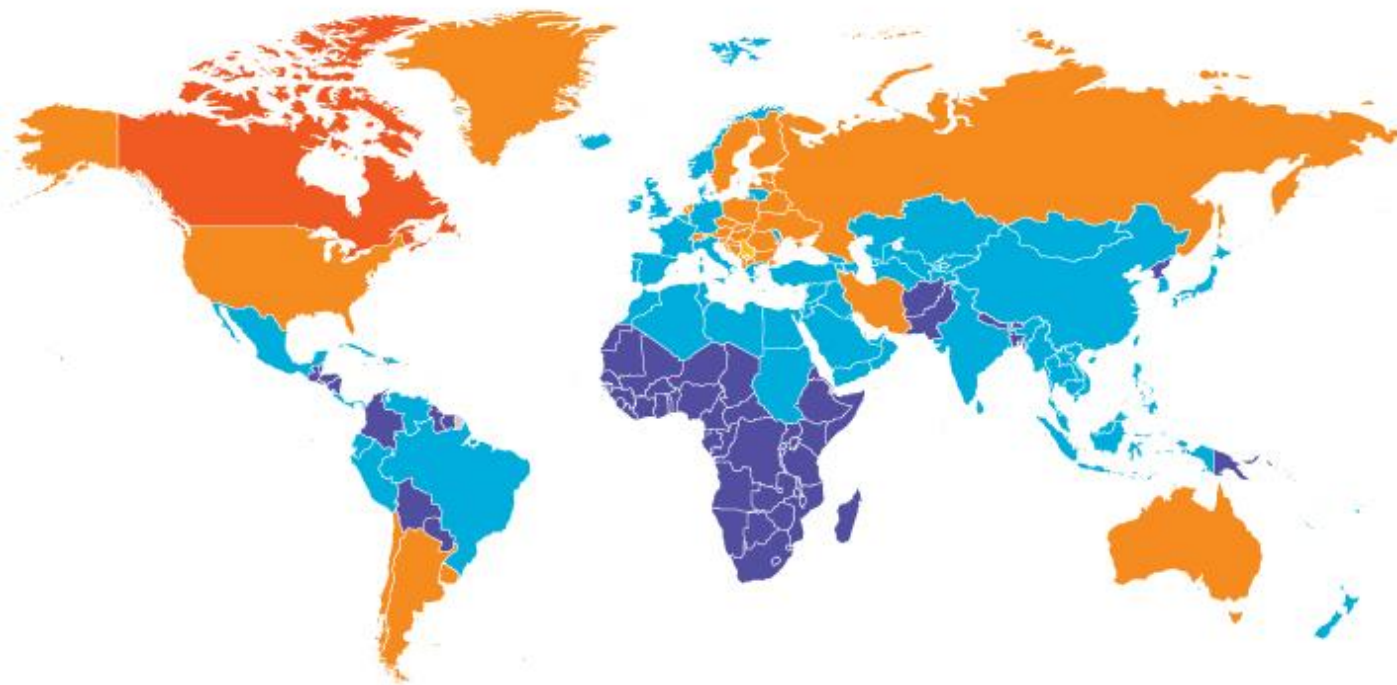
TO CARDIOVASCULAR DISEASE,  
MAKING IT THE LEADING CAUSE  
OF DEATH AND THE NUMBER 1  
METABOLIC DISORDER  
GLOBALLY

# PREVALENCE OF PARKINSON'S

With an ageing population, neurological disorders such as Parkinson's are becoming one of the leading causes of disability in the world

Age-adjusted prevalence of Parkinson's Disease per lakh population (2016)

■ 30 - <70 ■ 70 - <110 ■ 110 - <150 ■ 150 - <190



THE-KEN

Graphic by Prajakta Patil

Source: THE LANCET Neurology

# AUTISM

## STATISTICS 2023

Autism, also known as **Autism Spectrum Disorder (ASD)**, is a neurodevelopmental disorder characterized by difficulties in social interaction, communication challenges, and restricted and repetitive patterns of behavior. Autism affects approximately **168 million** people worldwide.



**Boys are four times** more likely to be diagnosed with autism than girls.

### Signs of Autism



Issues with Communications



Sensitive to Noises



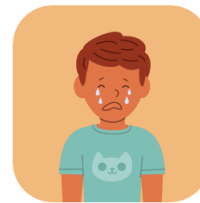
Avoiding Eye Contact



Hyperactivity



Sleep Problems



Inappropriate Laughing or Crying

### 10 Countries with Highest Autism Rates in Children

per 10,000 children in 2023



Qatar  
**151.20**



United Arab Emirates  
**151.20**



Oman  
**107.20**



Bahrain  
**103.30**



Saudi Arabia  
**103.30**



Kuwait  
**97.70**



Jordan  
**92.10**



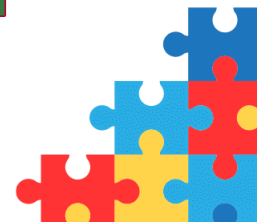
Syria  
**91.90**



Afghanistan  
**91.20**



Palestine  
**91.00**



# GLOBAL STATISTICS ON HYPERTENSION



**1.5 billion**  
adults will be hypertensives  
worldwide by 2025

## GLOBAL STATISTICS ON HYPERTENSION



**1/3**

Adults world wide has  
high blood pressure



**46%**

The World's highest rate  
of **high blood pressure**  
in Africa



**2/3** Developing countries  
has high blood pressure



**1.5 billion**  
adults will be hypertensives  
worldwide by 2025



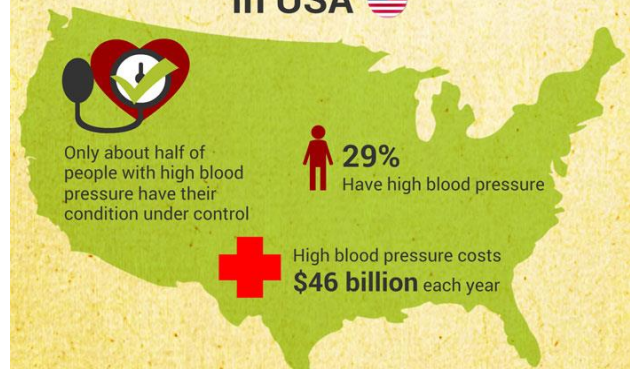
**NO. 2 KILLER**

One of the most common  
conditions leading to heart  
disease & stroke



**CDC** calls it the silent killer  
- leads to stroke, heartattack &  
coronary artery disease

In USA

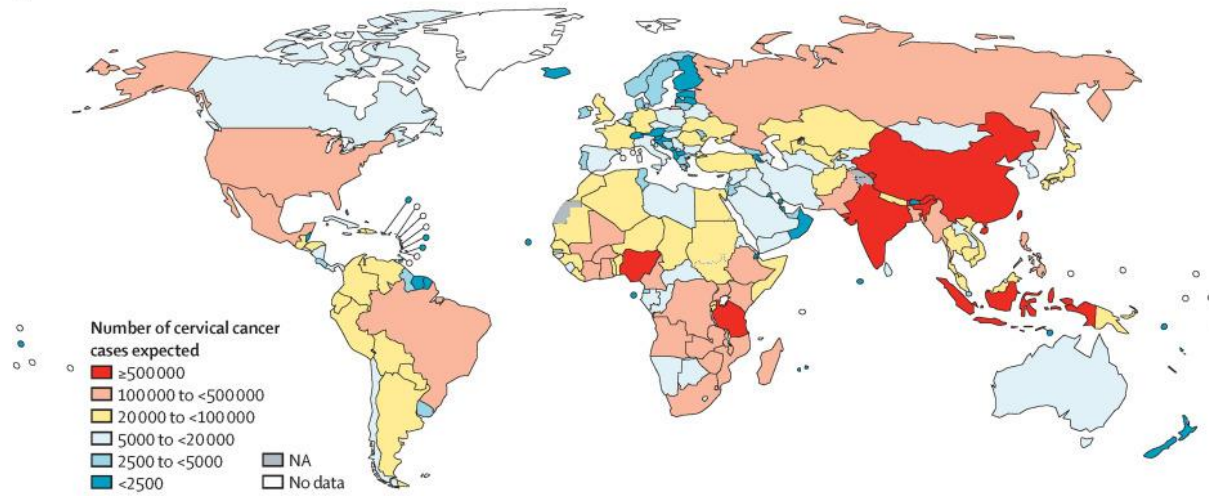


**CircleCare**<sup>®</sup>

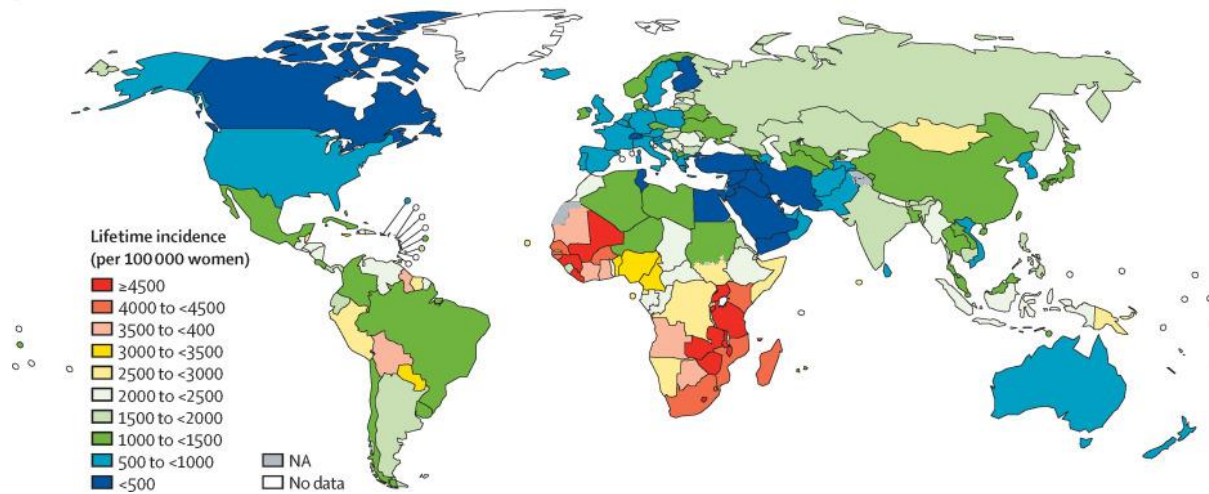
Motivate friends and family to stay healthy



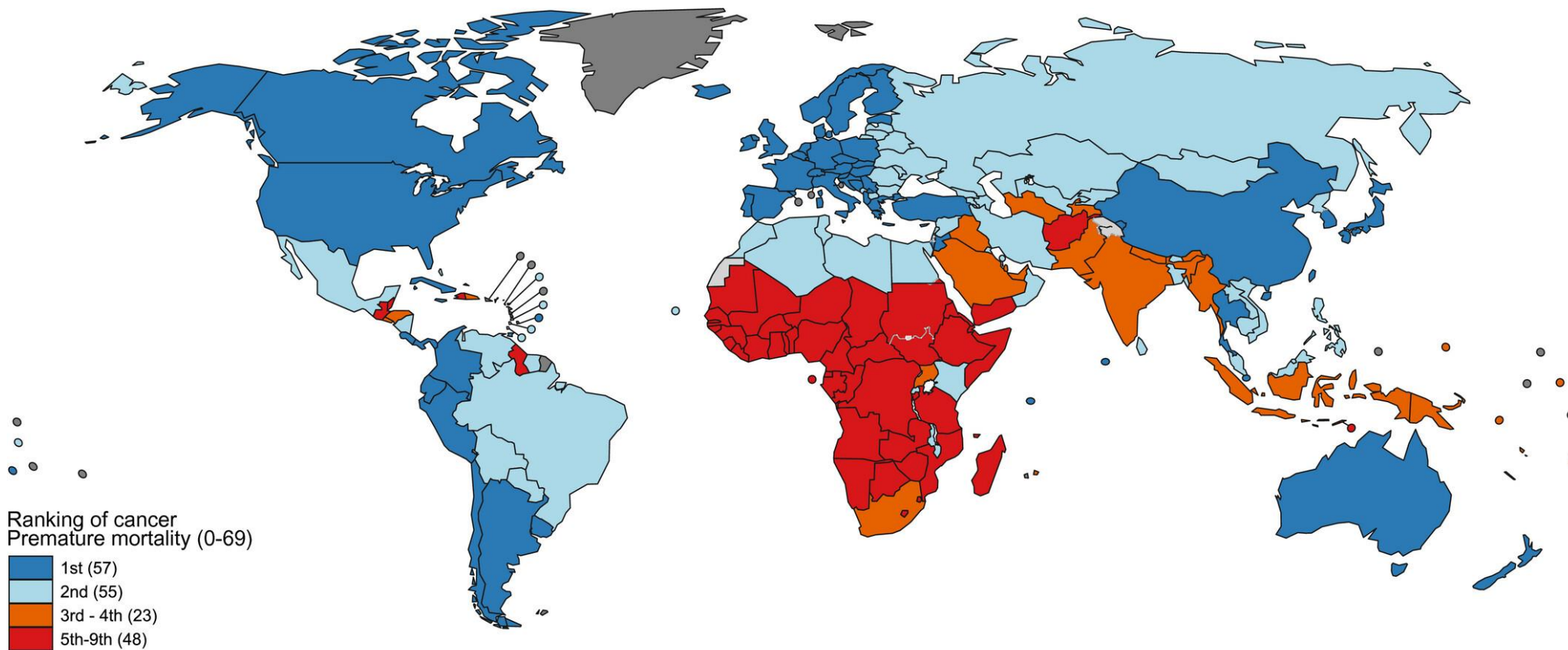
A



B



Global estimates of expected and preventable cervical cancers among girls born between 2005 and 2014: a birth cohort analysis

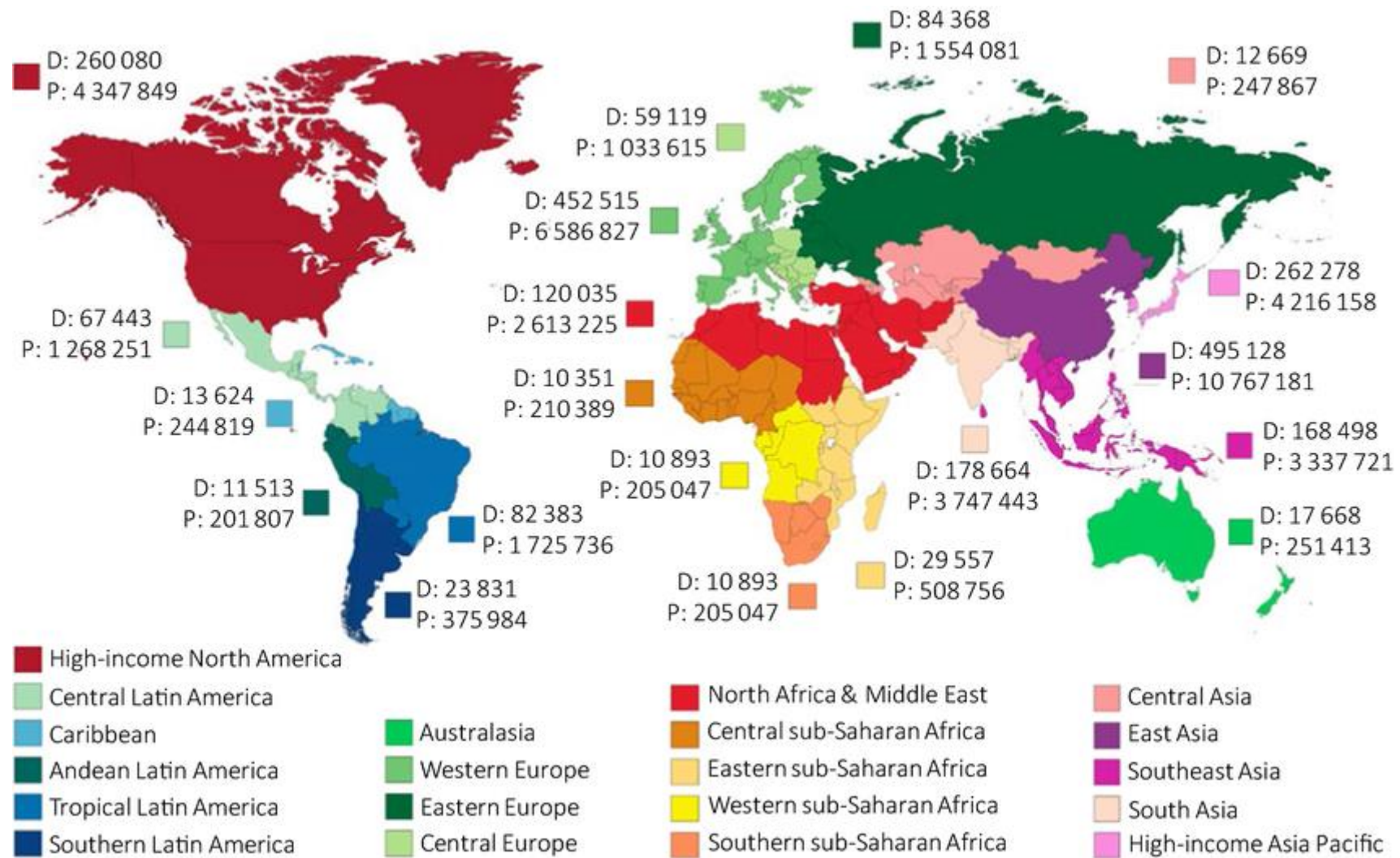


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: GHE 2020  
Map production: CSU  
World Health Organization



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Global deaths (D) and prevalence (P) for Alzheimer's disease and other dementias in 2016. Data are n (95% UI). UI = uncertainty interval. Data extracted from the Global Burden of Disease Study of Alzheimer's disease and other dementias 2016



# THE ECONOMIC IMPACT OF OVERWEIGHT & OBESITY IN 2020 AND 2060

Overweight and obesity prevalence is set to cost the global economy

**3.3%** of GDP by **2060**



# THE ALARMING RISE IN DIABETES AROUND THE WORLD

The IDF Diabetes Atlas 9th Edition 2019 reveals global diabetes prevalence continues to increase. Current projections show 700 million adults will be living with diabetes by 2045.

**463**  
million  
adults are living  
with diabetes  
worldwide



Diabetes affects all age groups, regardless of geography and income. It is impacting families worldwide.

A healthy lifestyle can help prevent type 2 diabetes and early diagnosis and uninterrupted access to appropriate care can avoid or delay life-threatening complications in people with the condition.



## DIABETES: PROTECT YOUR FAMILY

View all the latest IDF Diabetes Atlas findings and learn more about what can be done to reduce the impact of diabetes at:

[www.diabetesatlas.org](http://www.diabetesatlas.org)  
#WorldDiabetesDay

