



# Tech takes on Mental Health

RESOURCES AND INSPIRATION

# Start here.

**You will find here everything you need to get inspired for the hackathon.**

We have compiled for you a list of educational and informative resources and data sets on mental health. You will also find a list of worldwide initiatives and projects that have started to form around this very topic, along with sample ideas looking for volunteers.

**Feel free to let yourself be inspired by one of these:**

- **Public resources**
- **Mental health is important and it is important now more than ever**
- **What are some examples of current solutions for helping people with mental healthcare problems?**
- **Challenges**



# Public resources.

## Data

- [National Institute of Mental Health \(US\)](#)
- [Results from the 2017 National Survey on Drug Use and Health \(US\)](#)
- [CDC repository for Mental Health data](#)

## Courses

- [The Science of Well-being \(Yale/Coursera/English/Laurie Santos\)](#)
- [Foundations of Mindfulness \(Rice/Coursera/English/Dr. Elizabeth Slator\)](#)
- [Introducción a la Regulación Emocional Basada en Mindfulness \(Universidad Autónoma de Madrid/edX\)](#)
- [Bienestar para el Desarrollo Personal y Profesional \(Universidad Anahuac/edX/Jose Armando Barriguete\)](#)

## Mental Health Resources Online

- [Mental Health Resources by the Canadian Centre for Mental Health & Sport](#)
- [Mental Health Commission of Canada](#)
- [Bell Let's Talk Toolkit](#)
- [Dialectical Behaviour Therapy](#)
- [Psychology Compass](#)





# Mental health is important and it is important now more than ever.

It is estimated that one in five adults experience mental illness each year and an about 300 million people around the world experience depression. Mental health related problems have been on the rise and now that we are all living with a global health pandemic, the problem is becoming worse for our communities.

In any given year, one in five people in will experience a mental health problem or illness. By age 40, about 50 per cent of the people will have or have had a mental illness. **Approximately eight per cent of adults will experience major depression at some time in their lives.** Even without considering the affects of the COVID-19 global health pandemic, mental health related problems are on the rise. Layering on the global health pandemic only exacerbates the problem.

COVID-19 and the global health pandemic continue to ravish communities globally making it the perfect set of conditions for a rise in mental health related problems. That's why we should come together and help build solutions for this growing mental health crisis.

### **Five key mental health themes:**

1. Healthy diet, being physically active and getting enough sleep
2. Staying positive, practicing gratitude, and journaling
3. Meditation, yoga or other relaxation exercises
4. Education and speaking to professionals
5. Connecting with others and loved ones

## **What's mental health?**

Mental health includes emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood to adolescence and through adulthood.

Over the course of your life, if you experience mental health problems, your thinking, mood, and behavior could be affected. Many factors contribute to mental health problems, including:

- Biological factors, such as genes or brain chemistry
- Life experiences, such as trauma or abuse
- **Family history of mental health problems**

## How does the mental health problem impact society?

- **Stigma and lack of understanding about mental disorders**
  - Productivity
  - Physical illness
  - Social stress
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## What are the typical mental health issues?

- Anxiety disorders - fear and dread to certain objects or situations
- Behavioral disorders - disruptive behavior in children such as: ADHD, conduct disorders, oppositional-defiant disorder
- Eating disorders - anorexia, bulimia, binge eating
- Substance use disorders - opioids and the likes
- Mood disorders - fluctuating between extreme happiness and sadness. (i.e. depression, bipolar disorder, seasonal affective disorder and self-harm)
- Obsessive compulsive disorder - repeated, upsetting thoughts called obsessions that don't go away
- Personality disorders - extreme and inflexible personality traits that are distressing to the person and may cause problems with others. (i.e. borderline personality and antisocial)

- Psychotic disorders - hallucinations and delusions (i.e. schizophrenia)
  - Suicidal behavior - thoughts, making plans and committing suicide
  - **Trauma and stress related disorders - PTSD makes you feel stressed and afraid after the danger is over**
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## Why is this problem important?

The World Health Organization (WHO) defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”. But we tend to prioritize physical health over the mental one. Yet when we think of health, we tend to prioritize physical well-being at the expense of mental health. Instead, we should tackle mental health the same way we tackle physical health—with an eye towards preventing disease by addressing the foundational forces that cause us to be sick or well in general.

- **Mental disorders account for a significant portion of the global disease burden.**
  - About 15% of the world’s diseases are mental related.
  - In the U.S., one in five adults (about 44 million people) experience mental illness each year.
  - An estimated 300 million people around the world experience depression.
  - WHO projects that by 2030, depression will be the leading cause of the global disease burden.
  - Many mental health challenges are likely underreported mainly due to differences of opinion within experts on how we study them, the social stigma that prevents people from treating it.

- **Mental disorders are unequal.**
    - Income is one of the most significant influencing factors.
    - Discrimination to immigrants, racial minorities and LGBTQ+ population can prevent their members from receiving treatment.
  - **We can make a difference in early childhood for preventing mental illness.**
    - As of 2011, up to 50% of children and adolescents in the U.S. met diagnostic criteria for at least one mental health disorder.
    - If not treated early, it can increase the risk of other disorders throughout life.
    - People with mental illnesses tend to have higher mortality rates.
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### **Positive mental health allows people to:**

- **Realize their full potential**
- **Cope with the stresses of life**
- **Work productively**
- **Make meaningful contributions to their communities**

- It is hard to diagnose mental illnesses as there aren't simple tests.
  - If we break an arm or develop an infectious disease, it will be difficult for anyone to mistake our condition for good health. If, however, we struggle with mental illness—such as depression, anxiety, or post-traumatic stress disorder (PTSD)—it is possible that our disease will present few outward symptoms.
  - Mental illness can make those who develop a disorder less likely to seek the help they need.
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## What do doctors recommend for improving mental health?

- **Staying positive.** It's important to try to have a positive outlook; some ways to do that include:
  - Finding balance between positive and negative emotions.
  - Trying to hold on to the positive emotions when you have them.
  - Taking a break from negative information.
- **Practicing gratitude**, which means being thankful for the good things in your life.
- **Taking care of your physical health**, since your physical and mental health are connected. Some ways to take care of your physical health include:
  - Being physically active.
  - Getting enough sleep.
  - Healthy eating.

- **Connecting with others.** Humans are social creatures, and it's important to have strong, healthy relationships with others.
- **Developing a sense of meaning and purpose in life.** This could be through your job, volunteering, learning new skills, or exploring your spirituality.
- **Developing coping skills,** which are methods you use to deal with stressful situations. They may help you face a problem, take action, be flexible, and not easily give up in solving it.
- **Meditation,** which is a mind and body practice where you learn to focus your attention and awareness. There are many types, including mindfulness meditation and transcendental meditation.
- **Relaxation techniques** are practices you do to produce your body's natural relaxation response. This slows down your breathing, lowers your blood pressure, and reduces muscle tension and stress. Types of relaxation techniques include:
  - Progressive relaxation
  - Biofeedback
  - Self-hypnosis
  - Deep breathing exercises





# What are some examples of current solutions for helping people with mental healthcare problems?

## For getting help

- [Terapify](#)
- [My3app](#)
- [Talkspace](#)
- [Yana](#)

## For staying positive

- [Happify](#)
- [Moodscope](#)



## For practicing gratitude

- [Gratefulness.me](#)
- [Greatfulness.io](#)

## For being physically active

- [Strava](#)
- [Gympass](#)
- Smartwatches with inactive state notifications

## For getting enough sleep

- [Fitbit will wake you when you've had your ideal rested sleep](#)
- [Track your sleep with your Apple Watch](#)

## For healthy eating

- [Fooducate](#)
- [HelloFresh](#)
- [MyFitnessPal](#)



## For connecting with others

- [7cups](#)
- [Replika](#)

## For developing coping skills

- [SuperBetter](#)

## For meditation

- [Headspace](#)
- [Waking Up by Sam Harris](#)
- [Calm](#)

## For relaxation techniques

- [Brain.fm](#)





## Challenges.

- Influencing national policy
- Helping the severely ill to find proper care and facilities
- More accurate and accessible diagnostic tools
- Finding alternative and more effective treatments
- Aligning digital products incentives with mental health wellness



### Contact us

Should you need additional information, support or should you have any questions, feel free to contact us at [hackathon@terminal.io](mailto:hackathon@terminal.io)

