

Investment in research saves lives and money



facts about:

Depression

"If you think research is expensive, try disease."

- Mary Lasker 1901-1994

Today:

- 7.6% of Americans over the age of 12, an estimated 20.2 million people, suffer from symptoms of moderate to severe depression.* □
- Globally, 350 million people suffer from symptoms of depression. ^
- People who suffer from major depression are 40 to 60% more likely to die prematurely compared to the general public, according to research published in 2013. ^
- Only 35% of individuals with severe depression report seeing a mental health professional within the last year.*
- Depression disproportionately affects women and individuals between the ages of 40 and 59, according to 2014 published data. Additionally, Americans living below the poverty line are two and a half times more likely to experience depression.*

The Cost:

- The total U.S. economic burden from major depressive disorder was estimated to be \$210.5 billion in 2010-- an increase of 21.5% from the economic burden estimated in 2005.*
- Ten to 20% of individuals with depression have treatment-resistant depression. The associated economic burden was estimated to be \$48 billion in 2013.**
- Depression is the leading cause of disability internationally. It is responsible for 40.5% of the disability-adjusted life years (DALYs) associated with mental health and substance abuse disorders. DALYs is a measurement of the total impact of a specified condition on quality of life. ^

* CENTERS FOR DISEASE CONTROL AND PREVENTION <WWW.CDC.GOV>
 □ US CENSUS BUREAU <FACTFINDER.CENSUS.GOV>
 ^ WORLD HEALTH ORGANIZATION <WWW.WHO.INT>
 + GREENBERG, P ET. AL. J CLIN PSYCHIATRY 2015; 76(2).
 ‡ AMERICAN FOUNDATION FOR SUICIDE PREVENTION <WWW.AFSP.ORG>
 ** MRAZEK, D ET. AL. PSYCHIATRIC SERVICES 2014; 65(8): 977-987.
 ^^ AVENEVOLI, S ET. AL. J AM ACADEMY OF CHILD AND ADOLESCENT PSYCH 2015; 54(1).

SAVING LIVES

SAVING MONEY

HOW RESEARCH SAVES LIVES:

- An intervention-based cohort study collected data on the effects of supplementing exercise with the traditional care path for depression. Researchers concluded exercise greatly increased depressed individual's quality of life and reduced symptoms.*
- A double-blind, placebo-controlled, randomized meta-analysis studied the short-term effects of two antidepressant medications, Prozac and Effexor, for treating major depressive disorder in children, adults, and the elderly. Every age group showed a statistically significant improvement between the control group and the two intervention groups, one for each drug. The youth intervention cohorts for both drugs had a 30.1% remission rate compared to the placebo group during the 6-week trial period. ^

HOW RESEARCH SAVES MONEY:

- The economic burden of suicide is \$44 billion in the U.S. Over 50% of all individuals who commit suicide have major depression. Through comprehensive research and drug development, depression is now one of the most treatable mental illnesses. Between 80% and 90% of individuals who receive treatment, either talk therapy or drug interventions, report a positive improvement in their symptoms.**
- A study funded by the National Institute of Mental Health has discovered a method of predicting the type of treatment that would be the most successful and efficient for a depressed individual simply by looking at a scan of their brain. Treating depression is a difficult, time consuming and expensive process that depends largely on trial and error of different styles of therapy and medications. Due to this, only about 40% of patients recover from symptoms after the first attempted treatment path. This percentage may be greatly increased through this more advanced diagnostic technique.**

patient:



NAME: Todd Donovan
 AGE: 45
 CONDITION: Depression

Todd Donovan, a 45-year-old paramedic and firefighter, has battled depression for most of his life. He first exhibited signs of depression as early as age 8 when he attempted to overdose on aspirin. The following years were increasingly marked by symptoms of depression and intrusive thoughts of suicide, including several psychiatric hospitalizations, 12 different medications and a course of electroconvulsive therapy (ECT).

After reading an article in his local paper, he decided to try a treatment called Transcranial Magnetic Stimulation (TMS). Transcranial magnetic stimulation is a non-invasive outpatient procedure that uses a targeted pulsed magnetic field, similar to what is used in an MRI (magnetic resonance imaging) machine. TMS Therapy stimulates areas of the brain that are underactive in depression. TMS Therapy for treatment resistant depression was developed at the National Institute of Mental Health in the early 90's. Public and private funding sources provided the necessary support to bring this breakthrough treatment to patients.

Now two years after completing his first TMS procedure, Todd's depression has lifted in ways he had never dreamed of before. He is more active as a husband and a father, and has even participated in activities with his coworkers, something he had never been able to do when dealing with depression.

"It's hard to find the words to describe what depression feels like, but since starting TMS treatment, I have a whole life now."

* SCHUCH, F.B. ET. AL. J PSYCHIATR RES, 2015.
 + WORLD HEALTH ORGANIZATION <WWW.WHO.INT>
 ^ ROBERT, D. ET. AL. ARCH GEN PSYCHIATRY, 2012. 69(6):572-579.
 ** AMERICAN FOUNDATION FOR SUICIDE PREVENTION <WWW.AFSP.ORG>
 ++ MCGRATH, CL. ET. AL. JAMA PSYCHIATRY 2013; 7(8):821-829.

facts about: } Depression

Hope for the Future:

- The World Health Organization (WHO) has published their *Mental Health Action Plan 2013-2030*. The plan relies on several “cross-cutting” principles, including evidence-based practices, multi-sector approaches, and interventions available at all stages of an individual’s life. By addressing mental health in this way, WHO hopes to have all of their members provide “comprehensive, integrated and responsive” mental healthcare by 2030.*
- Researchers at the University of Texas Southwestern Medical Center are looking into the role of ghrelin, the so-called “hunger hormone,” as a natural antidepressant. It protects new neurons formed in the hippocampus – the area of the brain responsible for mood, memory, and complex eating behaviors – and could be used to prevent the increase in cell death that occurs during depression-inducing stress.^
- Diagnosing depression can be difficult due to the many different symptoms and manifestations of the condition. Researchers at Ridge Diagnostics, Whittier College, FindCures, Massachusetts General Hospital and the University Of Alabama Birmingham School Of Medicine have come together to improve a blood test that has been shown to correctly distinguish individuals with major depressive disorder from non-depressed individuals. The blood test utilizes nine biomarkers to identify individuals who are likely to suffer from the condition. As of 2015, the test has been shown to be nearly 95% accurate.†

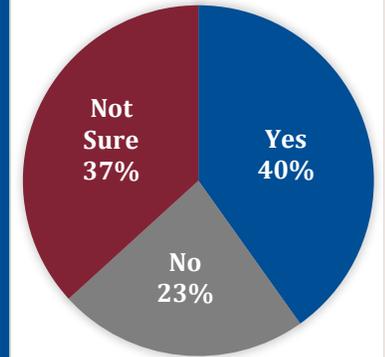
* WORLD HEALTH ORGANIZATION <WWW.WHO.INT>

^ WALKER ET AL. MOLECULAR PSYCHIATRY 2014.

† BILELLO, JOHN ET. AL. J CLIN PSYCHIATRY 2015; 76(2).

National Poll: Value in Public Funding

Do you think government should fund research to prevent violence and injury caused by preventable accidents, deliberate acts, or neglect?



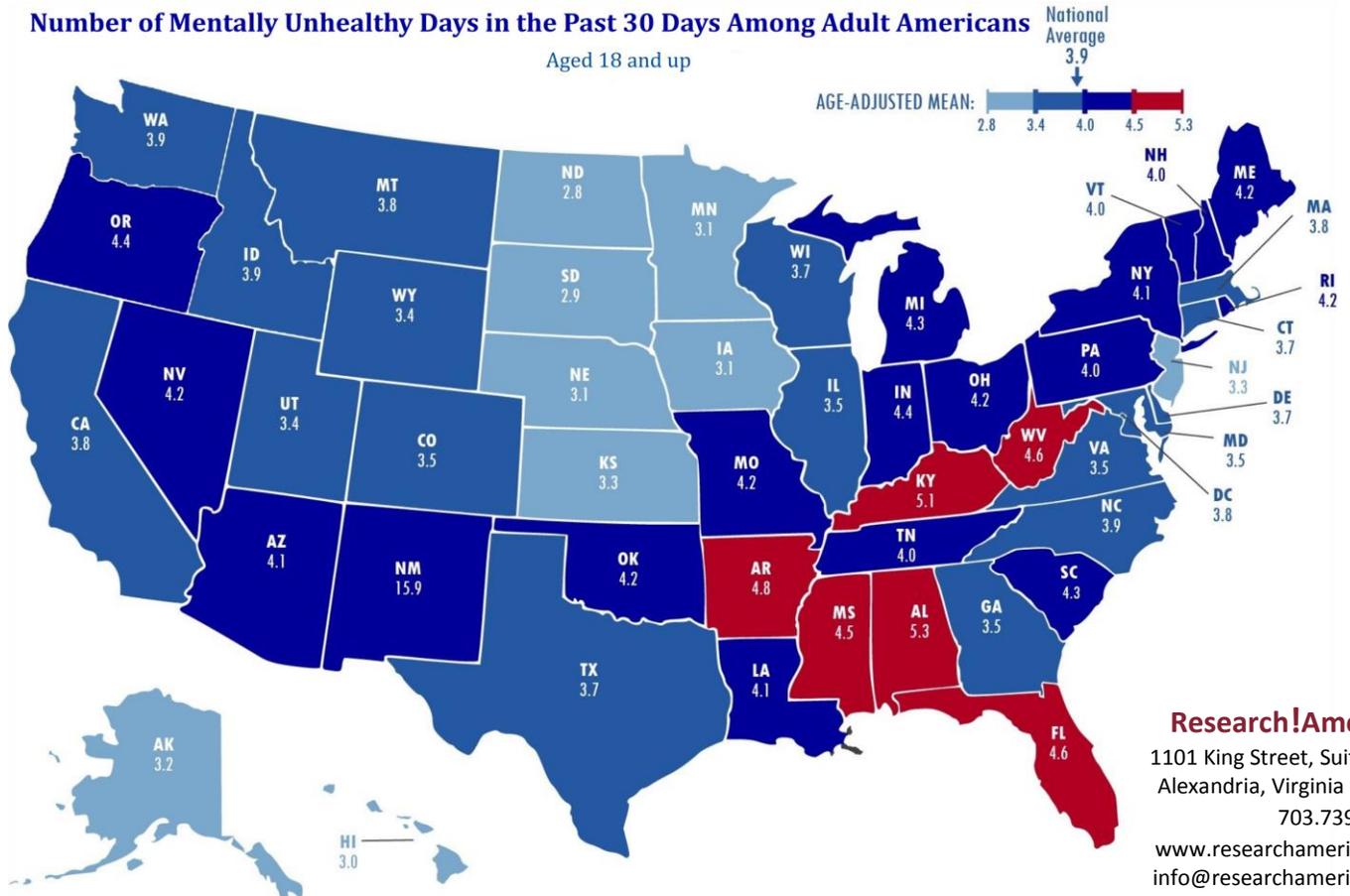
SOURCE: A RESEARCH!AMERICA POLL OF US ADULTS CONDUCTED IN PARTNERSHIP WITH ZOGBY ANALYTICS, MAY 2015.

The Bottom Line:

We are on the cusp of being able to treat depression more effectively than ever before, with new types of medications targeting specific hormones, and new therapies for treatment-resistant depression. More funding for research is needed to uncover the genetic, chemical, and environmental causes of depression so doctors can individualize treatment plans for each patient to significantly improve outcomes.

Number of Mentally Unhealthy Days in the Past 30 Days Among Adult Americans

Aged 18 and up



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SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION

The Albert and Mary Lasker Foundation is a founding partner in this series of fact sheets. www.laskerfoundation.org