# JAMA Psychiatry

#### Research

#### **Original Investigation**

531 Effects of Prenatal Exposure to Air Pollutants (Polycyclic Aromatic Hydrocarbons) on the Development of Brain White Matter, Cognition, and Behavior in Later Childhood BS Peterson and Coauthors

541 Circuit- and Diagnosis-Specific DNA Methylation Changes at γ-Aminobutyric Acid-Related Genes in Postmortem Human Hippocampus in Schizophrenia and Bipolar Disorder WB Ruzicka and Coauthors

552 Abnormalities in Hemispheric Specialization of Caudate Nucleus Connectivity in Schizophrenia

5 Mueller and Coauthors

561 Risk of Suicide Among US Military Service Members Following Operation Enduring Freedom or Operation Iraqi Freedom Deployment and Separation From the US Military MA Reger and Coauthors

#### 570 Risk of Suicide Following Deliberate Self-poisoning

Y Finkelstein and Coauthors for the Canadian Drug Safety and Effectiveness Research Network (CDSERN)

576 Urban vs Rural Residence and the Prevalence of Depression and Mood Disorder Among African American Women and Non-Hispanic White Women A Weaver and Coauthors

584 Impaired Functional Connectivity Within and Between Frontostriatal Circuits and Its Association With Compulsive Drug Use and Trait Impulsivity in Cocaine Addiction

Y Hu and Coauthors

593 Extended-Release Mixed Amphetamine Salts vs Placebo for Comorbid Adult Attention-Deficit/Hyperactivity Disorder and Cocaine Use Disorder: A Randomized Clinical Trial FR Levin and Coauthors

603 Large-Scale Network Dysfunction in Major Depressive Disorder: A Meta-analysis of Resting-State Functional Connectivity RH Kaiser and Coauthors

612 Effect of Depression and Diabetes Mellitus on the Risk for Dementia: A National Population-Based Cohort Study W Katon and Coauthors

#### **Opinion**

## Viewpoint

527 Are Anti-inflammatory Therapies Viable Treatments for Psychiatric Disorders? Where the Rubber Meets the Road AH Miller and CL Raison

529 The Impact of Air Pollutants on the Brain L Calderón-Garcidueñas and R Torres-Jardón

#### **Invited Commentary**

619 Promoting Healthy Brain Aging CF Reynolds III

## Clinical Review & Education

Continuing Medical Education 628 Online CME Quiz Questions

#### LETTERS

#### **Research Letter**

622 Speed of Psychosis Progression in People at Ultra-High Clinical Risk: A Complementary Meta-analysis MJ Kempton and Coauthors

#### Comment & Response

623 The Popularity of Benzodiazepines, Their Advantages, and Inadequate Pharmacological Alternatives

624 Suicide Risk: Sunshine or Temperature Increase?

625 Medusa's Head and Ancient Aristotelian Biology

Issue Highlights and Continued Contents on page 525

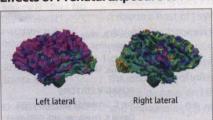


## **JAMA Psychiatry**

Volume 72, Number 6 Pages 521-628

#### Research

#### Effects of Prenatal Exposure to Air Pollutants on Children's Brains 531



Prenatal exposure to polycyclic aromatic hydrocarbons has been associated with cognitive disturbances in childhood. Peterson and coauthors studied brain structure, cognition, and behavior in 40 minority urban children followed up prospectively from the fetal period. They detected a dose-response relationship

between prenatal polycyclic aromatic hydrocarbon exposure and reduced left hemisphere white matter, which was associated with slower information processing speed. In a Viewpoint, Calderón-Garcidueñas and Torres-Jardón discuss the impact of air pollutants on the brain.

☑ Viewpoint 529

## Risk of Suicide Among US Military Service Members

561

Military deployment has been debated to increase suicide risk in service members. Reger and coauthors used a retrospective cohort design to study suicide mortality in 3.9 million US military personnel who served during Operation Enduring Freedom or Operation Iraqi Freedom. Deployment was not associated with the rate of suicide but the rate of suicide increased after an early separation from the military service and when discharge was not honorable.

## Extended-Release Mixed Amphetamine Salts for ADHD/CUD

Adult attention-deficit/hyperactivity disorder (ADHD) is present in almost 1 of every 4 patients with substance use disorder. Levin and coauthors conducted a clinical trial in adult patients with cocaine use disorder (CUD) and comorbid ADHD to study the effect of extended-release mixed amphetamine salts (60 mg or 80 mg) or placebo daily for 13 weeks. The medication group showed improved ADHD symptoms and reduced cocaine use, supporting the closely monitored use of stimulants in patients with substance use disorder and co-occurring ADHD.

## Meta-analysis of Network Dysfunction in Depression

603

612

Major depressive disorder has been linked to abnormal communication between various brain regions. Kaiser and coauthors used meta-analytic methods to investigate network dysfunction in data sets from 25 publications. They found decreased connectivity in networks governing attention and emotion regulation but increased connectivity in networks governing self-referential thought. This may reflect depressive biases toward internal thoughts at the cost of engaging with the world.

## Effect of Depression and Diabetes Mellitus on Dementia Risk

Departments

526 Staff Listing

626 Classified Advertising

626 Journal Advertiser Index

Instructions for Authors www.jamapsychiatry.com/public /instructionsforauthors.aspx

Depression and type 2 diabetes mellitus are risk factors for dementia but their combined effect on dementia has not been studied. Katon and coauthors performed a population-based cohort study of more than 2.4 million Danish adults. They found that both depression and type 2 diabetes mellitus increased the risk for dementia but that the combined effect was much stronger than the additive association. This was especially true for individuals younger than 65 years. In an Invited Commentary, Reynolds discusses the importance of promoting healthy brain aging.

- Invited Commentary 619 Editor's Note 621
- Continuing Medical Education jamanetworkcme.com

## Opinion

#### Viewpoint

527 Are Anti-inflammatory Therapies Viable Treatments for Psychiatric Disorders? Where the Rubber Meets the Road

AH Miller and CL Raison

529 The Impact of Air Pollutants on the Brain

L Calderón-Garcidueñas and R Torres-Jardón

#### **Editor's Note**

621 Wayne Katon, MD S Heckers

#### **LETTERS**

#### Research Letter

622 Speed of Psychosis Progression in People at Ultra-High Clinical Risk: A Complementary Meta-analysis MJ Kempton and Coauthors

#### Comment & Response

623 The Popularity of Benzodiazepines, Their Advantages, and Inadequate Pharmacological Alternatives

624 Suicide Risk: Sunshine or Temperature Increase?

625 Medusa's Head and Ancient Aristotelian Biology

625 Correction

612 CME Article

627 Contact Information

628 CMF Questions