

Analytics

Overhaul your marketing organization for top performance.

Read the report

sas
THE POWER TO KNOW.

Mobile: ☐ iPhone ☐ Android ☐ Web

Follow: ☐ Facebook ☐ Twitter ☐ Google+

Subscribe: ☐ RSS Feeds ☐ Email Newsletters

☐ ? ☐ HEALTH ☐ PHYSICAL/TECH ☐ ENVIRONMENT ☐ SOCIETY/EDUCATION ☐ QUIRKY ☐ Search

Latest Headlines Health & Medicine Mind & Brain Space & Time Matter & Energy Computers & Math Plants & Animals Earth & Climate Fossils & Ruins

Featured Research

from universities, journals, and other organizations

Save/Print: ☐ ☐ Share: ☐ ☐ ☐ ☐ ☐

Drug tests on mothers' hair links recreational drug use to birth defects

Date: October 31, 2014

Source: University College London

Summary: Drug tests on 517 mothers in English inner city hospitals found that nearly 15 percent had taken recreational drugs during pregnancy and that mothers of babies with birth defects of the brain were significantly more likely to have taken drugs than mothers with normal babies. The study found no significant links between recreational drug use and any other type of birth defect.

Share This

- ☐ Email to a friend
- ☐ Facebook
- ☐ Twitter
- ☐ LinkedIn
- ☐ Google+
- ☐ Print this page

Related Topics

Health & Medicine

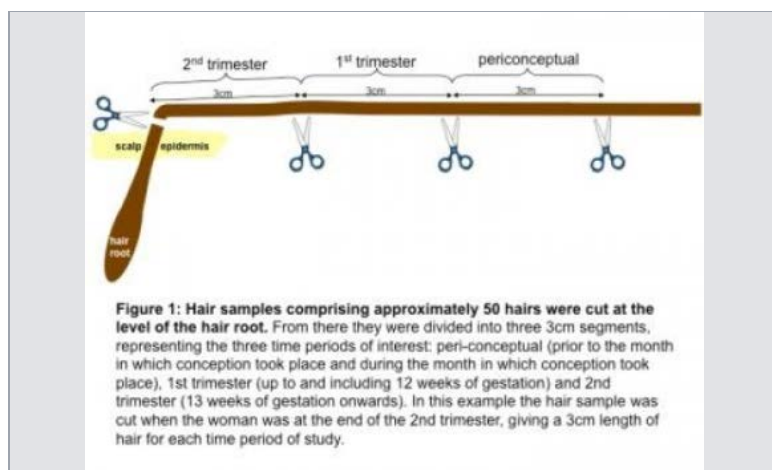
- ☐ Birth Defects
- ☐ Pharmacology

Mind & Brain

- ☐ Addiction
- ☐ Child Development

Science & Society

- ☐ Public Health
- ☐ Scientific Conduct



A description used in the hair sampling method used by UCL researchers to detect drugs in the hair of women who had recently given birth.

Credit: Anna David, UCL

[\[Click to enlarge image\]](#)

Drug tests on 517 mothers in English inner city hospitals found that nearly 15% had taken recreational drugs during pregnancy and that mothers of babies with birth defects of the brain were significantly more likely to have taken drugs than mothers with normal babies. The study found no significant links between recreational drug use and any other type of birth defect.

The study was led by a team of UCL researchers co-ordinating data collection from hospitals across London, Bristol and Birmingham and the results are published in the journal *PLOS ONE*. The study included 213 women whose baby had a type of birth defect with potential links to recreational drug use, 143 women whose baby had a birth defect with no previously reported links to drug use and 161 women whose baby was normally formed.

77 (14.9%) of the women who agreed to take part tested positive for at least one type of recreational drug, of whom 10 had taken more than one drug. 68 women tested positive for cannabis, 18 for cocaine, 1 for ketamine and 1 for MDMA. Drug use was highest around conception and reduced as the pregnancy progressed, but around half of the women who smoked cannabis continued to do so throughout

Related Articles

- ☐ Stimulant
- ☐ Premature birth
- ☐ Psychopharmacology
- ☐ Drug discovery
- ☐ Breastfeeding
- ☐ Postpartum depression

Breaking News:

Restoring Lost Memories: Marine Snail Insights

Parrot MINIDRONES

Jumping Sumo - \$159

Rolling Spider - \$99

I WANT THEM

Piloting App on iOS & Android

Related Stories

Key Factors in Understanding Differences in Rates of Birth Defects Identified

July 4, 2013 — New research highlights important information for health professionals and parents about the factors which may increase the likelihood of a baby being born with a birth ... [full story](#)

Pregnancy and Birth Complications More Likely in Mothers With Bipolar Disorder

Nov. 8, 2012 — Babies born to mothers with bipolar disorder are at increased risk of preterm birth (before 37 weeks), a new study ... [full story](#)

Overweight Mothers Who Smoke While Pregnant Can Damage Baby's Heart, Study Finds

Jan. 30, 2012 — Mothers-to-be who are both overweight and smoke during their pregnancy risk damaging their baby's developing heart, according to new ... [full story](#)

Antiretroviral Drugs Guard Against HIV but May Lead to Birth Defects

Jan. 26, 2012 — HIV-positive mothers have been able to guard against transmitting the disease to their babies by taking antiretroviral drugs during pregnancy. Although the drugs prevent children from being born with ... [full story](#)

Prenatal Use of Newer Antiepileptic Drugs Not Associated With Increased Risk of Major Birth Defects, Study Finds

May 17, 2011 — Use of newer-generation antiepileptic drugs, which are also prescribed for bipolar mood disorders and migraine headaches, during the first trimester of pregnancy was not associated with an increased ... [full story](#)

[more related stories](#)

Parrot MINIDRONES

Rolling Spider - \$99

Jumping Sumo - \$159

I WANT THEM



the second trimester.

Evidence of drug use was found in a significantly higher proportion of women whose babies were born with brain birth defects (35%), compared to women whose babies were normally formed (13%). Brain birth defects included brain anomalies other than spina bifida, such as brain cysts and under-development of the brain. These can have severe consequences and lead to lifelong conditions such as cerebral palsy.

"Our findings suggest a link between brain birth defects and recreational drug use in expectant mothers," Dr Anna David of the UCL Institute for Women's Health, lead author of the study and Consultant in Fetal Medicine at UCLH. "We were unable to identify significant links between specific drugs and brain birth defects. Therefore I would discourage women trying to get pregnant and those in early pregnancy from taking any recreational drugs including cannabis. Since only 20 of the mothers in our study had babies with brain birth defects, a larger study of such cases is now needed to examine the links with specific drug use more closely."

The study set out to investigate the link between drug use around the time of conception and the first trimester and a variety of birth defects. Smaller studies had suggested that drug use might be a primary risk factor for gastroschisis, a defect in the baby's belly that must be surgically repaired at birth. Other known risk factors for this abnormality include young maternal age and smoking. This larger study showed that the young age of the mother rather than recreational drug use was identified as the primary risk factor for gastroschisis. But for brain defects, drug use was a primary risk factor after taking into consideration the mother's age and use of tobacco and alcohol. Larger studies are now needed to investigate the link between the types of drug use and brain birth defects.

"Current evidence linking recreational drug use with birth defects is patchy as it relies on self-reporting which can be unreliable," explains Dr David. "Our anonymised hair testing offers an objective measure of recreational drug use and showed that it is common in pregnancy. The risks of alcohol and tobacco in pregnancy are relatively well-researched, and we hope that research into drug use will catch up now that we have demonstrated its relevance to babies' health and development."

Researchers took hair samples from consenting mothers, which were then tested for evidence of recreational drug use. The laboratory performing the drug tests were not given access to patient clinical data and all results were anonymised.

When someone takes drugs, traces from the bloodstream are deposited in their hair as it grows. Hair grows at an average rate of one centimetre per month, so a 9cm sample of hair from the scalp will give an approximate timeline of drug use from the past 9 months. The researchers divided hair samples into three sections of 3cm each, in order to time drug use to the months before and during conception, the first trimester and the second trimester.

Story Source:

The above story is based on materials provided by University College London. Note: Materials may be edited for content and length.

Cite This Page:

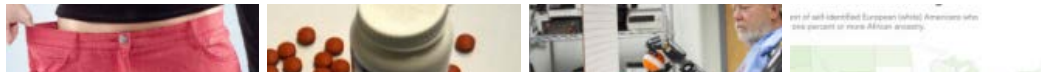
- MLA
- APA
- Chicago

University College London. "Drug tests on mothers' hair links recreational drug use to birth defects." ScienceDaily. ScienceDaily, 31 October 2014. <www.sciencedaily.com/releases/2014/10/141031150002.htm>.

Share This

- Email to a friend
- Facebook
- Twitter
- LinkedIn
- Google+
- Print this page

More From ScienceDaily



Pioneering Drug Discovery

peakdale.co.uk

Integrated Drug Discovery Service Provider

2014 Best Skin Tighteners

InterVivo Solutions

Strange & Offbeat Stories

Health & Medicine

- Lost Memories Might Be Able to Be Restored, Suggests Research Into Marine Snail
- Weigh-in Once a Week or You'll Gain Weight
- Thumbs-Up for Mind-Controlled Robotic Arm
- When You Lose Weight, Where Does the Fat Go? Most of the Mass Is Breathed out as Carbon Dioxide, Study Shows
- Dental Plaque Reveals Key Plant in Prehistoric Easter Island Diet

Mind & Brain

- In One Aspect of Vision, Computers Catch Up to Primate Brain
- No 'Bird Brains'? Crows Exhibit Advanced Relational Thinking, Study Suggests
- Bugs Life: The Nerve Cells That Make Locusts 'gang Up'
- Kids' Cartoon Characters Twice as Likely to Die as Counterparts in Films for Adults: Content on a Par With 'Rampant Horrors' of Popular Films
- A Lot or a Little? Wolves Discriminate Quantities Better Than Dogs

Living & Well

- Sharing That Crowded Holiday Flight With Countless Hitchhiking Dust Mites
- Is This the End of 'Fake Exemptions? ' It Is Possible to Detect When We Provide False Information Regarding Our Health Conditions Through Handwriting
- Dogs Hear Our Words and How We Say Them
- Pleasure at Another's Misfortune Is Evident in Children as Young as Two
- Finding 'Lost' Languages in the Brain: Far-Reaching Implications for Unconscious Role of Infant Experiences

In Other News ... from NewsDaily.com

Science News

- Europe recommends approval for first stem-cell therapy
- Disgraced Japan researcher fails to replicate 'game changing' stem cell results
- Songbirds fly coop long before tornadoes arrive in Tennessee
- SpaceX delays planned cargo run to space station to early January
- India tests its heaviest space launch vehicle, eyes global market

Health News

- U.N. warns Ebola-linked farm losses could threaten banking in West Africa



When you lose weight, where does the fat go ...



Ibuprofen use leads to extended lifespan in ...



Amputee makes history controlling two modular ...



Genetic ancestry of different ethnic groups ...



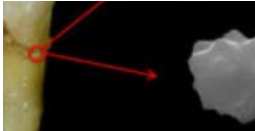
Feeling younger than actual age meant lower ...



Life expectancy increases globally as death ...



Virtual bodyswapping diminishes people's ...



Dental plaque reveals key plant in prehistoric ...

More Health & Medicine News

Monday, December 22, 2014

Featured Research

from universities, journals, and other organizations



Existing Drug, Riluzole, May Prevent Foggy 'Old Age' Brain, Research Shows

Dec. 22, 2014 — Forgetfulness, it turns out, is all in the head.

Scientists have shown that fading memory and clouding judgment, the type that comes with advancing age, show up as lost and altered connections ... [full story](#)

[Dementia](#); [Healthy Aging](#); [Intelligence](#); [Amyotrophic Lateral Sclerosis](#)

- [Existing Drug May Prevent Foggy 'Old Age' Brain](#)
- [How Resveratrol Provides Health Benefits](#)
- [Diverse Autism Mutations: Different Outcomes](#)
- [Cell Marking to Help Understand How Brain Works](#)
- [New Connection Between Metabolism, Regulation](#)
- [Limit Imaging Scans for Headache? Concerns Raised](#)
- [Alternative for Pain Control After Knee Surgery](#)
- [Suppressing a Protein Reduces Cancer Spread: Mice](#)
- [Making Tissues, Someday Maybe Organs](#)
- [Reducing Liver Cell Death in Cholestasis](#)

[newer top stories](#) | [older top stories](#)

- [Death toll from Ebola in West Africa rises to 7,518: WHO](#)
- [Achillion data shows promise of shorter-duration hep C treatment](#)
- [Fast food may lead to lower school results for U.S. kids: study](#)
- [Exclusive: WHO says Syria approves medicine deliveries to Aleppo, other areas](#)

Environment News

- [10 years on, tsunami warning stumbles at the "last mile"](#)
- [U.S. judge restores protections to Great Lakes wolves](#)
- [Coal ash is not hazardous waste under U.S. agency rules](#)
- [Ecuador halts environment deals with Germany over rainforest visit](#)
- [Obama: Keystone benefits for U.S. consumers, workers nominal](#)

Technology News

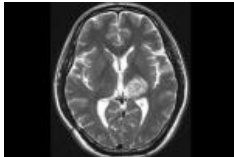
- [Telefonica adds fiber optic contracts as regulator mulls action](#)
- [China condemns cyberattacks, but says no proof North Korea hacked Sony](#)
- [Uber business model faces legal scrutiny in Taiwan, Chinese mega city](#)
- [Xiaomi raising over \\$1 billion from investors including GIC: source](#)
- [South Korea nuclear plant operator says hacked, raising alarm](#)

Featured Videos

from AP, Reuters, AFP, and other news services



Christmas Kissing Good for Health



Brain-Dwelling Tapeworm Reveals Genetic Secrets



Touch-Free Smart Phone Empowers Mobility-Impaired



Earthworms Provide Cancer-Fighting Bacteria

Save/Print: [□](#) [□](#) Share: [□](#) [□](#) [□](#) [□](#) [□](#)

Search ScienceDaily

Number of stories in archives: 140,361



Find with keyword(s):

Enter a keyword or phrase to search ScienceDaily for related topics and research stories.

Free Subscriptions

Get the latest science news with ScienceDaily's free email newsletters, updated daily and weekly. Or view hourly updated newsfeeds in your RSS reader:

- [Email Newsletters](#)
- [RSS Feeds](#)

Get Social & Mobile

Keep up to date with the latest news from ScienceDaily via social networks and mobile apps:

- [Facebook](#)
- [Twitter](#)
- [Google+](#)
- [iPhone](#)
- [Android](#)
- [Web](#)

Have Feedback?

Tell us what you think of ScienceDaily -- we welcome both positive and negative comments. Have any problems using the site? Questions?

- [Leave Feedback](#)
- [Contact Us](#)