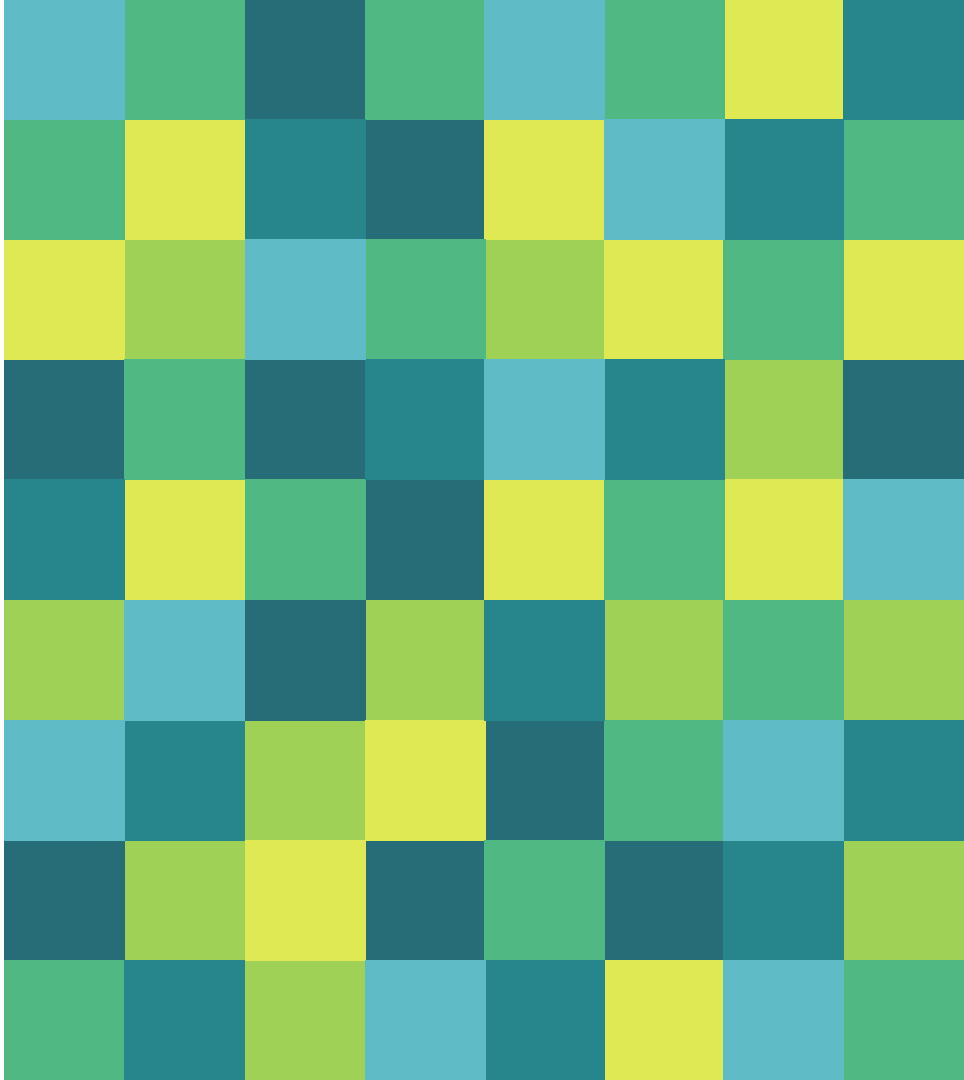
MotherToBaby

Medications and More During Pregnancy and Breastfeeding



MotherToBaby California

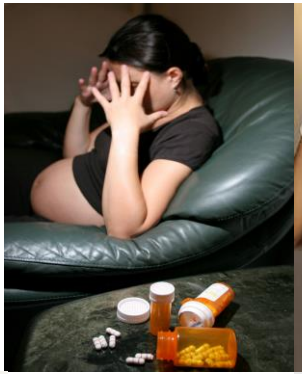
- **FREE** and **confidential *telephone*** service providing pregnancy and breastfeeding health information - no insurance or appointment needed!
  - ✓ *App, online chat, text, eMail*
  - ✓ A RESOURCE for pregnant/breastfeeding moms and healthcare providers;
  - ✓ NOT a HOTLINE
- Established over 39 years ago; UC San Diego School Of Medicine; funded by Ca Dept of Education.
- Federally funded by a Health Resources and Services Administration (HRSA)
- Affiliate ~ *Organization of Teratology Information Specialist* (OTIS)
- CTIS: California Teratogen Information Service, Pregnancy Risk Information Line, California Teratogen Registry

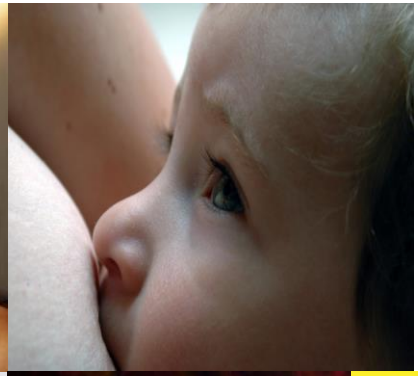
MotherToBaby California

- **"EXPOSURE CHECK-UP"**
  - ✓ Unintended pregnancies ~ 50%
    - >80% reported use during the first trimester – organogenesis*
  - ✓ Possible (***teratogenic***) exposures early in pregnancy to medications, chemicals, a cold or flu, second- hand smoke, and a lot of other things
  - ✓ Contact **pregnancy information health specialist** @ MotherToBaby
  - ✓ *Perfect fit for Perinatal Service Providers*
    - Provide Health Education, address nutrition and psycho-social issues
- After pregnancy test (before 1st prenatal visit), start searching for ANSWERS:
  - ✓ Dr. Google – Facebook - Twitter
  - ✓ Clinic/OB Office

**Mitchell AA, Gilboa SM, Werler MM, et al. Medication use during pregnancy, with particular focus on prescription drugs: 1976–2008. Am J Obstet Gynecol 2011;205(1): 51.e1–51.e8.*











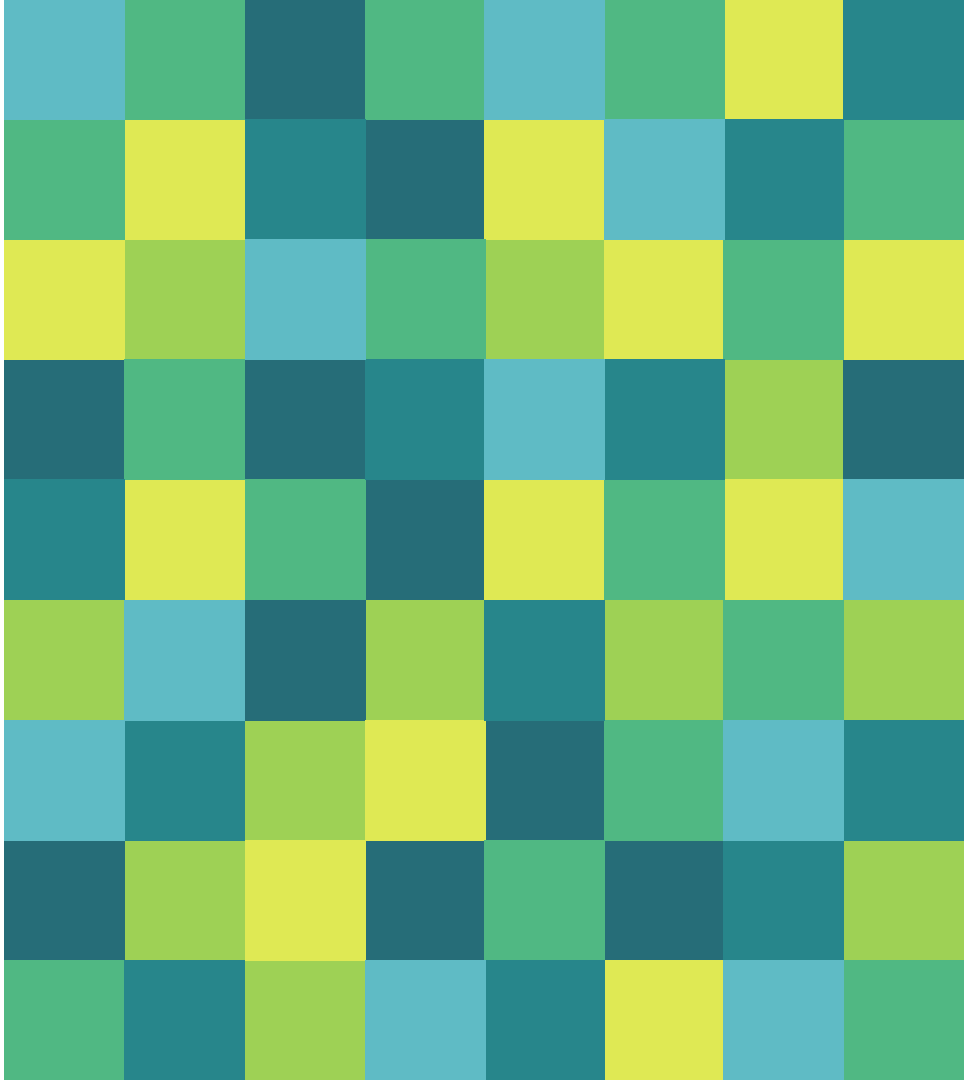


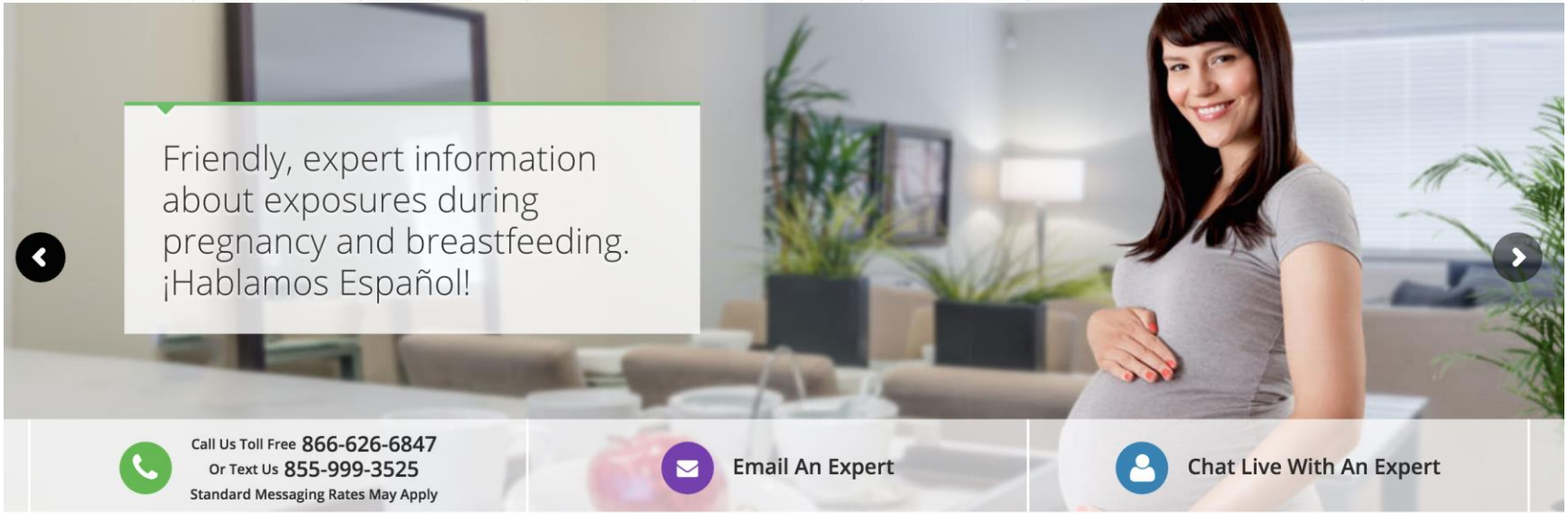
DANGER
RADIOACTIVE
MATERIAL



Dr. Google…
is NOT the answer!

Information may be outdated

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MotherToBaby California

Learning objectives

- ✓ Describe MotherToBaby and services provide
- ✓ Review some current information on marijuana and opioids
- ✓ Discuss/review some (frequently asked questions) FAQs

Marijuana (*cannabis*)

NEWSLETTER

MEDICAL NEWS TODAY

Smoking weed while pregnant: Is it safe?

By Rachel Nall, MSN, CRNA | Last reviewed Wed 2 January 2019

Reviewed by Valinda Riggins Nwadike

Safety | Possible side effects | Research challenges | Marijuana for nausea | Edibles and vaping | Outlook

Some pregnant women use marijuana, and researchers are still unsure how the drug can affect a fetus. As a result, most medical experts recommend refraining from smoking weed during pregnancy.

How cannabis works

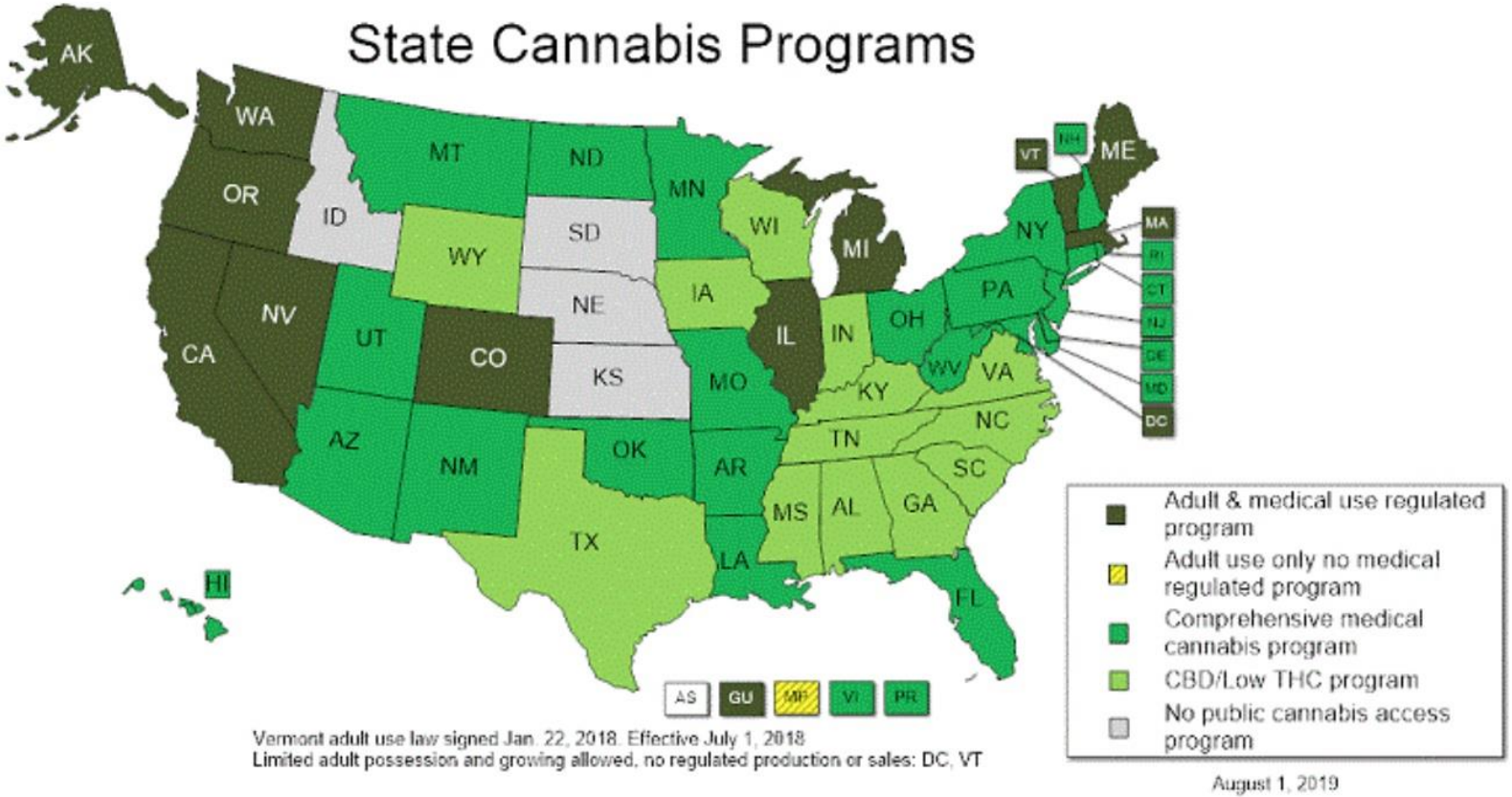
- Endocannabinoid system is involved in regulating variety of physiological processes
  - ✓ Appetite
  - ✓ Pain/pleasure
  - ✓ Immune system
  - ✓ Mood
  - ✓ Memory

- Endocannabinoid receptors
  - ✓ CB 1: found in the brain;
    - THC binds to receptors in the brain
  - ✓ CB 2: found in other parts of the body
    - CDB binds to receptors in other areas of the body

- Cannabinoids:
  - ✓ Endocannabinoids (brain derived)
  - ✓ Phytocannabinoids (plant derived)
  - ✓ Synthetic cannabinoids (made in the lab)

Marijuana (*cannabis*)

- One of the most widely used illicit psychoactive drug in the world
  - ✓ Global estimate: ~ 3.9% world population between 15-64 years old (180.6 million people)
  - ✓ Accepted as "relatively" harmless in many parts of the world; BUT, there's **evidence of detrimental impact** on the adult brain and developing central nervous system
- Marijuana (cannabis): also known as pot, weed, grass, dope, ganja, 420, bhang, hashish
- Last decade: increase use from 35% up to 72% (up to 28% in young, urban socioeconomically disadvantaged women)
- One of the most commonly used illicit drug in pregnancy and breastfeeding
  - ✓ **6.4%** of pregnant women in the 2015 National Survey on Drug Use and Health reported using during the **first trimester**
  - ✓ **> 60% of marijuana users continue during pregnancy**
  - ✓ Increased Legalization: increased treatment for nausea and vomiting
- 33 States, District of Columbia, Guam, Puerto Rico and US Virgin Islands now allow for comprehensive public medical marijuana/cannabis programs
  http://www.ncsl.org/research/health/state-medical-marijuana-laws.aspx


State Cannabis Programs
AK
WA
OR
CA
NV
ID
MT
WY
UT
AZ
CO
NM
ND
SD
NE
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MN
IA
MO
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SC
NC
VA
PA
NY
VT
NH
ME
MA
RI
CT
NJ
DE
MD
DC
HI
AS
GU
MP
VI
PR
Adult & medical use regulated program
Adult use only no medical regulated program
Comprehensive medical cannabis program
CBD/Low THC program
No public cannabis access program
Vermont adult use law signed Jan. 22, 2018. Effective July 1, 2018
Limited adult possession and growing allowed, no regulated production or sales: DC, VT
August 1, 2019

Marijuana (*cannabis*)

- Flowering plant: sativa (energy), indica (drowsy) and ruderalis
  - ✓ Used for medicinal and psychoactive properties (mediated through cannabinoids)
  - ✓ Generally lipophilic and low molecular weight: cross blood-brain barrier and placenta

Marijuana ~ Reasons for Use

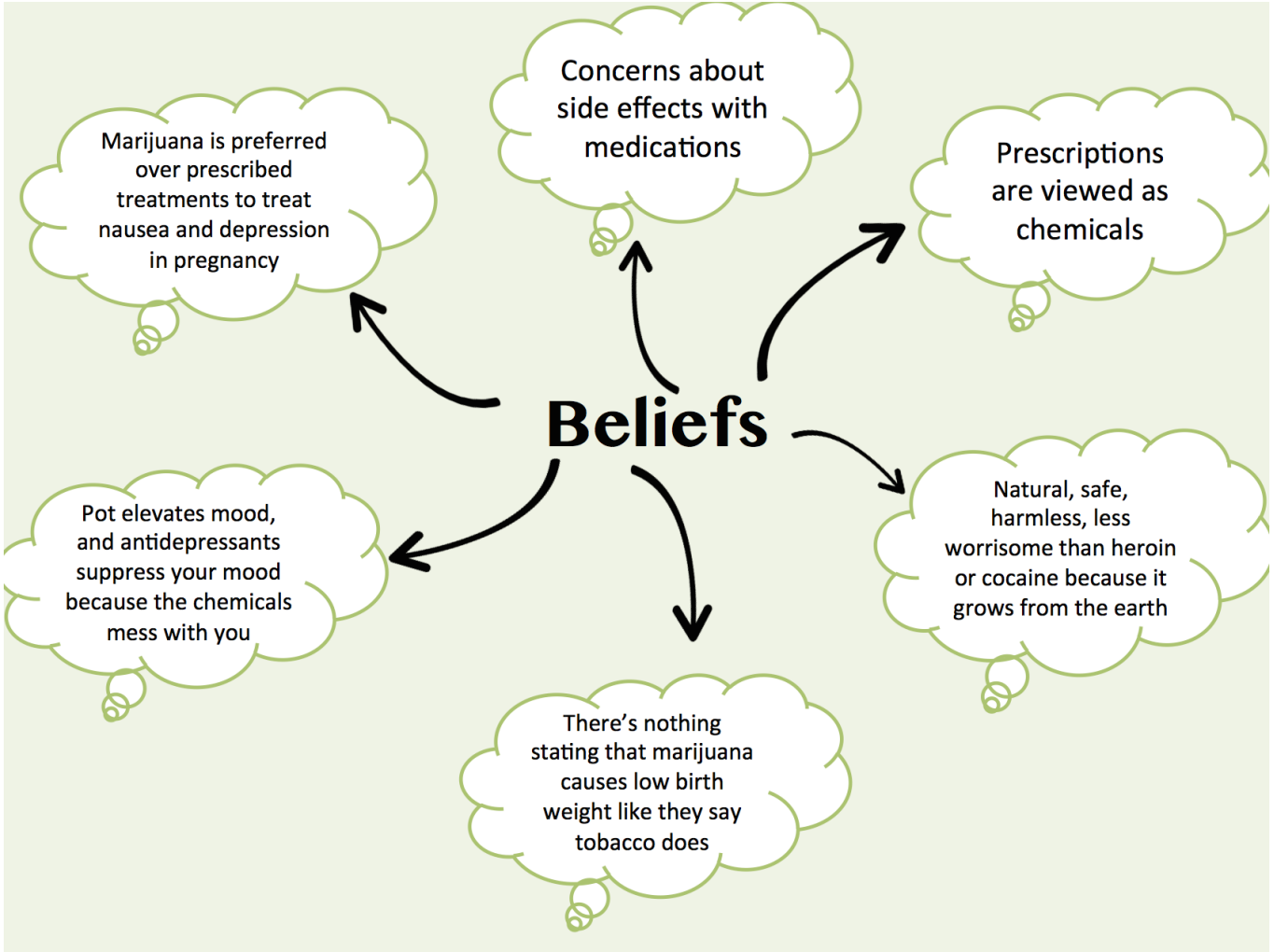
Helps with nausea, vomiting, or appetite changes related to pregnancy

Stress management
Mood improvement
Helps with coping

Assumed inadequate nutrition is worse than smoke exposure

Marijuana (*cannabis*)

- Current evidence – during pregnancy
  - ✓ No pattern of structural malformations have been identified
  - ✓ Potential adverse health effects with continued use during pregnancy
  - ✓ Reports of decreased/impaired fetal growth
  - ✓ Reports of increased tremulousness, altered visual response patterns to light stimulus, and withdrawal-like crying
  - ✓ Impacts neuropsychiatric, behavioral & executive functioning (poor cognitive function)
- Effects of marijuana use as serious as cigarette smoking or alcohol consumption,
  - ✓ THC potency ~ 3.8% (1990) to about 12% (2014); many hybrid varieties
  - ✓ Can produce anxiety, agitation, paranoia, psychosis
  - ✓ Advise/encourage to AVOID USE during pregnancy/breastfeeding or, at least, decrease
- Long-term follow-up: VERY CRUCIAL
  - ✓ Neurocognitive and behavioral problems benefit from early intervention - reduces potential difficulties such as delinquency, depression and substance use


Concerns about side effects with medications
Marijuana is preferred over prescribed treatments to treat nausea and depression in pregnancy
Prescriptions are viewed as chemicals
Beliefs
Pot elevates mood, and antidepressants suppress your mood because the chemicals mess with you
Natural, safe, harmless, less worrisome than heroin or cocaine because it grows from the earth
There's nothing stating that marijuana causes low birth weight like they say tobacco does

Marijuana Use by Breastfeeding Mothers and Cannabinoid Concentrations in Breast Milk

Kerri A. Bertrand, MPH,[a] Nathan J. Hanan, PharmD,[a,b] Gordon Honerkamp-Smith, MS,
[a] Brookie M. Best, PharmD, MAS,[a,b] Christina D. Chambers, PhD, MPH[a,c]

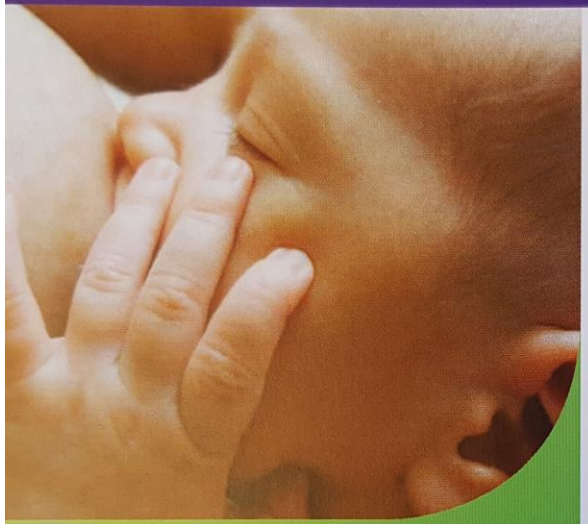
Marijuana (*cannabis*)

- The main cannabinoids reported by breastfeeding women
  - ✓ Tetrahydrocannabinol (THC): psychoactive
  - ✓ Cannabidiol (CBD): non-psychoactive

- Effects of marijuana during lactation:
  - ✓ Cannabis and metabolites ***readily pass in breast milk***
  - ✓ THC concentration ***can be*** up to 8-fold mom's plasma concentration
  - ✓ THC (delta 9) ***can inhibit hormones***: gonadotropin, prolactin, growth hormones, thyroid-stimulating hormone release affecting quantity/quality of milk

- What we **DON'T KNOW** is how does marijuana via breastmilk influence:
  - ✓ Child's growth in the first few months of life (when exclusive breastfeeding is recommended)
  - ✓ Child's neurodevelopment

Should You Pump and Dump?



Does pumping and discarding breastmilk protect your baby from....

- **Prescription medications?**
- **Alcohol?**
- **Recreational drugs?**
- **Other exposures that might be transmitted through breastmilk?**

YOU have questions.
WE have answers.

Call • Chat • Email

www.MotherToBabyCA.org

Toll FREE (866) 626-6847

MotherToBaby
CALIFORNIA

Mommy's Milk
HUMAN MILK RESEARCH BIOREPOSITORY

- Study Design
  - ✓ All breastfeeding women over the age of 18 years are eligible.
  - ✓ A 50 mL (~2 ounces) milk sample is collected, but as little as 1 mL is accepted.
  - ✓ Samples can be collected either at the UCSD HMB Research Center or via a mailed milk sample.
  - ✓ Women are interviewed by trained study staff the same day as they express their milk samples either in person or via telephone
  - ✓ Samples are stored in a -80◦ C freezer

- Interview Data
  - ✓ Demographics, maternal and child health, and breastfeeding habits
  - ✓ Current and past exposures to recreational drugs, alcohol, tobacco, caffeine, prescription medications, and over-the-counter medications
  - ✓ Infant adverse reactions (i.e., infant "toxicities")

- Mailed/Online Questionnaires Data
  - ✓ Stress, anxiety, and depression questionnaires
  - ✓ Eating habits via a short Block Food Frequency questionnaire
  - ✓ Child developmental questionnaires (ASQ, ITSEA, CDI, MCHAT)

Prenatal Exposure to Cannabis Affects the Developing Brain

Children born to moms who smoked or ingested marijuana during pregnancy suffer higher rates of depression, hyperactivity, and inattention.

Jan 1, 2019
ANDREW SCHEYER

ABOVE: © LYNN SCURFIELD

We live in a medicated era. Recent data indicate that more than half of Americans are currently taking prescription drugs. Among pregnant women this number skyrockets to more than 80 percent. One of these women was a 24-year-old from California named Carol, whom I met and befriended through an online drug research forum. After weeks of debilitating morning sickness, persistent pain in her back and hips, and chronic anxiety about becoming a mother, Carol was taking a tranquilizer called alprazolam as needed, plus daily doses of acetaminophen and an anti-nausea drug called metoclopramide.

Carol felt uneasy using the medications. Like many Americans and an even greater proportion of Europeans, Carol (who asked that I not use her surname) favors home remedies over pharmaceutical treatments. “I’ll always choose a tea over a pill,” she says. And so, as she sought relief during her pregnancy, she turned to marijuana.

In the summer of 2007, Carol was surrounded by people touting the wonders of cannabis as a panacea for diseases from depression to glaucoma and myriad ailments in between—including nausea, pain, and

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Ask The Experts

Fact Sheet
by the Organization of Teratology Information Specialists (OTIS)
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Find us! Facebook.com/MotherToBaby or @MotherToBaby on Twitter

Marijuana

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to marijuana may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is marijuana?

Marijuana, also called pot, weed, or cannabis, is a drug that comes from the hemp plant. Parts of the plant are dried and smoked in pipes or cigarettes (joints) or sometimes eaten. It is an illegal substance in parts of the United States; however, some states allow marijuana use by prescription for medical purposes, and some states allow the sale of marijuana for recreational use.

The main active chemical in marijuana is delta-9-tetrahydrocannabinol (THC). Another component of marijuana is cannabidiol (CBD). Both THC and CBD are known to cross the placenta during pregnancy and reach the baby's system.

How much is known about the effects of marijuana on a pregnancy?

It is difficult to accurately study marijuana use during pregnancy. Marijuana contains about 400 different chemicals, and some marijuana cigarettes may contain contaminants, such as other drugs, pesticides, or fungi. Some women who use marijuana may also use alcohol, tobacco, or other drugs at the same time. Women who use marijuana during pregnancy may also have other factors that can increase pregnancy complications, such as lack of prenatal care or an unbalanced diet. In addition, marijuana has become more potent (stronger), particularly in THC content over the past years. Many growers are focusing on sinsemilla. Sinsemilla refers to growing marijuana a certain way to get a more potent (stronger) marijuana product. Therefore, studies done years ago would, in theory, be looking at marijuana that was less strong than currently being used. Finally, information on the amount, frequency, and timing of marijuana use can be difficult to accurately collect. All of these factors explain why studies looking at marijuana use during pregnancy sometimes find different results.

I am trying to become pregnant. If I or my partner uses marijuana, do I have a lower chance of becoming pregnant?

In women, long-term use of marijuana may affect the menstrual cycle and lead to a reduction in hormones involved in reproduction and fertility. In men, an association with reduced sperm count has been seen. These side effects might make it harder to get pregnant. The effects on fertility appear to go away when marijuana use is stopped.

Will smoking or eating marijuana cause birth defects in my baby?

Most studies have not found an increase in the chance for birth defects among babies prenatally exposed to "occasional" marijuana use. A few studies have suggested a small increase in the chance for gastroschisis (a rare birth defect in which the infants' intestines stick out of an opening in the abdominal wall), and one study reported an increased chance for heart defects among babies prenatally exposed to marijuana. It can be difficult to draw conclusions from these studies because most of the women who used marijuana also used other substances at the same time or had other factors that may have increased their chance for these defects. Also, the term "occasional" use is hard to quantify and might be different from person to person.

While most studies are reassuring regarding birth defects, without good studies among heavy marijuana users, and because of other potential pregnancy complications it is best to avoid marijuana during pregnancy.

Can marijuana harm the baby in any other way?

Some studies have suggested that among women who smoke marijuana cigarettes regularly, there is an increased chance for pregnancy complications such as: premature birth, low birth weight, stillbirth and small length, small head size, and death in the newborn period. Babies that are born prematurely or with low birth weight can have higher rates of learning problems or other disabilities.

Similar to what is seen with cigarette smoking, smoking marijuana may increase carbon monoxide levels in the blood, which can decrease the amount of oxygen the baby receives, and this can also affect the growth of the baby. Some studies have suggested that lower birth weight is more likely to occur among women who also smoke cigarettes in addition to their marijuana.

If I smoke marijuana in the third trimester, can it cause my baby to go through withdrawal after birth?

Some newborns exposed to marijuana have been reported to have temporary withdrawal-like symptoms, such as increased tremors and crying. These symptoms usually go away within a few days.

Can my marijuana smoking affect the brain development of the baby?

Differences in brain activity, behavior, and sleeping patterns of infants and children exposed to marijuana in pregnancy have been reported in some studies. It is believed that these children might have more problems with attention, impulsive behavior, short term memory, academic performance and difficulty at work as an adult. These problems have been seen more often in children whose mothers were "heavy" marijuana users (smoked one or more marijuana cigarettes per day). The evidence is not conclusive and some studies report conflicting results.

What happens if I use marijuana when I'm breastfeeding?

Marijuana can be passed to infants through their mother's breast milk. Marijuana may also affect the quality and quantity of breast milk that you make. There are no good studies on how marijuana in breast milk might affect a nursing baby. Although no consistent effects have been noticed in infants exposed to marijuana through breast milk, the American Academy of Pediatrics and the Academy of Breastfeeding Medicine advise that breastfeeding mothers avoid using marijuana. Be sure to talk to your health care provider about all your breastfeeding questions.

References Available By Request

December, 2017

ACOG & AAP *Recommendations*

- ACOG
  - ✓ Women who are pregnant or planning a pregnancy should be encouraged to discontinue marijuana use
  - ✓ Insufficient data to evaluate the effects of marijuana use on infants during lactation and breastfeeding, and in the absence of such data, marijuana is discouraged

- AAP
  - ✓ Recommends women of childbearing age to abstain from marijuana use while pregnant or breastfeeding due to potential adverse consequences to the fetus, infant or

Opioids

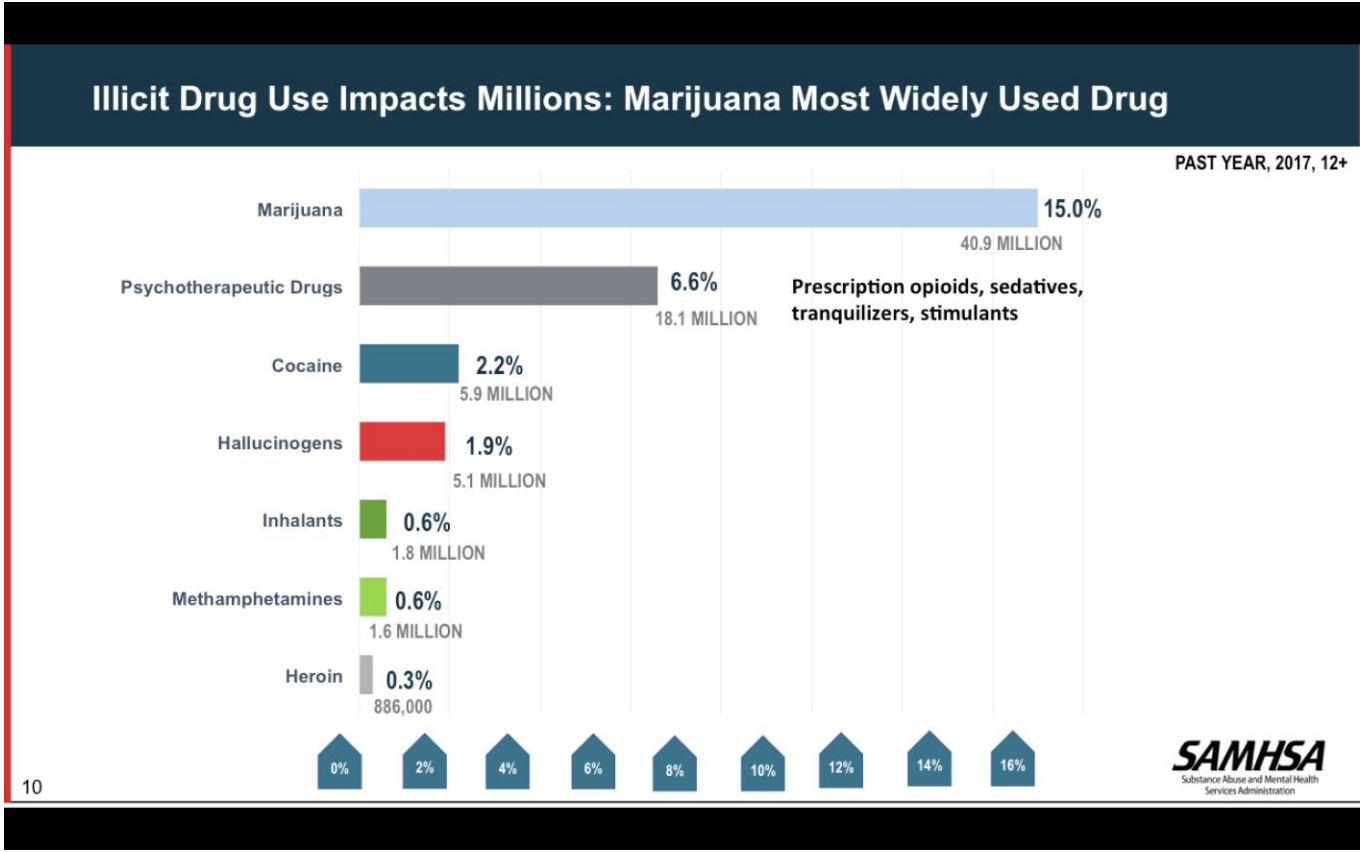
- Surveillance data suggest an increase in:
  - ✓ Prescription opioid use disorder
  - ✓ Frequency of use and related disorders
  - ✓ Previously, heroin was more common

- Prevalence of prescription opioid misuse during pregnancy more than doubled in the U.S. from 1992-2008
  - ✓ Intoxication, repiratory depression, decreased oxygen supply
  - ✓ Fetal hypoxemia
  - ✓ Withdrawal – hypertension, tachycardia, decrease placental perfusion

- Neonatal Abstinence Syndrome (NAS) has more than tripled in the last decade

Neonatal Abstinence Syndrome (NAS)

- Increasing frequency of neonatal abstinence syndrome (NAS)
  - ✓ Can occur with misuse of opioids or taking opioids for chronic pain
  - ✓ About 50% of infants exposed to opioids chronically in utero develop NAS
  - ✓ NAS typically occurs 48-72 hours post-birth (after prenatal opioid exposure)
  - ✓ CNS hyper-irritability (i.e. increase in muscle tone), dysfunction of the sutonomic nervous system (sweating), GI tract (vomiting), and respiratory system
- Agency for Healthcare Research and Quality (AHRQ) database
  - ✓ Newborns diagnosed with NAS increased from 1.20 (2000) to 3.39(2009) per 1,000 births
  - ✓ Mothers diagnosed as dependent or using opiates at time of delivery increased 1.19 to 5.63 per 1,000 births per year


Illicit Drug Use Impacts Millions: Marijuana Most Widely Used Drug
PAST YEAR, 2017, 12+
Marijuana
15.0%
40.9 MILLION
Psychotherapeutic Drugs
6.6%
18.1 MILLION
Prescription opioids, sedatives, tranquilizers, stimulants
Cocaine
2.2%
5.9 MILLION
Hallucinogens
1.9%
5.1 MILLION
Inhalants
0.6%
1.8 MILLION
Methamphetamines
0.6%
1.6 MILLION
Heroin
0.3%
886,000
0%
2%
4%
6%
8%
10%
12%
14%
16%
SAMHSA
Substance Abuse and Mental Health Services Administration
10

Maternal Mental Health ~ Co-morbidities

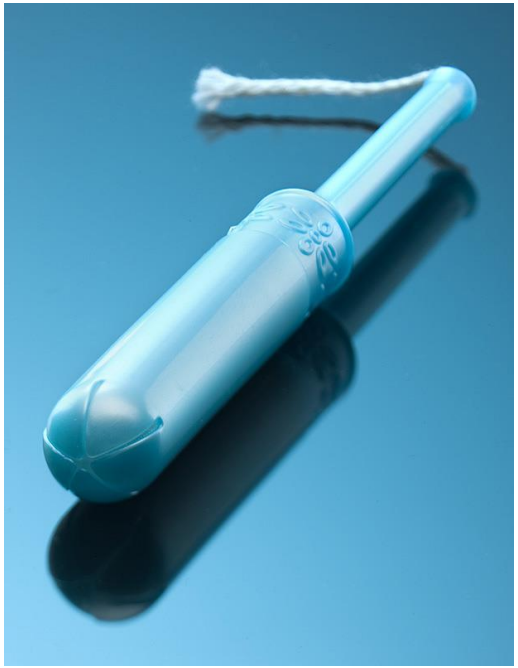
- Smoking
- Overweight or obesity
- Poor nutrition, lack of exercise
- Substance use; Other drug use/alcohol use
- Poor uptake/access to adequate prenatal care
- Failure to take folic acid supplements prior to becoming pregnant and throughout pregnancy

THE ROANOKE TIMES
Monday, September 20, 2004

STEPHANIE KLEIN-DAVIS | The Roanoke Times

Mellisa Williamson, 35, a Bullitt Avenue resident, worries about the effect on her unborn child from the sound of jackhammers.

Fetal Alcohol Spectrum Disorder (FASD)



FDA Pregnancy Drug Label

Category A: Controlled studies in women fail to demonstrate a risk to the fetus in the first trimester (and no evidence of a risk in later trimesters), and possibility of fetal harm appears remote.

Category B: Either animal-reproduction studies have not demonstrated a fetal risk but there are no controlled studies in pregnant women or animal-reproduction studies have shown an adverse effect (other than a decrease in fertility) that was not confirmed in controlled studies in women in the first trimester (and there is no evidence of a risk in later trimesters).

Category C: Either studies in animals have revealed adverse effects on the fetus (teratogenic or embryocidal or other and there are no controlled studies in women or studies in women and animals are not available. Drugs should be given only if the potential benefit justifies the potential risk to the fetus.

Category D: There is positive evidence of human fetal risk, but the benefits from use in pregnant women may be acceptable despite the risk (e.g., if the drug is needed in a life-threatening situation or for a serious disease for which safer drugs cannot be used or are ineffective).

Category X: Studies in animals or human beings have demonstrated fetal abnormalities or there is evidence of fetal risk based on human experience or both, and the risk of the use of the drug in pregnant women clearly outweighs any possible benefit. The drug is contraindicated in women who are or may become pregnant.

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Drugs

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- Development & Approval Process (Drugs)
- Development Resources
- Labeling
- Pregnancy and Lactation Labeling Final Rule

Pregnancy and Lactation Labeling Final Rule

[12/3/14] The FDA published the *Content and Format of Labeling for Human Prescription Drug and Biological Products; Requirements for Pregnancy and Lactation Labeling*, referred to as the "Pregnancy and Lactation Labeling Rule" (PLLR or final rule).

The PLLR requires changes to the content and format for information presented in prescription drug labeling in the Physician Labeling Rule (PLR) format to assist health care providers in assessing benefit versus risk and in subsequent counseling of pregnant women and nursing mothers who need to take medication, thus allowing them to make informed and educated decisions for themselves and their children. The PLLR removes pregnancy letter categories – A, B, C, D and X. The PLLR also requires the label to be updated when information becomes outdated.

Below is a comparison of the current prescription drug labeling with the new PLLR labeling requirements.

PSYCHIATRIC NEWS alert

The Voice of the American Psychiatric Association and the Psychiatric Community

CURRENT ISSUE

NEWS FROM CURRENT ISSUE

- APA Announces Candidates Vying for Board of Trustees Positions
- Child Health Experts Urge Caution on Marijuana Legalization
- FDA Actions on Antidepressants and Suicidality: 10 Years Later

BLOG ARCHIVE

- 2015 (17)
- 2014 (325)
  - December (21)
    - Teens With and Without Elevated Suicide Risk Have ...
    - Study Finds Olanzapine-Fluoxetine Combo Superior t...
    - FDA Approves New Alzheimer's Medication

FRIDAY, DECEMBER 5, 2014

FDA to Change Pregnancy and Lactation Labeling Information for Prescription Drugs

On Wednesday, the Food and Drug Administration (FDA) published a final rule that will set new standards for presentation of information concerning pregnancy and breastfeeding on labels of prescription drugs and biological products. The rule goes into effect June 15, 2015.

"The [current] letter category system [A, B, D, and X] was overly simplistic and was misinterpreted as a grading system, which gave an oversimplified view of the product risk," said Sandra Kweder, M.D., deputy director of the Office of New Drugs in the FDA's Center for Drug Evaluation and Research, in a press statement. "The new labeling rule provides for explanations, based on available information, about the potential benefits and risks for the mother, the fetus, and the breastfeeding child." The information provided under the new labeling requirements will be divided into the following categories:

Pregnancy: Containing information such as dosing and potential risks to the developing fetus and will require information about whether there is a registry that collects and maintains data on how pregnant women are affected when they use the drug.

Lactation: Containing information about using the drug while breastfeeding, such as the amount of drug in breast milk and potential effects on the breastfed child.

Females and Males of Reproductive Potential: Containing information about pregnancy testing, contraception, and infertility as it relates to the drug.

THE AMERICAN COLLEGE OF OBSTETRICIANS AND GYNECOLOGISTS

Office of Communications
tel: 202-484-3321
communications@acog.org
www.acog.org

ACOG Statement on FDA Pregnancy Labeling Final Rule

December 3, 2014

Washington, DC – John C. Jennings, MD, President of the American College of Obstetricians and Gynecologists (ACOG), released the following statement addressing the Food and Drug Administration's updated product labeling rule regarding pregnancy and lactation:

"The American College of Obstetricians and Gynecologists applauds the Food and Drug Administration (FDA) for taking needed steps to increase understanding about the effect of prescription medicines on women during pregnancy and lactation. The FDA's updated method of presenting information about both risk and benefit will improve the ability of all physicians to treat their pregnant and breastfeeding patients, as well as women who may become pregnant. It will also help more women to understand and take part in their healthcare decision-making.

"As obstetrician-gynecologists, we understand the importance of keeping women healthy before, during, and after their pregnancies, whether they live with chronic conditions or whether they are confronting new diagnoses. And, we recognize that medications can be vital to maintaining a mother's continued good health when pregnant, a goal of central concern in obstetric care. It is essential that all providers have the information they need to safely, effectively, and reliably treat their female patients. We also want to ensure that medicines will help, and not harm, both mother and child.

"Moreover, ACOG hopes that the inclusion of more information on prescription medicine labeling will provide added incentives for clinical research as well as participation in patient registries, to better capture the impact that prescription medicines have on pregnant and breastfeeding women. It is crucial that healthcare providers have access to as much information as possible, and more research will help lead to better care for women in the future.

"ACOG will review the new rule in detail prior to its implementation in June and will develop physician and patient educational resources as necessary."

Paracetamol/acetaminophen

MotherToBaby
Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet
by the Organization of Teratology Information Specialists (OTIS)
For more information about us or to find a service in your area, call (866) 626-6847. Visit us online at www.MotherToBaby.org. Find us! Facebook.com/MotherToBaby or @MotherToBaby on Twitter

Acetaminophen (Paracetamol)

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to acetaminophen (also known as paracetamol) may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is acetaminophen (paracetamol)?

Acetaminophen (paracetamol) is a medication used to treat fever and mild to moderate pain. Acetaminophen is available alone and in combination with other medications to treat symptoms of colds, flu, headache and osteoarthritis. You can buy acetaminophen in different forms, including liquids, tablets, capsules, and suppositories. A common brand name is Tylenol®.

I take acetaminophen (paracetamol). Can it make it harder for me to get pregnant?

Studies have not been done to see if acetaminophen could make it harder for a woman to get pregnant.

Can taking acetaminophen (paracetamol) during pregnancy cause miscarriage or birth defects?

Based on the studies, taking acetaminophen at the recommended doses is unlikely to increase the chance for pregnancy loss or birth defects.

Are there any other concerns related to taking acetaminophen (paracetamol) during pregnancy?

Acetaminophen is considered by most healthcare providers to be the pain reliever of choice during pregnancy. Aspirin and nonsteroidal anti-Inflammatory drugs (e.g. ibuprofen or naproxen) should not be used in pregnancy.

Some studies have suggested that taking acetaminophen daily or most days during the second half of the pregnancy could slightly increase the chance of wheezing or asthma in children. However, the illness the mother has, or other reasons why the mother needs to use the acetaminophen during her pregnancy, may be the reason for the development of asthma in the child, and not the acetaminophen itself.

There have also been studies that noted a possible association with mild developmental delay (including language delay) and hyperactivity. This association was stronger when the medication was used for 28 days or more during pregnancy. However, another study compared mother's reported use of acetaminophen during pregnancy and then evaluated their children at four years of age and did not find an increased chance for harmful effects on these children's I.Q., learning, or development. It is not yet clear if there is a direct relationship with acetaminophen, or if the findings were related to the reasons the mother took the medication, such as cold or fever, or a chance finding.

How much acetaminophen (paracetamol) is safe to take while I am pregnant?

It is best to use medication only as needed at the lowest effective dose. Your healthcare providers may have a recommendation about how much they want you to take. The maximum recommended dose of acetaminophen is 4000 mg in one day.

Taking too much acetaminophen (paracetamol) can cause liver damage, kidney damage, and anemia (low iron in the blood) in a pregnant woman. It has also been seen to cause the same problems in the baby.

Acetaminophen (paracetamol) is also in many combination medications. Carefully check the ingredients of any other medications that you take, to see if they also have acetaminophen. You will need to add up the amount of acetaminophen in the medications to make sure you are not taking more than 4000 mg in one day.

Is there anyone who should avoid taking acetaminophen (paracetamol)?

Women who have had a liver injury or liver disease should talk to their healthcare providers before taking acetaminophen (paracetamol) or other pain medication.

Is it safe for me to take acetaminophen (paracetamol) while I am breastfeeding?

Yes. The amount of acetaminophen (paracetamol) that enters the breast milk results in an infant exposure that is no more than about 4% of the dose usually given to infants (So much less than would be given directly to an infant, when needed). Be sure to talk to your health care provider about your breastfeeding questions.

Is it safe for the father of the baby to take acetaminophen (paracetamol)?

There is no evidence to suggest that acetaminophen (paracetamol) would affect a man's ability to conceive or increase risk to a pregnancy. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/ .

Please click here for references.

May, 2018

Glow Sticks

- Contains two chemicals and a fluorescent dye (sensitizer or fluorophore). Chemicals inside the plastic tube are a mixture of the dye and diphenyl oxalate. Chemical in the glass vial is hydrogen peroxide.
- Diphenyl oxylate is an eye and skin irritant can be toxic if ingested in large amounts
- Hydrogen peroxide (3%) used on cuts and scrapes

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- Reduce calls to clinic
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- Clarify misconceptions, allay fears and reduce anxiety
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Updated: Feb 07, 2017
Version: 1.11
Size: 14.3 MB
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Seller: ORGANIZATION OF TERATOLOGY INFORMATION SPECIALISTS, NFP
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Rated 4+

Compatibility: Requires iOS 8.0 or later. Compatible with iPhone, iPad, and iPod touch.

Customer Ratings

We have not received enough ratings to display an average for the current version of this application.

Description

"What's safe during pregnancy or while breastfeeding?" "Will my medicine affect the baby? "What's the latest research about vaccines during pregnancy?" There's not always time for your doctor to call you back right away, and a search on the internet about the safety of medications and other exposures during pregnancy and breastfeeding may not

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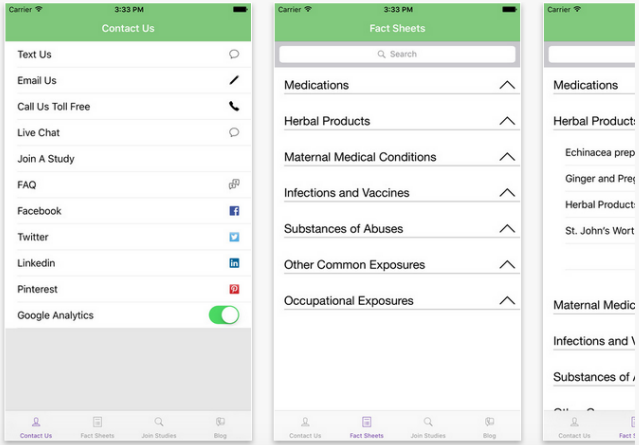
New studies

iPhone Screenshots



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MotherToBaby Health & Fitness

★★★★☆ 2

Everyone 10+

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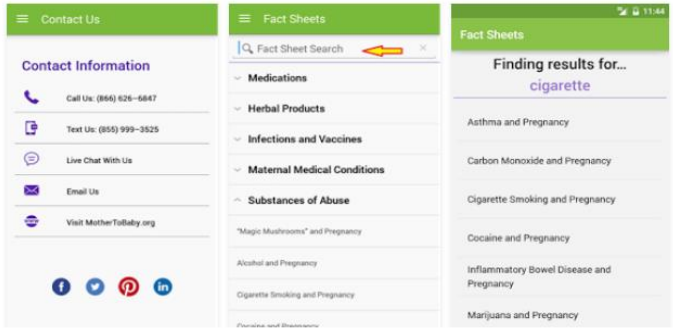
Installed



"What's safe during pregnancy or while breastfeeding?" "Will my medicine affect the baby? "What's the latest research about vaccines during pregnancy?" There's not always time for your doctor to call you back right away, and a search on the internet about the safety of medications and other exposures during pregnancy and breastfeeding may not give you reliable information from a trusted source – that's where MotherToBaby experts step-in. If you're planning a pregnancy, currently pregnant, breastfeeding, or are a health care provider, MotherToBaby has the app you've been waiting for. A

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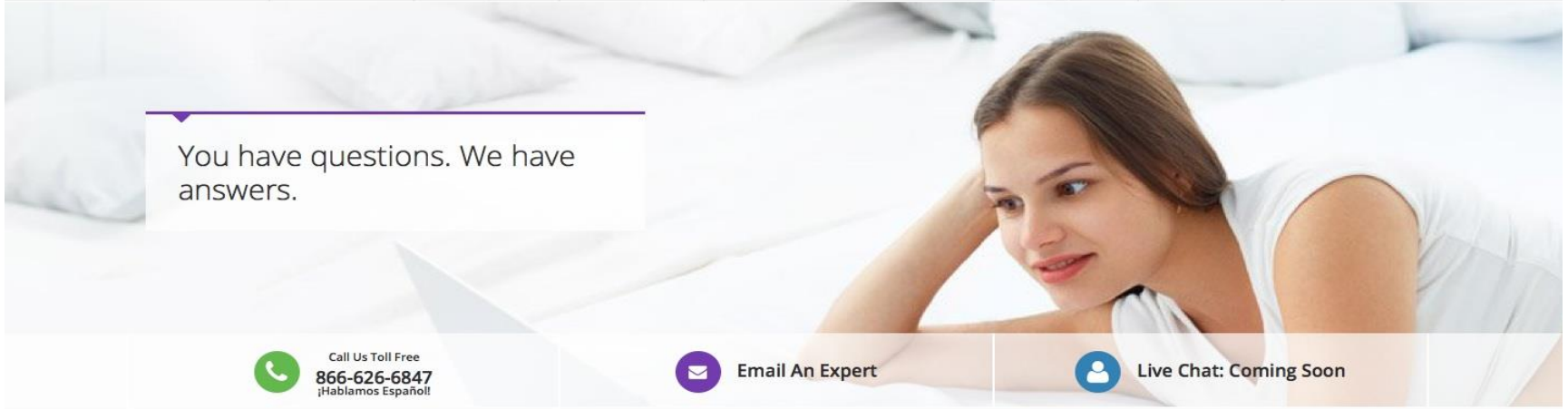

Call Us Toll Free
866-626-6847
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Email An Expert

Live Chat: Coming Soon

Fact Sheets

The experts behind MotherToBaby have created fact sheets that answer frequently asked questions about exposures during pregnancy and breastfeeding. MotherToBaby Fact Sheets are available in both English and Spanish and can be downloaded for free. Currently available fact sheets are listed below by category of exposure. All medications are listed by generic name. The generic name can be found on your prescription or medication packaging listed as the Active Ingredient, or in parentheses after the medication's brand name.

MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. If you have additional questions, or if you do not see your topic of interest listed below, please call us toll-FREE at 1-866-626-6847 to speak with a MotherToBaby expert.

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Fact Sheets

F.A.Q's

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- Food and Drug Administration (FDA)-Office of Women's Health
- Centers for Disease Control (CDC)
- American Congress of OB/GYN (ACOG)
- March of Dimes
- Planned Parenthood
- Kaiser
- Sweet Success Express (Diabetes in Pregnancy) Program
- California Smokers Helpline
- California Breastfeeding Coalition
- California Department of Public Health
  - ✓ WIC
  - ✓ Black Infant Health
  - ✓ Breastfeeding Program
  - ✓ *Comprehensive Perinatal Services Program (CPSP)*
  - ✓ Nurse-Family Partnership
  - ✓ Regional Perinatal Programs of California

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