HIGHMARK Delaware
HEALTH OPTIONS

March 2020

PROVIDER UPDATE

An Update for Highmark Health Options Providers and Clinicians

THIS ISSUE

Page

PROVIDER UPDATES

Important Phone Numbers

A NOTE FOR LTSS PROVIDERS

LTSS Providers Only: If you have a question regarding your service authorization or need to reach someone in the LTSS Support Center, please call 844-325-6258 or send an email to HHO-MemberAssociate@Highmark.com

QUARTERLY OUTREACHES VIA ATLAS

Highmark Health Options is conducting quarterly outreaches to verify your provider data. Our Vendor, Atlas Systems, Inc. will perform the quarterly outreach on our behalf. Atlas will fax a letter to your practice locations within the first two weeks of a quarter. This letter will provide instructions on how to register on PrimeHub, the Atlas portal. Please complete your data verifications through this portal. If the data validations are not completed through the portal, Atlas will begin making calls to your practice locations to verify the data.

The list of provider data elements that will be verified are:

- Practitioner name
- Practice name
- Practitioner specialty
- Locations where the practitioner schedules appointments and sees patients
- Phone number
- Address
- Whether the practitioner does or does not accept new Medicaid patients
- Languages spoken by the practitioner
- Age ranges seen by practitioner
- Wheelchair accessibility
- Group website

Please contact Provider Services at 844-325-6251 with any questions.

HEDIS 2020 INFORMATION: The Healthcare Effectiveness Data and Information Set (HEDIS) Medical Record Review Season is Approaching.

Highmark Health Options will be performing medical record reviews for HEDIS in 2020. We appreciate your cooperation with this matter and are happy to assist you with fulfilling this request in any way possible. Some options for submitting medical records include via secure fax, secure messaging through NaviNet, or an on-site review. A member of our retrieval staff will be contacting you to discuss your preference.

Please recall that, as outlined in your Participating Provider Agreement with Highmark Health Options, you are required to respond to requests for medical records in support of all state and regulatory-required activities, including the annual HEDIS medical record review project, within the requested timeframe and at no cost to Highmark Health Options and its members.

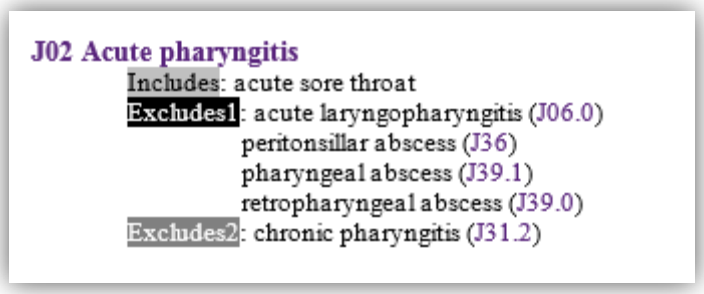
If you have questions or concerns about any portion of this process, please email the ClinicalQualitySupportTeamDE@HighmarkHealthOptions.com or call 412-420-6428. We appreciate your assistance in this effort and thank you for partnering with us to improve the health of individuals, families, and communities.

ICD-10-CM OFFICIAL GUIDELINES FOR CODING AND REPORTING: EXCLUDES NOTES

Highmark Health Options follows all coding conventions, including the ICD-10-CM Official Guidelines and Reporting. The ICD-10-CM has two types of Excludes notes. Each type of note has a different definition for use, but they are all similar in the manner that they indicate that codes excluded from each other are independent of one another.

Excludes 1: A type 1 Excludes note is a pure excludes note, meaning "Not Coded Here!" An Excludes 1 note indicates that the code excluded should never be used at the same time as the code above the Excludes 1 note.

Excludes 2: A type 2 Excludes note represents "Not included here." An Excludes 2 note indicates that the condition excluded is not part of the condition represented by the code, but a patient may have both conditions at the same time. When an Excludes 2 note appears under a code, it is acceptable to use both the code and the excluded code together, when appropriate.
Example (as seen in the ICD-10 manual):



For more information please refer to the following guidance:
ICD-10-CM Official Guidelines for Coding and Reporting, FY 2020
https://www.cdc.gov/nchs/data/icd/10cmguidelines-FY2020_final.pdf

PROVIDER SELF-REPORTED OVERPAYMENTS VIA TRENDCONNECT™

Highmark Health Options, in coordination with our vendor Trend Health Partners, is excited to announce the implementation of a new provider account management tool which allow providers to self-report overpayments. Through the TRENDAnalyze™ portal, providers will be able to submit, manage and track overpayment inventory without a vendor onsite. Trend Health Partners will work directly with interested providers to conduct trainings on self-reporting overpayments via TRENDAnalyze™, free of charge. TRENDAnalyze™ is expected to be available to providers in Q2 2020. Further information will be available in the coming weeks.

PROVIDER FRAUD, WASTE AND ABUSE ("FWA")

Highmark Health Options' Payment Integrity would like to alert providers to a new program beginning in 2020. As part of our team's ongoing program integrity initiatives, Highmark Health Options' Payment Integrity will make available an annual Provider Fraud, Waste and Abuse ("FWA") Training. This training will help providers detect, correct and prevent FWA in the Medicaid program.

All providers will be required to have a representative review the Provider FWA Training upon contracting with Highmark Health Options and annually thereafter. The provider representative will be responsible for communicating the information obtained from the Provider FWA Training to the entire staff of the provider. It is the provider's responsibility to either attend a live session of the Provider FWA Training or independently review the required materials. Providers will be expected to submit proof of their completion of the training when requested by Highmark Health Options.

Highmark Health Options' Payment Integrity will host the first live Provider FWA Training in the coming months. Details of the training and online registration will be made available.

For further information and updates concerning the Provider FWA Training and other FWA resources, please visit the "Fraud & Abuse" page on our website at www.HighmarkHealthOptions.com.

The Payment Integrity team is committed to detecting, correcting and preventing FWA; but your help is needed.

If you think there is fraud, waste or abuse incident occurring, here is how you can report it:

1. Call the Fraud Hotline: 1-844-325-6256;
2. Email: SIU@HighmarkHealthOptions.com; or
3. Online referral form: https://www.highmarkhealthoptions.com/Fraud-Abuse

All information received or discovered by Payment Integrity will be treated as confidential, and the results of investigations will be discussed only with persons having a legitimate reason to receive the information.

Remember: you can choose to remain anonymous!

2019 PROVIDER SATISFACTION SURVEY RESULTS

Highmark Health Options Provider Relations Department conducts an annual practitioner, ancillary, and hospital survey to get your feedback on how we are doing. The survey was mailed in two waves, and additional outreach was conducted to collect survey responses by phone. The survey was conducted between September and October of 2019.

Response Rate:

The response rate was low in 2019.

Practitioners

Mail/Internet Component

$$\frac{38 \text{ (mail)} + 22 \text{ (internet)}}{1000 \text{ (sample)} - 146 \text{ (ineligible)}} = \frac{60}{854} = 7.0\%$$

Phone Component

$$\frac{63 \text{ (phone)}}{550 \text{ (sample)} - 79 \text{ (ineligible)}} = \frac{63}{471} = 13.4\%$$

Hospital and Ancillary

Mail/Internet Component

$$\frac{47 \text{ (mail)} + 27 \text{ (Internet)}}{650 \text{ (sample)} - 50 \text{ (ineligible)}} = 12.3\%$$

Phone Component

$$\frac{64 \text{ (phone)}}{448 \text{ (sample)} - 43 \text{ (ineligible)}} = 15.8\%$$

2019 PROVIDER SATISFACTION SURVEY RESULTS *cont.*

Results:

Practitioner Summary

Composites/Attributes	Summary Rate Definition	2019 Summary Rate Scores	2018 Summary Rate Scores
Utilization Management	Yes	89.80%	90.50%
Continuity and Coordination of Care	Excellent, Very good or Good	100.00%	83.50%
Highmark Representative and Communication		86.10%	86.40%
Provider Services and Claims		81.40%	82.70%
Pharmacy Authorization Process, Staff and Drug Formulary		86.40%	87.10%
Disease Management	Yes	88.70%	88.80%
Hours of Availability		97.00%	93.80%
Authorization through Portal		54.00%	77.30%
EPSDT Services	Excellent, Very good or Good	NA	94.10%
Overall Satisfaction and Loyalty		91.60%	90.40%
Consistency across all departments at HHO	Very/Somewhat Consistent	93.20%	89.10%
Overall satisfaction with Highmark Health Options Plan	Very/Somewhat Consistent	90.80%	89.80%

2019 vs 2018: The only significant change was in the use of authorization tool through Provider Portal

Hospital and Ancillary Summary

Composites/Attributes	Summary Rate Definition	2019 Summary Rate Scores	2018 Summary Rate Scores
Highmark Representative and Communication	Excellent, Very good or Good	83.60%	76.40%
Provider Services and Claims		76.90%	74.10%
Utilization Management		92.90%	91.90%
Hours of Availability	Yes	96.40%	93.30%
Authorization through Portal		48.80%	33.70%
Overall Satisfaction and Loyalty		86.30%	79.40%
Consistency across all departments at HHO	Very/Somewhat Consistent	89.20%	82.90%
Overall satisfaction with Highmark Health Options Plan	Very/Somewhat Consistent	83.50%	75.90%

2019 vs 2018: The only significant change was in the use of authorization tool through Provider Portal

2019 PROVIDER SATISFACTION SURVEY RESULTS *cont.*

Summary Rate Score is the sum of the proportion of respondents who selected the most favorable response options (Always or Usually; Excellent, Very good, or Good; Yes; Very Consistent or Somewhat consistent; Definitely or Probably Yes; and Very or Somewhat Satisfied) for the attribute.

Composites are calculated by taking the average of the Summary Rate Scores of the attributes in the specified section.

Highmark Health Options takes your feedback seriously. A workgroup made up of Provider Relations, Utilization Management, Provider Services, Member Services, Claims, Quality Improvement, Contracting, and Regulatory participate in reviewing results, and implementing improvements. Please be on the lookout for changes in the near future that we are implementing based on your direct feedback. Also, please help us continue to improve by participating in the 2020 Provider Satisfaction Survey, which will be mailed to you in September.

REMINDER TO TEST PEDIATRIC MEMBERS FOR LEAD

A friendly reminder that all providers should be testing pediatric patients for Lead. Per the Centers for Medicare & Medicaid Services (CMS), all children enrolled in Medicaid and CHIP must be tested for Lead. This testing should be done according the American Academy of Pediatrics (AAP) Recommendations for Preventive Pediatric Health care (Periodicity Schedule) published in March 2019. The schedule recommends children be tested for Lead at age 12 months and again at age 24 months. Please ensure that our children are being tested to keep them safe.

To review the AAP Periodicity Schedule please click here: https://www.aap.org/en-us/documents/periodicity_schedule.pdf

To review the CMS Informational Bulletin entitled "Coverage of Blood Lead Testing for Children Enrolled in Medicaid and the Children's Health Insurance Program," please see the next page:

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-26-12
Baltimore, MD 21244-1850

CMS CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICAID & CHIP SERVICES

CMCS Informational Bulletin

DATE: November 30, 2016

FROM: Vikki Wachino, Director
Center for Medicaid and CHIP Services

SUBJECT: **Coverage of Blood Lead Testing for Children Enrolled in Medicaid and the Children's Health Insurance Program**

Background

The recent water crisis in Flint, Michigan, serves as a reminder of the importance of blood lead screening for children. While substantial environmental improvements have been made to reduce exposure to lead, over four million children are estimated to reside in housing where they are exposed to lead.[1] The Centers for Disease Control and Prevention (CDC) projects that there are about half a million children between the ages of one and five years in the United States who possess blood lead levels greater than 5 micrograms per deciliter (µg/dL), which is the threshold level at which CDC recommends public health actions are taken.[2] It is essential that children enrolled in the Medicaid and Children's Health Insurance Program (CHIP) receive blood lead screening tests as required in order to identify children with elevated blood lead levels (EBLLs) at as young an age as possible. The goal of lead screening is to assist children before they are harmed. Comprehensive screening and surveillance ensures that lead-poisoned infants and children receive medical and environmental follow-up as soon as possible and allows for the development of neighborhood-based efforts to prevent lead poisoning.[3] Lead exposure can impact nearly every system in the body and often goes undetected because at low levels of exposure, it can occur without any obvious symptoms.[4] Exposure to lead can cause damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems. While lead paint has historically been the greatest source of exposure to lead, children can be exposed to lead from additional sources (such as lead smelters, leaded pipes, solder and plumbing fixtures, and consumer products) and through different pathways (such as air, food, water, dust and soil).[5]

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[1] Lead. (2016, January 29). Retrieved from http://www.cdc.gov/nceh/lead/
[2] Lead. (2016, January 29). Retrieved from http://www.cdc.gov/nceh.lead. In 2012, the reference level to identify children with blood lead levels that are much higher than most children's levels was changed to 5 µg/dL.
[33] Lead – CDC's Childhood Lead Poisoning Prevention Program. (2015, February 9). Retrieved from http://www.cdc.gov/nceh/lead/about/program.htm
[4] Lead. (2016, January 29). Retrieved from http://www.cdc.gov/nceh/lead/
[5] Lead (2015, May 29). Retrieved from http://www.cdc.gov/nceh/lead/tips/sources.htm

APPOINTMENT AND AFTER-HOURS AVAILABILITY AUDIT

SPH Analytics, an NCQA certified Vendor, is conducting the appointment and after-hours audit this year. All participating providers are required to participate and comply with the appointment and availability standards listed below. This is not only a Highmark Health Options requirement, but a State requirement as well.

In order to make the audit process less intrusive this year, SPH will be evaluating just one standard by phone. Please inform your staff that an audit is expected and take this opportunity to review the appointment standards below.

Since we will only be auditing one standard by phone, please be aware that later this year, your practice will receive a survey in the mail from SPH that needs to be returned.

Primary Care Providers (PCP)

PROVIDER TYPE	REQUIREMENT	STANDARD
PCP	Emergency Services Appointments	**Available the same day** Examples of emergency care include: high temperature, persistent vomiting or diarrhea or symptoms which are of sudden or severe onset but which do not require emergency room services.
PCP	Wait time for Urgent Care Appointments	**PCP Appointments for Urgent Care are available within two calendar days.** Examples of Urgent Care include: persistent rash, recurring high-grade temperature, non-specific pain or fever.
PCP	Wait time for Routine Appointments	**Routine Care Appointments are available within 21 days.**
PCP	After-Hours Care Accessibility	**Emergency Services are available 24 hours a day, seven days a week.**
PCP	Office Waiting Times	Office visits can be delayed when a provider "works in" urgent cases, when a serious problem is found, or when a patient had an unknown need that requires more services or education than was described at the time the appointment was made. **If a physician or other provider is delayed, patients must be notified as soon as possible so they understand the delay. If the delay will result in more than a 90 minute wait, then the patient must be offered a new appointment.**

APPOINTMENT AND AFTER-HOURS AVAILABILITY AUDIT *cont.*

Specialists

PROVIDER TYPE	REQUIREMENT	STANDARD
Specialists	After-Hours Care Accessibility	**Emergency Services are available 24 hours a day, seven days a week.**
Specialists	Wait time for an Urgent Care Appointment	**Urgent Care appointments within 48 hours of member request.**
Specialists	Wait time for Routine Appointments	**Routine appointments within three weeks of member request.**
Specialists	Office Waiting Times	Office visits can be delayed when a provider "works in" urgent cases, when a serious problem is found, or when a patient had an unknown need that requires more services or education than was described at the time the appointment was made. **If a physician or other provider is delayed, patients must be notified as soon as possible so they understand the delay. If the delay will result in more than a 90 minute wait, then the patient must be offered a new appointment.**

Additional OB-GYN Standards

PROVIDER TYPE	REQUIREMENT	STANDARD
OB-GYNs (additional standards)	Wait time for prenatal visit	**1st Trimester- within three weeks of member request** **2nd Trimester- within 7 calendar days** **3rd Trimester- within3 calendar days**
OB-GYNs (additional standards)	High-risk pregnancies	**High-risk pregnancies within three calendar days of identification of high risk by the Contractor or maternity care provider, or immediately if an emergency exists.**

APPOINTMENT AND AFTER-HOURS AVAILABILITY AUDIT *cont.*

Behavioral Health Providers

PROVIDER TYPE	REQUIREMENT	STANDARD
Behavioral Health Practitioner	Care for a non life-threatening emergency	**Within 6 hours**
Behavioral Health Practitioner	Urgent Care	**Within 48 hours**
Behavioral Health Practitioner	Initial visit for routine care	**Within 7 business days**
Behavioral Health Practitioner	Follow-up routine care	**Within 3 weeks**
Behavioral Health Practitioner	After-Hours Care Accessibility	**Emergency Services are available 24 hours a day, seven days a week.**

Important Reminder:

If a patient is placed on hold or is forwarded to an answering service during after-hours, please make sure instructions on what to do in an emergency situation are provided. Part of your initial message should contain the following information, "If this is a true emergency, please hang up and dial 911 or go to the nearest emergency room. If you would like a call back from one of our practitioners, please leave a message and your call will be returned within the next 30 minutes."

PNEUMOCOCCAL VACCINATION IN ADULTS

Prevnar 13 is often thought of as a childhood vaccine, but it is also FDA-approved for use in adults 18 years of age and older (condition unspecified). The CDC recommends its use in adults 65 years and older and in younger adults with immunocompromising conditions, cerebrospinal fluid (CSF) leak, or cochlear implant, in addition to *Pneumovax 23*. Both vaccines cover 12 of the same serotypes, plus *Prevnar 13* covers one more, and *Pneumovax 23* covers 11 others. Immune response to *Prevnar 13* (a conjugate vaccine) is as good as or better than *Pneumovax 23* (a polysaccharide vaccine). There is a slightly lower immune response to *Prevnar 13* when it is given at the same visit as the influenza vaccine in the elderly. **However**, either *Prevnar 13* or *Pneumovax 23* can be given at the same visit as the influenza vaccine (live or inactivated), or other vaccines in adults, at separate injection sites. Although *Prevnar 13* and *Pneumovax 23* should not be given at the same visit, they should not be repeated if accidentally given sooner than the recommended interval. The CDC's recommendations for pneumonia vaccination in adults are summarized in the table below. If the following recommendations are followed correctly, no adult will receive more than three doses of 23-valent pneumococcal vaccine, and not more than one dose of *Prevnar 13*, in their lifetime.

PNEUMOCOCCAL VACCINATION IN ADULTS *cont.*

Who	What and When
Immunocompromised adults 19 to 64 years of age: • Asplenia (functional or anatomic) • Hemoglobinopathy (e.g., sickle cell disease) • Congenital or acquired immunodeficiency (includes complement deficiency, B- or T-cell deficiency, and phagocytic disorders [excluding chronic granulomatous disease]) • Cancer (e.g., leukemia, lymphoma, Hodgkin's disease, multiple myeloma) • HIV • Chronic renal failure or nephrotic syndrome • Organ transplant • Latrogenic immunosuppression (e.g., systemic corticosteroids 14 days or longer, radiotherapy, chemotherapy)	Single dose of Prevnar 13 (if not previously given), followed by Pneumovax 23 at least eight weeks later. Wait until at least one year has passed since any previous Pneumovax 23 dose to give Prevnar 13. A second Pneumovax 23 should be given at least five years after the first, but at least eight weeks after Prevnar 13.
Immunocompetent adults 19 to 64 years of age with **CSF leak** or **cochlear implant**	Single dose of *Prevnar 13* (if not previously given), followed by *Pneumovax 23* at least eight weeks later. Wait until at least one year has passed since any previous *Pneumovax 23* dose to give *Prevnar 13*.
Immunocompetent adults 19 to 64 years of age or older with **diseases, habits, or living conditions** that put them at high risk of pneumococcal disease: • Heart disease (including heart failure or cardiomyopathy) • Pulmonary disease (including COPD, emphysema, or asthma) • Diabetes • Alcoholism • Cigarette smoking • Chronic liver disease	Single dose of *Pneumovax 23*.

Adults **65 years of age and older**	Single dose of *Prevnar 13* (if not previously given, or vaccination history is unknown), followed by *Pneumovax 23* at least one year later (at least eight weeks later for adults who are immunocompromised, with functional or anatomic asplenia, or who have CSF leak or cochlear implant). Wait until at least one year has passed since any previous *Pneumovax 23* dose to give *Prevnar 13*. **ACIP recommendation, 2019 (final CDC guidance pending)**: *Pneumovax 23* is recommended. For patients 65 years of age and older without an immunocompromising condition, *Prevnar 13* (if not previously given), based on shared clinical decision-making. The addition of *Prevnar 13* prevents one case of outpatient pneumonia for every 2,600 immunocompetent seniors and one case of invasive pneumococcal disease for every 26,300 immunocompetent senior's vs giving *Pneumovax 23* alone. Those who received one or more doses of the 23-valent vaccine before age 65 for any indication should receive another dose at age 65 or older after at least five years have elapsed since their previous *Pneumovax 23* dose.

References

. CDC. Pneumococcal vaccine timing for adults. November 30, 2015. https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf. (Accessed August 1, 2019).

. CDC. General Recommendations on immunization. In: Epidemiology and prevention of vaccine-preventable diseases. The Pink Book: Course Textbook. 13th Ed. 2015. https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/genrec.pdf. (Accessed August 1, 2019).

. CDC. Pneumococcal disease. In: Epidemiology and prevention of vaccine-preventable disease. The Pink Book: Course Textbook. 13th Ed. 2015. https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/pneumo.pdf. (Accessed August 1, 2019).

. ACIP Recommendations. June 2019 meeting recommendations. https://www.cdc.gov/vaccines/acip/recommendations.html. (Accessed August 1, 2019).

ASPIRIN FOR CV PRIMARY PREVENTION AND MORE

In 2014, the FDA denied aspirin an indication for primary prevention of MI based on primary prevention studies. But practice guidelines, including recommendations from the USPSTF, continued to recommend aspirin for primary prevention in certain populations, largely based on meta- and other analyses of the primary literature. In 2018, three high-quality primary prevention studies were published. In light of these studies, guideline recommendations regarding aspirin for primary prevention may now be outdated. The table below provides information to assist clinicians in estimating aspirin's risk/benefit ratio in patients without CVD. Use for colorectal cancer prevention is also addressed.

Acronyms/Definitions

- **American College of Cardiology (ACC)**: The American College of Cardiology is a **52,000-member medical society** that is the professional home for the entire cardiovascular care team. The mission of the College is to transform cardiovascular care and to improve heart health.
- **American College of Chest Physicians (ACCP):** The American College of Chest Physicians is the global leader in advancing best patient outcomes through innovative chest medicine education, clinical research, and team-based care.
- **American Diabetes Association (ADA):** A network of more than 565,000 volunteers, a membership of more than 540,000 people with diabetes, their families and caregivers, a professional society of nearly 20,000 healthcare professionals, as well as more than 400 staff members.
- **American Heart Association (AHA):** The American Heart Association is a non-profit organization in the United States that funds cardiovascular medical research, educates consumers on healthy living and fosters appropriate cardiac care in an effort to reduce disability and deaths caused by cardiovascular disease and stroke.
- **A Study to Assess the Efficacy and Safety of Enteric-Coated Acetylsalicylic Acid in Patients at Moderate Risk of Cardiovascular Disease (ARRIVE):** The ARRIVE trial was a randomized controlled clinical **study** that compared elective induction of labor at 39 weeks to expectant management of labor with women who were nulliparous and met study criteria to be identified as low risk.
- **American Stroke Association (ASA):** The American Stroke Association is solely focused on reducing disability and death from stroke

Acronyms and definitions cont.

- **A Study of Cardiovascular Events in Diabetes (ASCEND):** The ASCEND Aspirin trial showed that the absolute reduction in cardiovascular events from aspirin was offset by a similar absolute increase in major bleeding. The goal of the trial was to evaluate aspirin compared with placebo among diabetics with no known cardiovascular disease (CVD).
- **Aspirin in Reducing Events in the Elderly (ASPREE):** Showed that aspirin did not prevent disability-free survival, but did increase major bleeding compared with placebo. The goal of the trial was to evaluate low-dose aspirin compared with placebo among healthy elderly patients.
- **Antithrombotic Trialists' Collaboration (ATT)**
- **Blood pressure (BP)**
- **Cyclo-oxygenase-2 (COX-2)**
- **C-reactive protein (CRP)**
- **Cardiovascular (CV)**
- **Cardiovascular disease (CVD)**
- **Food and Drug Administration (FDA or USFDA)**: The FDA is a federal agency of the United States Department of Health and Human Services, one of the United States federal executive departments. The FDA is responsible for protecting and promoting public health through the control and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter pharmaceutical drugs (medications), vaccines, biopharmaceuticals, blood transfusions, medical devices, electromagnetic radiation emitting devices (ERED), cosmetics, animal foods & feed and veterinary products.
- **Gastrointestinal (GI)**
- **Hypertension Optimal Treatment (HOT)**
- **Japanese Primary Prevention of Atherosclerosis with Aspirin for Diabetes (JPAD)**
- **Myocardial infarction (MI)**
- **Nonsteroidal anti-inflammatory drug (NSAID)**
- **Prevention of Progression of Arterial Disease and Diabetes (POPADAD)**
- **Proton pump inhibitor (PPI)**
- **Peptic ulcer disease (PUD)**
- **Relative risk (RR)**
- **Transient ischemic attack (TIA)**
- **United States Preventive Services Task Force (USPSTF)**
- **Women's Health Study (WHS)**

ASPIRIN FOR CV PRIMARY PREVENTION *cont.*

Clinical Question	Guideline recommendation or other pertinent information
Who might be a candidate for aspirin for primary prevention of CV disease, **per current guidelines**?	**See new, practice-changing data below that may obviate these guidelines.** • **USPSTF (2016 recommendations)**: **age 50 to 59 years** with ≥10% 10-year risk of CV disease, AND not at increased risk of bleeding, AND with a life expectancy of at least 10 years, AND willing to take low-dose aspirin for at least 10 years. Also consider for **age 60 to 69 years** with >10% 10-year risk of CV disease. Evidence is insufficient to assess risk/benefit in younger or older adults. • **ACCP (2012)**: age 50 and older • **AHA/ASA (2014)**: adults with a 10-year CVD risk >10% (i.e., potential benefit is high enough to outweigh potential aspirin risks) (to prevent CV events); women with stroke risk high enough that aspirin benefits outweigh risks (to prevent stroke); or patients with chronic renal disease with eGFR 30 to 45 mL/min/1.73 m^2 (to prevent stroke). • **ADA (2018)**: consider for patients with diabetes and increased CV risk (e.g., patients ≥50 years of age with at least one additional major risk factor: family history of premature atherosclerotic CV disease, hypertension, dyslipidemia, smoking or albuminuria) who are not at increased risk of bleeding.
Why might recommendations differ among guidelines?	The **USPSTF 2016 recommendations** used a model based on findings from three systematic reviews to estimate net benefit. Results were stratified by age, gender, and 10-year CVD risk using the 2013 ACC/AHA pooled cohort equations calculator. This model was combined with primary trial data and meta-analyses. The number of MIs and ischemic strokes prevented, the number of colorectal cancer cases prevented, and the number of serious GI bleeding events caused by aspirin were considered. They also considered lifetime net life-years and net quality-adjusted life-years gained/lost due to aspirin use. **AHA/ASA** guidelines focus on primary stroke prevention. They cite benefit in WHS, and subgroup analyses of JPAD, and HOT, and 2009 USPSTF analysis. **ACCP** relied on a large 2009 meta-analysis by the ATT of individual data that they felt provided the best evidence regarding the benefit/risk of aspirin for primary prevention.[5] Benefit in ATT was largely driven by a reduction in nonfatal MI. ACCP chose not to make recommendations based on specific patient characteristics (e.g., sex, diabetes, older age) due to concerns about the validity of the subgroup analyses necessary to make such recommendations.

What new studies inform the decision to use aspirin for CV primary prevention?	• **ARRIVE** (n = 12,546) was a multinational trial of enteric-coated aspirin 100 mg once daily vs placebo for primary prevention of CV events (CV death, MI, unstable angina, stroke, or TIA) in men ≥55 with two to four risk factors and women ≥60 years of age with three or more risk factors (an estimated 10-year CV risk of about 10% to 20% per the 2013 ACC/AHA pooled cohort equations calculator). Patients with a history of GI bleed, frequent NSAID use, antiplatelet or anticoagulant use, or **diabetes were excluded**. Aspirin was not beneficial during 5 years of follow-up (event rate 4.29% vs 4.48%, HR 0.96, 95% CI 0.81 to 1.13, p=0.6038), but doubled the risk of GI bleeding (0.97% vs 0.46%, HR 2.11, 95% CI 1.36 to 3.28, p=0.0007). The actual 10-year CV event rate in this study was lower than estimated (about 8% to 9%), perhaps due to optimization of modern medical therapies (e.g., statins, anti-hypertensives), making the study population essentially a low-risk population.[14] The GI bleed event rate was similar to the expected event rate. • **ASCEND** (n = 15,480) compared enteric-coated aspirin 100 mg once daily to placebo in patients ≥40 years of age **with diabetes** (but no evidence of cardiovascular disease) for prevention of CV events (e.g., vascular death, MI, stroke, or TIA). Aspirin provided some benefit for prevention of serious vascular event (8.5% vs 9.6%, rate ratio 0.88, 95% CI 0.79 to 0.97, p= 0.01, NNT = 91 over 7.4 years to prevent one event). No benefit was seen for any specific event (e.g., MI), and benefit was mainly seen in the first five years of use. This benefit was largely offset by bleeding events (NNH = 112 over 7.4 years to cause one major bleeding event). • **ASPREE** (n = 19,114) was a multinational trial of enteric-coated aspirin 100 mg once daily vs placebo in patients ≥70 years of age (African Americans or U.S. Hispanics ≥65 years of age). Patients taking antiplatelets or anticoagulants were excluded, as were patients with BP ≥180/105 mmHg. Patients were allowed short-term use of NSAIDs at the lowest dose. Eleven percent of enrollees had diabetes. Aspirin did not reduce CV events, but increased the risk of major bleeding (8.6 vs 6.2 events per 1,000 person-years, p<0.001). There was no evidence that any subgroup responded differently, including patients with diabetes. **Bottom line: aspirin does not likely provide net benefit for primary prevention patients ≥70 years of age, or non-diabetics with an estimated 10-year event rate <20%, especially those with bleeding risks.**
Do patients with diabetes benefit from aspirin for primary prevention of cardiovascular disease?	See reviews of ASCEND and ASPREE, above. Older individual studies (e.g., JPAD, POPADAD) did not show a benefit of aspirin in diabetes patients. This may be due to low event rates, relatively small number of enrolled patients, use of statins and other medications with cardiac benefits, or other study limitations. A meta-analysis (ATT) that included patients with diabetes (~4%) suggested a modest benefit (12% reduction in relative risk of events). Based on two systematic reviews, benefit for patients with diabetes seems similar to that for the general population. The USPSTF also found no clear differences in outcomes based on diabetes status, and in the WHS, aspirin prevented stroke in women with and without diabetes.

Are there gender-specific differences in aspirin's benefits for primary CV prevention?	**The USPSTF 2016 recommendations state there is not sufficient evidence to support any gender-specific differences in CV disease outcomes. This differs from their 2009 analysis. The apparent gender differences likely reflects data from the WHS, which was a young, healthy, female population. (The WHS found a benefit for stroke prevention, but not cardiac events or CV death).** **The ATT meta-analysis did not find a difference in proportional benefit from aspirin between men and women.**
What can patients expect from aspirin for primary prevention?	Tables showing lifetime benefits and risks of taking aspirin are available at https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/aspirin-to-prevent-cardiovascular-disease-and-cancer. **However**, this tool may be outdated in light of more recent evidence from large RCTs (described above), and may overestimate benefit for nondiabetic patients with an estimated CV risk of 10% to 20%. For nondiabetic patients with CV risk of 10% to 20% calculated using the 2013 ACC/AHA pooled cohort equations calculator, patients with diabetes, and patients ≥70 years of age, aspirin will not likely provide a net benefit [Evidence level A-1]. This may be especially true in patients with bleeding risks (e.g., anticoagulant use, history of GI bleed, uncontrolled BP). Based on the new information, use shared decision making to decide if starting/stopping aspirin for primary prevention may be appropriate in a given patient. Stopping aspirin for **primary prevention** might confer a small increased risk of a CV event: one per year for every 146 patients who discontinue it [Evidence level B-3]. Weigh baseline CV risk, potential benefit, bleeding risk, and CV risk of stopping (if pertinent) in light of patient's values and preferences.
How do I assess CV risk for purposes of decision-making regarding aspirin?	The USPSTF used the 2013 ACC/AHA pooled cohort equations calculator available at http://myamericanheart.org/cvriskcalculator. However, this calculator might overestimate CV risk in modern nondiabetic patients, as seen in ARRIVE, discussed above. This may result in aspirin use in patients for whom benefit does not outweigh risk. ADA suggests considering noninvasive tests such as coronary artery calcium score to help clarify the decision to start aspirin therapy in patients with diabetes, particularly in patients with low estimated risk.
Should aspirin be used for primary prevention in a patient with GI bleed risk?	The Aspirin-Guide app (available at https://www.apple.com/itunes/ or http://www.aspiringuide.com/nav/1) takes into account risk in patients with a history of GI bleed. This app is based on the 2016 USPSTF recommendations. It calculates the patient's CV risk using the 2013 ACC/AHA pooled cohort equations calculator, and calculates a bleeding risk score based on the USPSTF analysis and published studies, and provides guidance for decision-making.[10] **However**, extrapolating from the results of ARRIVE, discussed above, this app might overestimate benefit in nondiabetic patients with a 10% to 20% estimated risk.[14] Low-dose aspirin is linked to about 2 GI bleeds per 1,000 patients each year. But the risk is up to 10 times higher after a GI bleed. So in patients who have had a bleed, net benefit of aspirin for primary prevention is unlikely.

	Use a PPI for GI prophylaxis in patients taking aspirin who have a history of ulcer disease or upper GI bleeding, are taking an additional antiplatelet (including an NSAID or COX-2 inhibitor), or who take an anticoagulant.[11] Also use a PPI in patients who have more than one of the following GI bleed risk factors: age 60 years and older, corticosteroid use, or dyspepsia or gastroesophageal reflux symptoms. Ensure patients with a history of peptic ulcer are treated for *H. pylori*, if appropriate.[11] Note that the use of enteric-coated or buffered aspirin formulations does not mitigate bleeding risk, as it is due to aspirin's systemic effect. *Yosprala* (aspirin/omeprazole) is a convenience product that offers no proven benefit over the individual agents alone, but costs at least ten times more.
What is the aspirin dose for primary prevention of CV disease?	**USPSTF (2016 recommendations)**: 81 mg daily **AHA/ASA**: dose not explicitly stated except that 81 mg daily or 100 mg every other day suggested for preventing first stroke in women. **ADA**: 75 to 162 mg daily **ACCP**: 75 to 100 mg daily **CCS**: 75 to 162 mg daily An analysis of individual data from RCTs suggests that currently recommended aspirin doses may not be high enough for primary CV prevention or colorectal cancer prevention for many patients weighing ≥70 kg. Interestingly, doses ≥325 mg reduced CV events only in larger patients. However, these higher doses increase bleeding risk.
Who qualifies for aspirin for primary prevention of colon cancer?	Five to ten years of daily aspirin use is needed to reduce the incidence of colorectal cancer, and this benefit may not be seen for ten to 20 years. Patients with a low risk of bleeding, a life expectancy of at least ten years, and high 10-year CV risk are most likely to receive net benefit. Analysis of data from the Nurses' Health Study and the Health Professionals Follow-up Study suggests that for every 100,000 people >50 years, aspirin may prevent 33 colorectal cancers each year in patients who did not receive colonoscopy. There was a smaller benefit seen in people who were screened with colonoscopy (18 colorectal cancers prevented). These benefits were seen when low-dose aspirin was taken each day for at least six years.

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IMPROVING TOLERABILITY TO METFORMIN

Up to 30% of patients have gastrointestinal (GI) adverse effects when taking metformin. Generally these adverse effects are mild and transient, but about 5% of patients are unable to tolerate metformin at all and almost half may not be able to tolerate the drug at a target dose of 2000 mg/day. Metformin is an important first-line glucose lowering medication due to its low cost, efficacy for glycemic control, possible cardiovascular benefits, and well-established safety. Consider using the strategies and tips below to improve patient tolerance of metformin so they can continue therapy with this important medication.

Things to consider when starting metformin and handling gastrointestinal adverse effects:

Initiating Metformin

a) How should metformin be started?

- It is generally accepted that slow dose escalation increases GI tolerability but evidence for this is lacking.
- Start with either immediate-release (IR) or extended-release (ER) tablets.
  - If using IR, give 500 mg once daily.
    - If a patient has a history of GI intolerance, consider starting with 250 mg once daily.
  - If using ER, start with 500 mg once daily. (See next section for more about the available ER products, cost considerations, etc.)
- For even greater flexibility, metformin 100 mg/mL liquid can be used, allowing a patient to start at a lower dose and increase by smaller increments.
- Suggest starting with single-ingredient metformin for easier titration. Once dose is established, patient can be switched to a combination product with another glucose-lowering agent if that is indicated.

b) How should metformin dose be increased?

- For IR or ER, increase by 500 mg per day every one to two weeks.
- Advise patients not to break, crush, or chew the ER tablets.
- If there is a history of GI intolerance increase more slowly, and maybe by only 250 mg at a time.
- If GI symptoms occur, decrease the dose back to the last tolerated dose and wait at least two weeks before further increases, in a smaller increment if possible.
- It may take four to eight weeks, or longer to reach the target dose of 2000 mg/day. The benefit vs. risk for adverse reactions does not support doses >2000 mg/day.

IMPROVING TOLERABILITY TO METFORMIN *cont.*

c) Tips for improving tolerance of metformin

- Take with food, during or right after meals.
- Recommend taking with the evening meal, typically the largest meal of the day.
- Dividing the daily dose may improve tolerability. Consider giving the IR product three times per day or the ER product twice daily. Some reports indicate splitting the dose has no effect on the rate of adverse effects. Customize dosing to your patient. Consider patient adherence with more frequent dosing before switching.

d) What the patient needs to know

- Let the patient know what to expect. It can be easier to tolerate some of these adverse effects if they know they'll likely subside.
- Persistent diarrhea will subside quickly if metformin is stopped.
- Metformin can have an undesirable odor. Patients might even complain the odor makes them nauseous. Try a different brand or generic tablet if patients complain.
- Let patients know that they should be patient during the titration as it will take weeks and maybe a month or two to reach the target dose.

Managing Complaints about Metformin's Adverse Effects

a) What are the most common complaints?

- Diarrhea and nausea are the most common gastrointestinal adverse effects.
- Also reported are flatulence, abdominal pain with cramps, abdominal swelling, taste distortions, vomiting, constipation, dyspepsia, fecal incontinence and weight loss.
- Symptoms are generally transient, resolve over several months of treatment, and are reduced by slow dose titration and administration with food.

b) What about GI adverse effects that begin months or years after initiating metformin?

- It is unusual for GI symptoms from metformin to begin after prolonged therapy.
- Recommend a trial off metformin to see if symptoms resolve. You should see a resolution of symptoms within two to three days if the cause was metformin.
- Be aware that GI symptoms that developed later in therapy may need further investigation as they could be symptoms of lactic acidosis or other serious conditions.

IMPROVING TOLERABILITY TO METFORMIN *cont.*

c) How do immediate-release (IR) and extended-release (ER) products compare?

- If patients cannot tolerate IR metformin at optimal doses, consider switching to a trial of ER.
- There have been some retrospective and observational studies that report improved GI tolerability with ER over IR tablets. However, large, direct comparative studies are lacking.
- The product information for *Glucophage ER* reports an incidence of diarrhea of around 10% and nausea of around 7%. *Glucophage* reports an incidence of almost 50% for diarrhea and 25% for nausea. Direct comparisons of these two products have not been made within the same study.
- The ER tablets have a slower time to peak plasma concentration and smoother plasma peak/trough levels which has been theorized to lead to improved tolerability, compared to the IR tablets.
- Incidence of nausea has been reported as being lower with ER tablets, compared to IR tablets, during the first week of therapy.
- More discontinuations have been reported with metformin IR vs ER products.
- A retrospective cohort study in 468 patients found reduced GI adverse effects with ER vs IR in metformin-naïve patients, but no difference between groups for those switched from IR to ER for improved tolerability.
- A small study in 35 patients showed switching from IR to ER resulted in 25% of patients becoming symptom free with marked reductions in diarrhea and nausea.

d) Can other medications improve metformin tolerability?

- There are many different theories about how metformin causes GI adverse effects but no conclusion has been reached as to the exact mechanism. Many believe it is a physiological/functional disturbance. Some theories include:
  - Malabsorption of bile salts and vitamin B12.
  - Agonist at the 5-HT3 (serotonin) receptors within the GI system.
  - Alterations of levels of other peptides: ghrelin, VIP, GLP-1.
- Ondansetron, a 5-HT3 antagonist, did not improve GI adverse effects in one clinical trial.
- In a study in just over 400 patients, there were significantly more GI symptoms in patients positive for *H. pylori* on metformin. Treatment of *H. pylori* infections, as appropriate, may help improve a patient's tolerance to metformin.
- There is a GI microbiome modulator (NM505) in development. One small study has shown promising results for improved metformin tolerance.

IMPROVING TOLERABILITY TO METFORMIN *cont.*

How Should Temporary Interruptions in Metformin Therapy be Managed?

a) How many missed doses constitute an interruption?

- This will depend on your patient and could be a couple of days or more for some people.

b) Is a full titration required to restart metformin?

- Be more cautious with patients who needed a longer, slower titration initially.
- If a patient experiences adverse effects when restarting after missed doses, lower the dose and increase every one to two weeks back to the target dose.

What if Patients Cannot Reach the Metformin Target Dose?

a) What is the efficacy of different doses of metformin?

- In most patients, there is some efficacy at a minimum dose of 500 mg/day, with a maximal effect at 2000 mg/day.
- There may be some patients who see more benefit with doses up to 2500 mg/day but there is likely to be a higher incidence of GI adverse effects.
- Up to 85% of the maximal effect is seen at a dose of 1500 mg/day.
- If a patient cannot tolerate metformin IR or ER at target dose, consider adding a second agent to the maximum metformin dose they can tolerate.

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OTC MEDICATION USE IN PREGNANCY AND BREASTFEEDING

In the United States, over 90% of women take a form of medication during their pregnancy. However, for ethical reasons, a majority of clinical trials do not include pregnant women; therefore, limited evidence is available to help evaluate the use of medications during pregnancy. With the first trimester being a crucial part of the development of major organs in the fetus and when most birth defects are likely to happen, careful use of medications is recommended. However, some women are not aware of their pregnancy prior to medication consumption in the early stages.

A CDC study identified the most common medications used in the first trimester, with acetaminophen, ibuprofen, docusate, pseudoephedrine, aspirin, and naproxen being the most typically used OTC medications. With the increase of OTC- and prescription-drug use, providers, pharmacists, and the Internet have become valuable sources in determining whether a medication is safe to take. Given the risks of birth defects, prematurity, infant death, pregnancy loss, and various other complications, judicious use may be recommended. However, available resources have increased over the years due to the growing use of medications.

In addition, some of these situations, such as pain or constipation, may still exist after the baby is born, raising questions about whether it is safe to take a medication while breastfeeding. Similar to safe medication use in pregnancy, treating conditions when breastfeeding has comparable challenges, such as safety to the baby and mother, effect on lactation supply, and the limited available supporting evidence. Some medications may pose a safety risk, and careful consideration should be made for those with long half-lives or those that accumulate in breast milk in large amounts, and also for infants who are more prone to side effects (e.g., preterm, neonates, and underlying medical conditions).

Available Resources

With 2% to 3% of birth defects being due to medication use, drug labels or package inserts are required to provide guidance on the use of drugs during pregnancy and lactation. Although the number of medications that are known to cause birth defects is small, these medications may also be limited to prescription-drug products. In 2015, the FDA updated the former pregnancy categories on prescription and biological drug labels to a more narrative summary, requiring providers to review the available evidence before making a clinical decision on whether a medication may be safe to take during pregnancy and lactation. However, the labeling of OTC medications and the categories that help evaluate safety risk are unchanged. Outside of the FDA labels, a vast number of resources are available to help determine whether a medication is safe (TABLE 1).

OTC MEDICATION USE IN PREGNANCY AND BREASTFEEDING *cont.*

Available Resources Summarizing Safety in Pregnancy and Lactation (TABLE 1)

Resource	Summary
CDC Treating for Two: Safer Medication Use in Pregnancy	Database that gathers information on medications taken during pregnancy and breastfeeding
LactMed	Database that contains specific information about specific medications and their effects on lactation with alternatives, if available
March of Dimes	Information about the use of medications and herbals during pregnancy
MotherToBaby	Provides information on risks and safety of taking specific medications during pregnancy and breastfeeding
Office of Women's Health, U.S. Department of Health and Human Services	Database of resources that include such topic areas as pregnancy and medications and an available hotline for additional resources
Hale's Medications and Mother's Milk	Drug guide for nursing mothers including evidence-based information on over 1,300 drugs, diseases, vaccines and syndromes
*Drugs in Pregnancy and Lactation (*Briggs)	Reference guide with detailed information on commonly prescribed medications taken during pregnancy and lactation
Reprotox	Database developed by Reproductive Toxicology Center with summaries of effects of medications on pregnancy, reproduction and development

Commonly Treated Conditions Pain and Headache

Studies show that pain is the most treated condition during pregnancy and post-pregnancy. However, with the wide variety of OTC options for pain, only a few are recommended.

Acetaminophen (Tylenol) has demonstrated efficacy and safety at all stages of pregnancy when used at recommended therapeutic doses and for short-term use. Adverse pregnancy outcomes or abnormalities are not commonly seen with the use of acetaminophen. However, recent data have shown potential risks with prenatal acetaminophen use, such as asthma, lower performance intelligence quotient, neurodevelopmental problems, poorer attention, and behavioral problems in childhood. Yet, acetaminophen is still a safer option for pain or fever in pregnancy and should be used only when needed at recommended doses. In addition, it has been deemed safe for use in lactating women, with the amount in breast milk actually less than the dose typically given to an infant for fever or pain.

OTC MEDICATION USE IN PREGNANCY AND BREASTFEEDING *cont.*

Nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil, Motrin), naproxen (Aleve), or aspirin are not recommended during the last 3 months of pregnancy due to an increase in blood flow and bleeding complications in the mother and baby during pregnancy and at delivery. However, ibuprofen is actually one of the preferred choices for pain/fever in breastfeeding mothers because of its low levels in breast milk and short half-life. Aspirin and naproxen are not preferred for breastfeeding due to longer half-lives and reported serious adverse reactions. It is important to note that combination acetaminophen/aspirin/caffeine (Excedrin) for headache may not be considered safe due to effects that aspirin and caffeine have on the growing fetus as well as the infant.

Nausea and Vomiting

Nausea and vomiting are the most common gastrointestinal complications in pregnant women. This may affect quality of life not only in the beginning of the pregnancy; in some women, the condition may impact much of their term. Multiple treatment options are available and may be considered safe during certain trimesters of pregnancy, and the majority of options are prescription medications. Common OTC products that are recommended and proven to be safe are vitamin B_6 and ginger root. The American College of Obstetricians and Gynecologists and the *American Family Physician* recommend a combination of vitamin B_6 (10-25 mg every 8 hours) and doxylamine (Unisom) (12.5-25 mg every 8 hours) to help reduce nausea and vomiting in the first trimester. This combination therapy may help decrease nausea and vomiting by 70%.

Constipation

Due to physiological and anatomic changes in the gastrointestinal tract, constipation may occur in up to 38% of pregnant women, making it the second most common gastrointestinal disturbance. Fluids, dietary fiber, and exercise can help relieve constipation; however, alternatives such as probiotics or laxatives may be needed to achieve additional relief. Many laxatives are considered safe during pregnancy, with their own characteristics that may deter long-term use or monitoring for side effects. Osmotic laxatives such as polyethylene glycol may cause flatulence and bloating but may be considered one of the preferred agents during pregnancy.

Stimulant laxatives such as senna may cause abdominal cramps and are limited to short-term use. Overuse of senna may cause the bowels to not function properly and may create dependency on the stimulant; routine use is not recommended and is limited to a last-line option for no more than one week. Lubricants such as mineral oil should be avoided due to hemorrhage and absorption reduction of fat-soluble vitamins with long-term use. For breastfeeding mothers, laxatives that are not absorbed from the gastrointestinal tract, such as docusate, senna, and psyllium, cannot enter the breast milk and are preferred for short-term use.

OTC MEDICATION USE IN PREGNANCY AND BREASTFEEDING *cont.*

Cough and Cold

Mild upper-respiratory illnesses and the common cold are caused by viruses that are self-limiting; therefore, OTC medications are heavily relied on for symptoms and quality-of-life improvement. Many of the OTC medications contain only a few ingredients; however, these products may not be the safest options in breastfeeding mothers. TABLE 2 provides a summary of the pregnancy and lactation recommendations for these products.

Common OTC Cold Medications in Pregnancy and Lactation

Medication	Safety in Pregnancy	Safety in Lactation
Dextromethorphan (cough suppressant)	No increased risk of major malformations or birth defects	Not studied; unlikely to cause harm; Avoid if contains high alcohol content
Guaifenesin (expectorant)	No increased risk of major malformations	Not studied; unlikely to cause harm; Avoid if contains high alcohol content
Saline (nasal decongestant)	No increased risk of major malformations	No studied; unlikely to cause harm
Pseudoephedrine (oral decongestant)	Studies are conflicting on safety in pregnancy; particularly in first trimester. Some studies have shown development of birth defects and decreased fetal blood flow	Small amounts may pass in breast milk and irritate baby. Single does may decrease milk production acutely; repeated use will interfere with lactation
Oxymetazoline (nasal decongestant)	Relatively safe but overuse (>3 days) is not recommended due to rebound effects	Not studied; Due to local administration, very little should reach infant; Preferred over oral decongestants
Diphenhydramine (antihistamines)	No increased risk of malformations	Large doses or prolonged use may cause effects to infant and decrease milk supply

OTC MEDICATION USE IN PREGNANCY AND BREASTFEEDING *cont.*

Yeast Infections

With changes in hormone levels and the increase in glycogen in vaginal secretions, yeast infections are common in pregnancy, especially in the second trimester. Topical azoles such as miconazole (Monistat) are the therapy of choice due to safety data collected in humans. Therapy is recommended for seven days, and shorter treatment duration does not show success. Probiotics, such as lactobacillus and bifidobacterium, may also be used to treat yeast vaginosis, and they have not been reported to cause adverse fetal outcomes. It is crucial to combat these infections, as they can pass to the baby's mouth if left untreated during delivery, causing thrush in newborns.

If a yeast infection does occur while breastfeeding, topical azoles and probiotics (i.e., lactobacillus) are deemed safe and recommended; transfer to breast milk is unlikely.

Conclusion

While medication use during pregnancy has increased over the years, judicious use is strongly recommended at any stage of pregnancy or the lactation period due to safety, limited supporting evidence, and adverse events such as a decrease in milk production. Although the majority of OTC medications have been deemed safe, there are still some common products that could potentially cause harm to the growing fetus, cause problems during labor, or decrease milk production. Requesting information or recommendations from providers or pharmacists, researching safety with available resources, and evaluating whether therapy is truly needed during pregnancy or lactation should be done with any medication, including OTC products.

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Contact Provider Services at 844-325-6251

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Provider Complaints (not claims related)
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Phone: 844-228-1364
Fax: 844-221-1569