The Cold Standard

A Toolkit for Using Antibiotics Wisely for the Management of Respiratory Tract Infections in Primary Care

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Choosing Wisely Canada™

THE COLLEGE OF FAMILY PHYSICIANS OF CANADA

LE COLLÈGE DES MÉDECINS DE FAMILLE DU CANADA

What's New?

1. In the coming respiratory season, vaccines, including COVID-19 and flu shots, will continue to play an important role in preventing and reducing illness severity for respiratory tract infections.
2. COVID-19 testing remains available for ambulatory patients and clinicians should maintain low threshold for this testing.
3. In-person care should occur whenever necessary since availability of Personal Protective Equipment (PPE) is no longer a significant barrier.
4. Continued use of virtual care offers benefits for patients and their providers in some circumstances.

The majority of acute respiratory tract infections (RTIs) are viral and can be managed with **supportive care, whether virtual or in person**.

Assessing patients in person does not change the fact that the majority of RTIs do not require antibiotics. Supportive management can be offered using a viral prescription.

If you are frequently prescribing antibiotics for patients with acute RTI syndromes, you are likely overprescribing.

The majority of patients with RTI in a primary care setting do not benefit from antibiotics and these may cause unnecessary harms. For those RTIs that may be bacterial, an in-person assessment for examination is required to make the diagnosis (e.g. to assess the tympanic membrane, to determine need for a throat swab or chest x-ray), and determine if antibiotics are warranted.

Choosing Wisely Canada and the College of Family Physicians of Canada recommend the following:

> **Don't routinely prescribe antibiotics for acute RTIs following a virtual assessment alone. Do recommend an in-person visit if antibiotics are being considered.**

How Can the Cold Standard Toolkit Help?

The majority of overprescribing is not due to lack of knowledge. This toolkit is intended to support judicious use of antibiotics in the following ways:

- De-emphasize the role of antibiotics for RTI through public-facing campaign.
- Standardize practice regarding when patients must be assessed in person to consider need for antibiotics.
- Increase adoption of the viral prescription that can address patient concerns through structured communication regarding RTI diagnosis, symptom management, expected clinical course, and safety net planning.
- Incorporate delayed prescriptions for cases with diagnostic uncertainty regarding bacterial infection (e.g. acute otitis media).
- Ensure that, when antibiotics are deemed necessary, the duration does not exceed maximum recommendations.

Managing Respiratory Tract Infections

	CAN BE MANAGED VIRTUALLY OR IN PERSON (Use Viral Prescription)	SHOULD BE ASSESSED IN PERSON (To assess the need for immediate or delayed antibiotics, whether or not antibiotics are prescribed*)
SUSPECTED OR CONFIRMED COVID-19	• Fever • Respiratory symptoms • No shortness of breath	• Shortness of breath or hypoxia (if monitoring available) • Concerns of dehydration • Suspicion of secondary bacterial infection • Any red flags**
EAR PAIN (In children over 6 months of age)	• Symptoms <48 hours • Fever <39°C • Pain controlled with oral pain medication • Otherwise feels well	• Symptoms >48 hours despite adequate pain medications • Fever ≥39°C • Feels unwell

SORE THROAT	• Mild symptoms <48 hours
	• Low suspicion for bacterial pharyngitis, e.g.:
	  ○ Over 15 or less than 3 years of age
	  ○ No fever
	  ○ Presence of cough or runny nose
		• Persistent or worsening symptoms >48 hours, OR
		• High suspicion of bacterial pharyngitis, e.g.:
		  ○ Severe pain
		  ○ No cough or runny nose
		  ○ Fever without alternate cause

SINUS CONGESTION	• Mild symptoms <7 days • No red flags***	• Presence of red flags***
COPD EXACERBATION	• Patient able to do their activities of daily living • Patient known to provider and reliable for virtual follow-up	• Patient is too short of breath to do their activities of daily living
SUSPECTED PNEUMONIA	• Assess in person	• Assess in person
INFLUENZA-LIKE ILLNESS, BRONCHITIS, COMMON COLD, ASTHMA	• High fever controllable with antipyretic • Cough • Congestion • Body aches • Mild GI symptoms	• Concerns of dehydration • Suspicion of secondary bacterial infection • Any red flags**

***See table on role of antibiotics**

****Red flags for patient with viral infection:**

- For children, may include fast breathing or trouble breathing, bluish lips or face, ribs pulling in with each breath, chest pain, child refuses to walk, signs of dehydration, history of seizure, any fever in child <12 weeks of age.
- In adults, may include difficulty breathing or shortness of breath, acute chest pain or abdominal pain, dizziness, confusion, signs of dehydration.

*****Red flags for patient with sinusitis:**

- Altered mental status, headache, systemic toxicity, swelling of the orbit, change in visual acuity, neurologic deficits.

Points to Remember: The Role of Antibiotics

Syndrome	Specific Situations Where Antibiotics Are Recommended	Recommended Antibiotic Duration
UPPER RESPIRATORY TRACT INFECTION (COMMON COLD)	• Not indicated	• Antibiotics never indicated
BRONCHITIS/ ASTHMA	• Not indicated	• Antibiotics never indicated
OTITIS MEDIA*	• Perforated tympanic membrane with purulent discharge or a bulging tympanic membrane with either: ○ Fever ≥ 39°C OR ○ Moderately or severely ill OR ○ Symptoms lasting > 48 hours	• **Age 6 months to 2 years:** 10 days • **Age greater than 2 years:** 5 days
PHARYNGITIS	• Centor score is ≥ 2 **AND** throat swab culture (or rapid antigen test if available) confirms presence of Group A *Streptococcus* • Don't perform throat swabs at all for patients with Centor score ≤ 1 OR if there are accompanying symptoms of a viral infection such as rhinorrhea, oral ulcers or hoarseness (since a positive swab in that circumstance would only represent colonization).	• 10 days
SINUSITIS	• Patient has at least 2 of the below **PODS** symptoms, one of those being **O** or **D** **AND**: ○ Symptoms lasting greater than 7–10 days OR ○ The symptoms are severe OR ○ There is no response after a 72-hour trial with nasal corticosteroids **P** = Facial **P**ain/pressure/fullness **O** = Nasal **O**bstruction **D** = Purulent nasal or postnasal **D**ischarge **S** = Hyposmia/anosmia (**S**mell)	• 5 days
PNEUMONIA	• If the patient has compatible symptoms AND radiographic confirmation of pneumonia • Chest x-ray should not be performed routinely unless there are abnormal vital signs and/or physical exam findings	• 5 days
ACUTE EXACERBATION OF COPD	• Increase in sputum purulence with either increase in sputum volume and/or increased dyspnea	• 5 days

*In patients with childhood immunizations.

These recommendations are for outpatient/ambulatory patients (not hospitalized or unwell).
These recommendations only apply to individuals 6 months of age or older (excludes neonates and young infants).

Tools to Support Using Antibiotics Wisely

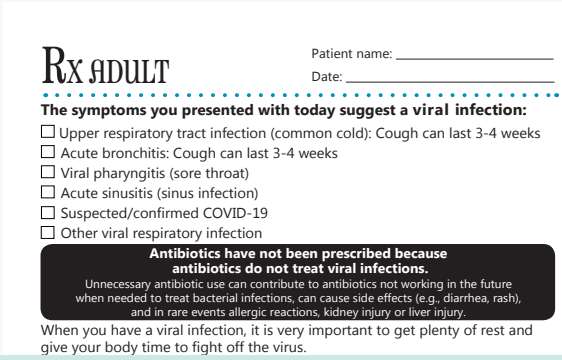
More information about the tools and how to download them can be found at:
www.choosingwiselycanada.org/antibiotics-primary-care.

1. VIRAL PRESCRIPTION

Patients with viral infections are seeking relief from their symptoms, and antibiotics do not help them recover. There are some supportive treatments, however, that can improve their symptoms.

Because patients have come to expect a prescription as part of their treatment plan for bacterial infections, you can use the same approach for viral infections (minus the antibiotic, of course!).

Adult Viral Prescription


Rx ADULT

Patient name: _____

Date: _____

The symptoms you presented with today suggest a viral infection:

- ☐ Upper respiratory tract infection (common cold): Cough can last 3-4 weeks
- ☐ Acute bronchitis: Cough can last 3-4 weeks
- ☐ Viral pharyngitis (sore throat)
- ☐ Acute sinusitis (sinus infection)
- ☐ Suspected/confirmed COVID-19
- ☐ Other viral respiratory infection

Antibiotics have not been prescribed because antibiotics do not treat viral infections.
Unnecessary antibiotic use can contribute to antibiotics not working in the future when needed to treat bacterial infections, can cause side effects (e.g., diarrhea, rash), and in rare events allergic reactions, kidney injury or liver injury.

When you have a viral infection, it is very important to get plenty of rest and give your body time to fight off the virus.

Download

Pediatric Viral Prescription

Rx PED **For children ages 6 months and older**

Patient name: _____

Date: _____

The symptoms your child presented with today suggest a viral infection:

- ☐ Upper respiratory tract infection (common cold): Cough can last 3-4 weeks
- ☐ Bronchiolitis/bronchitis: Cough can last 3-4 weeks
- ☐ Viral pharyngitis (sore throat)
- ☐ Otitis media (middle ear infection)
- ☐ Acute sinusitis (sinus infection)
- ☐ Suspected/confirmed COVID-19
- ☐ Other viral respiratory infection

Antibiotics have not been prescribed because antibiotics do not treat viral infections.
Unnecessary antibiotic use can contribute to antibiotics not working in the future when needed to treat bacterial infections, can cause side effects (e.g., diarrhea, rash), and in rare events allergic reactions, kidney injury or liver injury.

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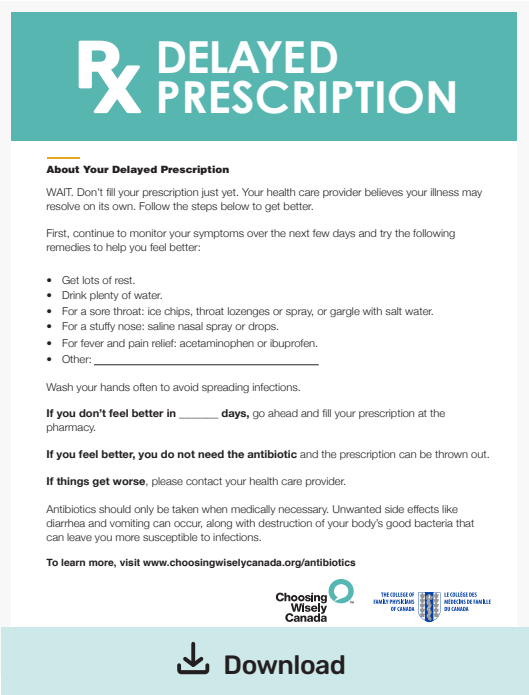
HOW TO IMPLEMENT: VIRTUAL VISIT

There are a number of ways to provide a patient with a viral prescription, depending on the technology available to you and your patient:

- Verbally review the viral prescription with your patient.
- If the viral prescription is incorporated into your EMR system, fill it in and email it directly to your patient.
- Fill out the viral prescription electronically or by hand and either scan or take a photo of it and email it to your patient using secure approved methods.
- If you are on a video call, fill out the viral prescription by hand, and let the patient take a screen shot or photo of it.
- You can refer them to the Using Antibiotics Wisely website to review the viral prescription.

HOW TO IMPLEMENT: IN-PERSON VISIT

- At an in-person visit, print the handout, review it with, and give it to, the patient.
- Offices using electronic health records (EHRs) can incorporate this tool into a patient's electronic medical record (EMR) by following the instructions included in the downloadable file.



2. DELAYED PRESCRIPTION

You can use delayed prescriptions for select patients following an in-person visit or in some cases, following a virtual visit (e.g. otitis media, uncomplicated sinusitis). Contrary to what many clinicians think, delayed prescriptions only get filled one third of the time and there is no difference in patient satisfaction between receiving an immediate prescription and a delayed prescription.[1]

To accompany a delayed prescription, Choosing Wisely Canada developed a delayed prescription handout that can be provided to patients. Note that this tool should not be used for all patients with RTIs since the majority should receive no antibiotics at all.

HOW TO IMPLEMENT: VIRTUAL VISIT

Delayed prescriptions should not routinely be used for virtual visits, with the following exceptions:

- Suspected otitis media with symptoms >48 hours, and fever ≥39°C despite adequate pain medication.
- Sinusitis for symptoms >7 days without red flags, with no amelioration following 72 hour trial of nasal corticosteroids.

If you need to provide a patient with a delayed prescription, there are a number of ways to do so based on the technology available to you and your patient:

- Provide a prescription for antibiotics that is post-dated 2–3 days and have the patient pick it up from your clinic.
- Email a post-dated prescription to your patient.
- Fax the prescription directly to the pharmacy.
- If it is not possible to post-date the prescription, advise patient to wait to fill it.

HOW TO IMPLEMENT: IN-PERSON VISIT

- Provide a prescription for antibiotics that is post-dated 2–3 days so that it cannot be filled until the date indicated. You may also want to include an "expiration date" when the prescription becomes invalid.
- To accompany the prescription, print the Choosing Wisely Canada delayed prescription handout for the patient.
- Offices using EHRs can incorporate the Choosing Wisely Canada delayed prescription handout into a patient's EMR by following the instructions included in the downloadable file. Note that a prescription to accompany this handout must be provided (see above).

The Delayed Prescription is available in:
English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

3. POSTERS

A poster can educate patients and act as a behavioural 'nudge' by setting expectations.

Posters have been shown to be effective as part of an outpatient antimicrobial stewardship intervention for reducing inappropriate prescriptions.[2,3]

Download

Download

HOW TO IMPLEMENT

- Print the poster and hang it in the waiting area or examination rooms in your practice.
- Use it as a screen saver on your clinic computers or include it in the information broadcast on your waiting room televisions.
- If you do telemedicine, you can hang the poster in a visible space behind you.
- Given that many visits may be virtual, the poster can be included in your clinic's e-newsletter.

'Sorry' posters are available in:
English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

'Three Questions' posters are available in:
English, French, Simplified Chinese, Spanish, Arabic, Punjabi and Tagalog.

Quality Improvement in Your Practice

- Quality improvement is a great way to obtain CME credits.
- Earn up to 5 Mainpro+® credits using a Linking Learning to Practice exercise to document how this tool has affected your practice.
- Earn Mainpro+® credits by taking the e-course on managing viral infections during the pandemic.
- Measurement indicators can be found in Version 1.0 of The Cold Standard.

Visit www.cfpc.ca/en/education-professional-development/cpd-at-cfpc/linking-learning-exercises to learn more.

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THIS TOOLKIT WAS PREPARED BY:

GUYLÈNE THÉRIAULT, MD, CCFP
Primary Care Co-Lead, Choosing Wisely Canada

OLIVIA OSTROW, MD, FAAP
Pediatrics Lead, Using Antibiotics Wisely
Pediatrician, The Hospital for Sick Children

JEROME LEIS, MD, M.Sc., FRCPC
Clinician Lead, Using Antibiotics Wisely
Infectious Disease Physician, Sunnybrook Health Sciences Centre

ALLAN GRILL, MD, CCFP (COE), MPH, FCFP, CCPE
Physician Advisor, Department of Programs & Practice Support, The College of Family Physicians of Canada
Family Physician, Markham Stouffville Hospital

DOREEN DAY, MHSc
Project Manager, Pan-Canadian Initiatives, Choosing Wisely Canada

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