Canadian Respiratory Guidelines

PLAN OF ACTION FOR _____

Patient's copy

(patient's name)

I FEEL WELL

MY SYMPTOMS

- I feel short of breath: _____
- I cough up sputum daily. No Yes, colour: _____
- I cough regularly. No Yes

I FEEL WORSE

MY SYMPTOMS

- **I have changes in my sputum (colour, volume, consistency),** not only in the morning
- **I have more shortness of breath than usual**

Note that these changes may happen after a cold or flu-like illness and/or sore throat. Some people feel a change in mood, fatigue or low energy prior to a flare-up.

MY ACTIONS

- I use my **prescription for COPD flare up**
- I avoid things that make my symptoms worse
- I use my breathing, relaxation, body position and energy conservation techniques
- If I am already on Oxygen, I use it consistently and increase from ___ L/min to ___ L/min
- I notify my contact person _____ (Tel:_____) and/or see my doctor (Tel:_____)

PRESCRIPTION FOR COPD FLARE-UP

1) If your SPUTUM becomes yellowish/greenish

start Antibiotic _____ **Dose:**____ **#pills:**___ **Frequency:**___ **#days:**___

if repeating antibiotics within 3 months, use the following antibiotic instead

start Antibiotic _____ **Dose:**____ **#pills:**___ **Frequency:**___ **#days:**___

2) If you are more SHORT OF BREATH than usual, **take** ____ **puffs of** _____ **up to a maximum of** ____ **times per day, as necessary**

If your SHORTNESS OF BREATH DOES NOT IMPROVE,

start PREDNISONE _____ **Dose:**____ **# pills:**___ **Frequency:**___ **# days:**___

Physician Name	Signature	License	Date
_____	_____	_____	_____

I FEEL MUCH WORSE OR IN DANGER

MY SYMPTOMS	MY ACTIONS
• My symptoms have worsened. • After 48 hours of treatment my symptoms are not better.	• I notify my contact person and/or see my doctor • After 5 pm or on the weekend, I go to the hospital emergency department (Tel:_____)
• I am extremely short of breath, agitated, confused and/or drowsy, and/or I have chest pain	• **I dial 911 for an ambulance to take me to the hospital emergency department.**

Important Information: Make a follow-up appointment with your doctor to periodically review your plan of action or if you need to use your additional treatment twice within a short period of time (e.g. 3 months).

Living Well with COPD™ Chronic Obstructive Pulmonary Disease

COPD Treatable. Preventable.

FPAGC Family Physician Airways Group of Canada

CANADIAN THORACIC SOCIETY / SOCIÉTÉ CANADIENNE DE THORACOLOGIE

PLAN OF ACTION

Patient's copy

This action plan is a written contract between you and your doctor to give you firm direction in how you will manage your COPD flare-ups. This action plan will help you and your doctor to quickly recognize and treat flare ups to allow you to aggressively manage these flare-ups and prevent further deterioration in your lungs and your health.

A COPD flare up is most commonly characterized by changes in your sputum and/or an increase in your shortness of breath. It can sometimes occur after you get a cold or flu, get (or feel) run down or are exposed to air pollution. They may also occur during changes in the weather.

Before or during a flare up you may notice changes in your mood such as feeling down or anxious. Some people have low energy or fatigue before and during a COPD flare up. Flare-ups cause symptoms, which include cough, wheezing, sputum, & shortness of breath.

Your flare-up action plan is to be used only for COPD flare-ups. Remember there are other reasons you may get short of breath such as pneumonia or heart problems. If you develop shortness of breath and you do not have symptoms of a COPD flare-up, see a doctor.

REMEMBER:

1. Take your regular medication as prescribed
2. Do not wait more than 48 hours after the beginning of a COPD flare up to start your antibiotic and prednisone
3. Make sure when you start an antibiotic that you completely finish the treatment
4. Quitting smoking and ensuring that your vaccinations are up-to-date (influenza annually, pneumococcal at least once) will help prevent future flare ups of your COPD.

Canadian Respiratory Guidelines

PLAN OF ACTION FOR _____

Pharmacist's copy

(patient's name)

I FEEL WELL

MY SYMPTOMS

- I feel short of breath: _____
- I cough up sputum daily. No Yes, colour: _____
- I cough regularly. No Yes

I FEEL WORSE

MY SYMPTOMS

- **I have changes in my sputum (colour, volume, consistency),** not only in the morning
- **I have more shortness of breath than usual**

Note that these changes may happen after a cold or flu-like illness and/or sore throat. Some people feel a change in mood, fatigue or low energy prior to a flare-up.

MY ACTIONS

- I use my **prescription for COPD flare up**
- I avoid things that make my symptoms worse
- I use my breathing, relaxation, body position and energy conservation techniques
- If I am already on Oxygen, I use it consistently and increase from ___ L/min to ___ L/min
- I notify my contact person _____ (Tel:_____) and/or see my doctor (Tel:_____)

PRESCRIPTION FOR COPD FLARE-UP

1) If your SPUTUM becomes yellowish/greenish

start Antibiotic _____ **Dose:**____ **#pills:**___ **Frequency:**___ **#days:**___

if repeating antibiotics within 3 months, use the following antibiotic instead

start Antibiotic _____ **Dose:**____ **#pills:**___ **Frequency:**___ **#days:**___

2) If you are more SHORT OF BREATH than usual, **take** ____ **puffs of** _____ **up to a maximum of** ____ **times per day, as necessary**

If your SHORTNESS OF BREATH DOES NOT IMPROVE,

start PREDNISONE _____ **Dose:**____ **# pills:**___ **Frequency:**___ **# days:**___

Physician Name	Signature	License	Date
_____	_____	_____	_____

I FEEL MUCH WORSE OR IN DANGER

MY SYMPTOMS	MY ACTIONS
• My symptoms have worsened. • After 48 hours of treatment my symptoms are not better.	• I notify my contact person and/or see my doctor • After 5 pm or on the weekend, I go to the hospital emergency department (Tel:_____)
• I am extremely short of breath, agitated, confused and/or drowsy, and/or I have chest pain	• **I dial 911 for an ambulance to take me to the hospital emergency department.**

Important Information: Make a follow-up appointment with your doctor to periodically review your plan of action or if you need to use your additional treatment twice within a short period of time (e.g. 3 months).

Living Well with COPD™ Chronic Obstructive Pulmonary Disease

COPD Treatable. Preventable.

FPAGC Family Physician Airways Group of Canada

CANADIAN THORACIC SOCIETY / SOCIÉTÉ CANADIENNE DE THORACOLOGIE

Pharmacological Treatment

1. Short-acting (beta2-agonists and anticholinergic) bronchodilators to treat wheeze and dyspnea. Continue all of your long acting bronchodilators or inhaled steroids as prescribed.
2. Prednisone (oral) → 25-50 mg once daily for 10 days for patients with moderate to severe COPD[1].
3. Antibiotic choice is prescribed based upon the presence of risk factors as below.
4. Severe AECOPD complicated by acute respiratory failure is a medical emergency. Consider consultation with an emergency specialist or respirologist.

Antibiotic Treatment Recommendations for Acute COPD Exacerbations[2]

GROUP	PROBABLE PATHOGENS	FIRST CHOICE	ALTERNATIVES FOR TREATMENT FAILURE
I, Simple Smokers FEV1 > 50% ≤ 3 exacerbations per year	H. influenzae M. catarrhalis S. pneumoniae	Amoxicillin, 2nd or 3rd generation cephalosporin, doxycycline, extended spectrum macrolide, trimethoprim-sulfamethoxazole *(in alphabetical order)*	Fluoroquinolone ß-lact/ ß-lactamase inhibitor
II, Complicated, as per I, plus at least one of the following should be present: FEV1<50% predicted; ≥4 exacerbations/year; ischemic heart disease; use home oxygen or chronic oral steroids; antibiotic use in the past 3 months	As in group I, plus: Klebsiella spp. and other gram-negative bacteria Increased probability of ß-lactam resistance	Fluoroquinolone ß-lact/ ß-lactamase inhibitor *(in order of preference)*	May require parenteral therapy Consider referral to a specialist or hospital.
III, Chronic Suppurative II, plus: Constant purulent sputum; some have bronchiectasis; FEV1 usually <35% predicted; chronic oral steroid use; multiple risk factors	As in group II, plus: P. Aeruginosa and multi-resistant Enterobacteriaceae	Ambulatory – tailor treatment to airway pathogen; P. Aeruginosa is common (ciprofloxacin) Hospitalized – parenteral therapy usually required	

General Recommendations

1. Patients need to be instructed to call or visit their treating physician if symptoms persist or worsen in spite of patient-initiated treatment.
2. The prescription of antibiotics and prednisone can only be renewed once unless re-evaluated by the physician.
3. To reduce the risk of antibiotic resistance, if more than one treatment is required over 3 months, the class of antibiotics should be changed on subsequent prescription.
4. Review with your patient general measures to prevent future COPD exacerbations including smoking cessation, annual influenza vaccination, pneumococcal vaccination and appropriate use of inhaled medications.

1 Aaron SD, Vandemheen KL, Hebert P, Dales R, et al. Outpatient oral prednisone after emergency treatment of chronic obstructive pulmonary disease. *N Engl J Med* 2003; 348(26):2618-2625.

2 O'Donnell DE, Hernandez P, Kaplan A, Aaron S., et al. *CTS recommendations for management of COPD* – 2008 update – highlights for primary care. *Can Resp J* 2008; 15(Suppl A): 1A-8A.

3 Balter MS, La Forge J, Low DE, Mandell L., et al. Canadian guidelines for the management of acute exacerbation of chronic bronchitis. *Can Respir J* 2003; 10(Suppl B) :3B-32B.

Canadian Respiratory Guidelines

PLAN OF ACTION FOR _____

Physician's copy

(patient's name)

I FEEL WELL

MY SYMPTOMS

- I feel short of breath: _____
- I cough up sputum daily. No Yes, colour: _____
- I cough regularly. No Yes

I FEEL WORSE

MY SYMPTOMS

- **I have changes in my sputum (colour, volume, consistency),** not only in the morning
- **I have more shortness of breath than usual**

Note that these changes may happen after a cold or flu-like illness and/or sore throat. Some people feel a change in mood, fatigue or low energy prior to a flare-up.

MY ACTIONS

- I use my **prescription for COPD flare up**
- I avoid things that make my symptoms worse
- I use my breathing, relaxation, body position and energy conservation techniques
- If I am already on Oxygen, I use it consistently and increase from ___ L/min to ___ L/min
- I notify my contact person _____ (Tel:_____) and/or see my doctor (Tel:_____)

PRESCRIPTION FOR COPD FLARE-UP

1) If your SPUTUM becomes yellowish/greenish

start Antibiotic _____ **Dose:**____ **#pills:**___ **Frequency:**___ **#days:**___

if repeating antibiotics within 3 months, use the following antibiotic instead

start Antibiotic _____ **Dose:**____ **#pills:**___ **Frequency:**___ **#days:**___

2) If you are more SHORT OF BREATH than usual, **take** ____ **puffs of** _____ **up to a maximum of** ____ **times per day, as necessary**

If your SHORTNESS OF BREATH DOES NOT IMPROVE,

start PREDNISONE _____ **Dose:**____ **# pills:**___ **Frequency:**___ **# days:**___

Physician Name	Signature	License	Date
_____	_____	_____	_____

I FEEL MUCH WORSE OR IN DANGER

MY SYMPTOMS	MY ACTIONS
• My symptoms have worsened. • After 48 hours of treatment my symptoms are not better.	• I notify my contact person and/or see my doctor • After 5 pm or on the weekend, I go to the hospital emergency department (Tel:_____)
• I am extremely short of breath, agitated, confused and/or drowsy, and/or I have chest pain	• **I dial 911 for an ambulance to take me to the hospital emergency department.**

Important Information: Make a follow-up appointment with your doctor to periodically review your plan of action or if you need to use your additional treatment twice within a short period of time (e.g. 3 months).

Living Well with COPD™ Chronic Obstructive Pulmonary Disease

COPD Treatable. Preventable.

FPAGC Family Physician Airways Group of Canada

CANADIAN THORACIC SOCIETY / SOCIÉTÉ CANADIENNE DE THORACOLOGIE

Pharmacological Treatment

1. Short-acting (beta2-agonists and anticholinergic) bronchodilators to treat wheeze and dyspnea. Continue all of your long acting bronchodilators or inhaled steroids as prescribed.
2. Prednisone (oral) → 25-50 mg once daily for 10 days for patients with moderate to severe COPD[1].
3. Antibiotic choice is prescribed based upon the presence of risk factors as below.
4. Severe AECOPD complicated by acute respiratory failure is a medical emergency. Consider consultation with an emergency specialist or respirologist.

Antibiotic Treatment Recommendations for Acute COPD Exacerbations[2]

GROUP	PROBABLE PATHOGENS	FIRST CHOICE	ALTERNATIVES FOR TREATMENT FAILURE
I, Simple Smokers FEV1 > 50% ≤ 3 exacerbations per year	H. influenzae M. catarrhalis S. pneumoniae	Amoxicillin, 2nd or 3rd generation cephalosporin, doxycycline, extended spectrum macrolide, trimethoprim-sulfamethoxazole *(in alphabetical order)*	Fluoroquinolone ß-lact/ ß-lactamase inhibitor
II, Complicated, as per I, plus at least one of the following should be present: FEV1<50% predicted; ≥4 exacerbations/year; ischemic heart disease; use home oxygen or chronic oral steroids; antibiotic use in the past 3 months	As in group I, plus: Klebsiella spp. and other gram-negative bacteria Increased probability of ß-lactam resistance	Fluoroquinolone ß-lact/ ß-lactamase inhibitor *(in order of preference)*	May require parenteral therapy Consider referral to a specialist or hospital.
III, Chronic Suppurative II, plus: Constant purulent sputum; some have bronchiectasis; FEV1 usually <35% predicted; chronic oral steroid use; multiple risk factors	As in group II, plus: P. Aeruginosa and multi-resistant Enterobacteriaceae	Ambulatory – tailor treatment to airway pathogen; P. Aeruginosa is common (ciprofloxacin) Hospitalized – parenteral therapy usually required	

General Recommendations

1. Patients need to be instructed to call or visit their treating physician if symptoms persist or worsen in spite of patient-initiated treatment.
2. The prescription of antibiotics and prednisone can only be renewed once unless re-evaluated by the physician.
3. To reduce the risk of antibiotic resistance, if more than one treatment is required over 3 months, the class of antibiotics should be changed on subsequent prescription.
4. Review with your patient general measures to prevent future COPD exacerbations including smoking cessation, annual influenza vaccination, pneumococcal vaccination and appropriate use of inhaled medications.

[1] Aaron SD, Vandemheen KL, Hebert P, Dales R, et al. Outpatient oral prednisone after emergency treatment of chronic obstructive pulmonary disease. *N Engl J Med* 2003; 348(26):2618-2625.

[2] O'Donnell DE, Hernandez P, Kaplan A, Aaron S., et al. *CTS recommendations for management of COPD* – 2008 update – highlights for primary care. *Can Resp J* 2008; 15(Suppl A): 1A-8A.

[3] Balter MS, La Forge J, Low DE, Mandell L., et al. Canadian guidelines for the management of acute exacerbation of chronic bronchitis. *Can Respir J* 2003; 10(Suppl B) :3B-32B.