

Principal Investigator &
Program Director
R. William Vandivier, MD

Co-Investigators

Norbert F. Voelkel, MD
Kelly E. Greene, MD
Thomas J Stelzner, MD
John M. Westfall, MD
Jeffery J. Glasheen, MD
Jim Grigsby, PhD
Sung-joon Min, PhD
Cynthia Hartsfield, PhD
Debra P. Ritzwoller, PhD, RRT

Program Coordinator
Patricia B. Koff, MEd, RRT

Participating Institutions

University of Colorado Hospital
Kaiser Permanente
University of Colorado at Denver and
Health Sciences Center

Contact Numbers at
University of Colorado

Patty Koff, MEd, RRT
Program Coordinator
(303) 476-8049

Fran Piedalue, RRT
Care Coordinator
(303) 476-8053

Tammie Freitag, RN
Care Coordinator
(303) 476-8052

Debbie Diaz
Administrative Assistant
(303) 372-8378

Contact Numbers at
Kaiser Permanente

Christine Kveton, RRT
Care Coordinator
(303) 476-8050

Stephanie Carwin, RRT
Care Coordinator
(303) 476-8055

Contact Number at
High Plains-Eastern CO.

Christin Sutter
(303) 921-8744

www.copdehealth.org

University of Colorado Hospital
COPD eHealth
4200 E. 9th Ave., Mail Stop C300,
Denver, CO 80262
(303) 372-8378



DID YOU REMEMBER?
Ask your patients at every visit
if they are smoking and if they
are ready to quit.

MANAGING STABLE COPD

When managing the patient with stable COPD, a stepwise increase in treatment should be used, depending on the severity of disease. Disease severity is measured by severity of symptoms and airflow limitations as well as frequency/severity of exacerbations, complications, respiratory failure, comorbidities and general health status of the patient.

Treatment will depend on the patient's educational level, willingness to apply recommended therapy, local conditions and availability of resources.

Treatment should include:

- **Patient Education.** The following education helps with improving skills, disease awareness, ability to cope and health status. It also can help accomplish goals such as smoking cessation, initiating discussions and understanding of advanced directives and end-of-life issues, and improving patient responses to exacerbations.
- **Medication Regimens.** Pharmacologic therapy is used to decrease symptoms and/or complications. None of the existing medications for COPD have been shown to change the long-term decline in lung function.
- **Systemic Glucocorticosteroids.** Chronic use of systemic steroids should be avoided due to an unfavorable benefit-to-risk ratio.
- **Exercise.** Patients benefit from exercise training programs. This improves exercise tolerance and symptoms of dyspnea and fatigue.
- **Oxygen Therapy.** Long-term administration of oxygen (>15 hours day) has been shown to increase survival.

Table 9 - Bronchodilators in Stable COPD

- Bronchodilator medications are central to symptom management in COPD.
- Inhaled therapy is preferred.
- The choice between β_2 -agonist, anticholinergic, theophylline, or combination therapy depends on availability and individual response in terms of symptom relief and side effects.
- Bronchodilators are prescribed on an as-needed or on a regular basis to prevent or reduce symptoms.
- Long-acting inhaled bronchodilators are more effective and convenient, but more expensive.
- Combining bronchodilators may improve efficacy and decrease the risk of side effects compared to increasing the dose of a single bronchodilator.

Table 8 - Therapy at Each Stage of COPD

Old	0: At Risk	I: Mild	II: Moderate		III: Severe
			IIA	IIB	
New	0: At Risk	I: Mild	II: Moderate	III: Severe	IV: Very Severe
Characteristics	<ul style="list-style-type: none"> Chronic symptoms Exposure to risk factors Normal spirometry 	<ul style="list-style-type: none"> FEV₁/FVC < 70% FEV₁ ≥ 80% With or without symptoms 	<ul style="list-style-type: none"> FEV₁/FVC < 70% 50% ≤ FEV₁ < 80% With or without symptoms 	<ul style="list-style-type: none"> FEV₁/FVC < 70% 30% ≤ FEV₁ < 50% With or without symptoms 	<ul style="list-style-type: none"> FEV₁/FVC < 70% FEV₁ < 30% or FEV₁ < 50% predicted plus chronic respiratory failure
	Avoidance of risk factor(s); influenza vaccination				
		Add short-acting bronchodilator when needed			
			Add regular treatment with one or more long-acting bronchodilators Add rehabilitation		
				Add inhaled glucocorticosteroids if repeated exacerbations	
					Add long-term oxygen if chronic respiratory failure Consider surgical treatments

Bronchodilators

- Decrease symptoms
- Increase exercise capacity
- Decrease exacerbations

<u>Short Acting</u>	<u>Dose</u>	<u>OOA</u>	<u>DOA</u>
Albuterol	200µg QID	3m	4-6 hr
Ipratropium (Atrovent)	40µg QID	15m	6-8 hr

<u>Long Acting</u>	<u>Dose</u>	<u>OOA</u>	<u>DOA</u>
Tiotropium (Spiriva)	18µg qd	30m	24 hr
Salmeterol (Serevent)	50-100µg BID	25m	12 hr
Formoterol (Foradil)	6-12µg BID	3m	12 hr

Breathless not Helpless!



World COPD Day 2006

November 15, 2006



Stable COPD

- ➔ Manage with bronchodilators
- ➔ Oxygen, if indicated, can increase survival
- ➔ Smoking cessation can increase survival
- ➔ Save systemic glucocorticosteroids for exacerbations

Coming Next Month.....

- ➔ Oxygen Therapy
- ➔ Inhaled Steroids