

Research papers

- **Is COPD a Progressive Disease? A Long Term Bode Cohort Observation -**
<https://pmc.ncbi.nlm.nih.gov/articles/PMC4839642/> - Fig 2. Is interesting
- **Impacting patient-centered out-comes in COPD: deconditioning**
<https://publications.ersnet.org/content/errev/15/9/9/42>
- **Prevalence and incidence of COPD in smokers and non-smokers: the Rotterdam Study**
<https://pmc.ncbi.nlm.nih.gov/articles/PMC5005388/>
- **Effectiveness of Virtual Reality-Complemented Pulmonary Rehabilitation on Lung Function, Exercise Capacity, Dyspnea, and Health Status in Chronic Obstructive Pulmonary Disease: Systematic Review and Meta-Analysis**
<https://pubmed.ncbi.nlm.nih.gov/40193185/>
- **Exercise Prescription Training in Chronic Obstructive Pulmonary Disease: Benefits and Mechanisms**
<https://pmc.ncbi.nlm.nih.gov/articles/PMC12009044/>
- **Oxygen therapy and inpatient mortality in COPD exacerbation**
<https://emj.bmj.com/content/emmermed/38/3/170.full.pdf>
Look at the One-year mortality.
- **Changes in blood gas transport of altitude native soccer players near sea-level and sea-level native soccer players at altitude.**
<https://pmc.ncbi.nlm.nih.gov/articles/PMC3903154/> - Look for figure 1.
- **Improving physical activity in COPD: towards a new paradigm.**
<https://pmc.ncbi.nlm.nih.gov/articles/PMC4176094/pdf/1465-9921-14-115.pdf>

I believe, "Improving physical activity in COPD: towards a new paradigm" shows staying active increases our quality of life

A Case Study?

I have learned a great deal over the last twenty-five years. I like 15 LPM playing pickleball or for hard exertion. My Companion T portable reservoir will last about an hour at 15 LPM. At 2 LPM it will last about 8 hours.

For digging a ditch I use 8 – 10 LPM. I would use 8 LPM if it was easy digging and 10 LPM if it was more difficult.

On a treadmill I can show how fast I could walk at any LPM setting by upping the speed until my SpO2 bounces around 88%. I match the speed to the LPM setting that will keep me at 88%. I am also able to compare POCs to Liquid oxygen or another POC.

I know many others could benefit from what I have learned. They would have fewer hospitalizations and a higher quality of life. I know what it is like to be on the downward spiral of COPD and deconditioning. I know how I suffered and I am sure others do as well. I know that suffering doesn't need to be there.

I could help set up studies to show getting the oxygen to stay active will help others, just as it has helped me.

I believe the SOAR Act is a good idea and it needs these studies done to show Congress the Soar Act may also save taxpayer money through lower medical expenses.

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Find "Horse Sense, Oxygen & COPD at above website

Horse Sense Oxygen & COPD

Horse Sense

Practical knowledge and good judgment
about ordinary life.

Cambridge Advanced Learner's Dictionary & Thesaurus

Over the last 30 years my COPD has gone from moderate to severe and onto very severe. Nothing unusual about that, but what happened over the last eight years is!

My FEV1 has went from 30% of expected in 2018 to 45% in 2023. My COPD has drastically improved. Uncommon but not unprecedented.

Not the medical profession or prescribed medications are responsible for the improvement but I will give both credit for helping keep me alive.

I am responsible for learning how to get the oxygen I need and how to use it!

Getting the OXYGEN I NEED to remain active started a continuing upward spiral of RECONDITIONING that is improving my Health and Quality of Life!!!

My Journey

1990s – Occasional shortness of breath.

2000 – Building corrals for handling cattle I needed to stop and catch my breath often.

2001 – Pneumonia, then increased COPD.

2006 – Quit smoking.

2008 to 2010 – Before 2010 I started using an oximeter trying to keep my SpO2 out of the 70s as much as possible to spend more time in the low 90s.

2010 – Went camping at Silver City, Id (6,000+ ft elevation). My SpO2 fell to the seventies by bedtime. We broke camp and headed home. By the time we reached home my SpO2 and breathing were normal.

2014 – Started using supplemental oxygen 24 hours, 7 days a week.

2015 – Had a PFT and my FEV1 was 47% of expected.

2016 – Attended the National Wild Horse and Burro Advisory Board Meeting in Elko, Nevada (5,000+ ft elevation). Even with supplemental oxygen it was a struggle.

2015 – Applied for SSDI in May. Was accepted in August. Accepted quickly because of my low SpO2 readings at work

2018 - Had a PFT and my FEV1 was 30% of expected. In 2015 it was a struggle to work all day in a grocery store. In 2018 it was a struggle to get to the grocery store to buy a few groceries.

2018 – Began using Respironics Ultra-Fill system with 3000 psi tanks using 6 – 10 LPM. My activity level and quality of life jumped. I began an upward spiral of reconditioning.

2020 – I began using liquid oxygen to supplement the 3,000 psi tanks.

2022 – Moved east of the Mississippi and it took six months to find a place to fill my liquid oxygen reservoirs.

2023 – FEV1 45 % of expected. My FEV1 increased 15% over what it was in 2018. It is possible for a person to raise their FEV1. Exercise and staying active is the key.

2024 – Started using up to 15 LPM with hard exertion and while playing pickleball.

2025 – Completed the American Lung Associations, “fight for air climb” in Charlotte NC at The VUE. I climbed 51 floors and 882 steps

2025 – In November I had pneumonia and was using 6 to 15 LPM in the quick care clinic. Within three months I made a good recovery, better than I expected.

2025 – In December I had my fourth PFT and my FEV1 was 43% of expected. Slightly lower than in 2023.

2026 – began playing 2 hours at a time in a pickleball club.

2022 to 2026 – My Quality of life is higher than it was twenty years ago.



Putting up a tarp



Digging a ditch



Finishing the Fight for Air Climb in under an hour!
In 2022 I visited Devils Tower National Monument and Fort Bridger State Historic Site.



The mask that protects me from Dust.



Outings with my Grandkids

“All with COPD should keep their blood oxygen level between 88 – 92%,” IS A MYTH

The Medical Profession tells us with COPD to stay active, but they only give us enough supplemental oxygen to keep us alive. Why? Because they are afraid of patients with COPD getting hypercapnia. Professionals need to prescribe the oxygen we need to stay active. With activity our bodies are healthier and more able to exhale the CO2 preventing hypercapnia. We need prescribed and taught how to use the appropriate oxygen!
If a person’s oxygen level has fallen below 88%, is then prescribed oxygen and holds their oxygen level between 88 and 92%, their ability to be active is severely limited.

When I am playing pickleball my blood oxygen level yo-yos between the mid-70s to the mid-90s. I am able to get a good workout, have fun and even win some games.

