

# Breathe



[www.thelungspecialists.com](http://www.thelungspecialists.com)  

## Honest Talk About Flu and COVID Vaccines

Page 4

## Nicotine Dependence

Page 8

## Sleep Medications And Pregnancy

Page 10

## Lung Cancer Screening in the Time of COVID

Page 12

**LUNG**  
DISEASE CENTER  
OF CENTRAL PENNSYLVANIA

Produced by the Lung Disease  
Center of Central Pennsylvania



Scan with your  
smartphone to  
visit our website.



# Rehabilitation

## THAT'S WORTH THE DRIVE

On the road to recovery after an illness, accident or surgery, our hospital provides a better route to independence with specialized teams and advanced technologies that go the extra mile. Make the most of your rehabilitation journey and choose the best option for recovery. We provide healthcare that's worth the drive.



**Encompass  
Health**

Rehabilitation Hospital  
of **Altoona**

2005 Valley View Boulevard • Altoona, PA 16602

814.941.3230

[encompasshealth.com/altoonarehab](https://encompasshealth.com/altoonarehab)



# Welcome to Breathe

**W**elcome to the pages of Breathe Magazine 2021. My hope is that all of you have so far survived the COVID pandemic. The welcome this year includes the hope that we can all get back to some type of life that resembles the pre-pandemic days. I have written a number of weekly articles in the Altoona Mirror about COVID so I have tried to include articles on other issues in this edition of Breathe Magazine. There is only one article that references the COVID pandemic, and it tries to add some perspective on the need to continue lung cancer surveillance. Of particular interest to women is the article on medications for sleep issues during pregnancy. Lastly, there are some

scientifically oriented comments about flu and COVID vaccines to help dispel any misinformation.

The main article this year involves an interesting account on how cigarette companies have tried to fool the public about the safety of their products, and I think it makes an interesting read. Please make note of the supporters of this publication and consider them when you need the type of services they offer.

We should remember all of those victims of the COVID scourge who are no longer with us. | ♦



## Continuing the Long Tradition *of Legal Services to the Community*



- Personal Injury
- Workers' Compensation
- General Practice



[www.gieg-law.com](http://www.gieg-law.com)

**814-946-1606**



## HONEST TALK ABOUT FLU AND COVID VACCINES

**T**he development of vaccines as a preventative measure against disease is one of the great medical achievements of all time. Before vaccines there was really no way to prevent some of the most deadly infections on the planet. In the United States we are fortunate to have few deadly communicable diseases. The vaccine familiar to most of us is the flu vaccine. However, recent events have made the vaccine against the COVID-19 virus a topic of frequent discussion. Patients often have reasons not to get vaccinated, but most of these reasons are based on fear which has been triggered by misinformation supplied by media groups with specific agendas, or people in our own communities who deny or are unfamiliar with the science involved.

Anywhere from 30,000 to 60,000 people die each year in the United States because of influenza. These numbers would be much higher if it were not for the influenza vaccine which is available annually. Without the influenza vaccine, deaths could approach those seen with the COVID-19 epidemic, or worse as evidenced by the millions who died in the flu pandemic of 1918.

Please, read these comments about some of the frequent statements concerning the flu vaccine. "It makes people sick." The flu vaccine contains

inactivated virus and biologically cannot cause you to become sick, "I got the flu shot and still got sick." The vaccine is intended to prevent influenza. It does not prevent other viral or bacterial disease, which can seem like the flu. "It does not work for many people." While the flu vaccine may not fully immunize everyone because of variations in immune response, it makes influenza related disease less severe. These and many other excuses are given for not getting the influenza vaccine each year. None of them hold water. To protect yourself and others, get an annual flu shot.

The COVID-19 vaccine(s) appears to be another amazing medical breakthrough, partly because of the scientific and technical aspects in producing the vaccine, and partly because of the speed with which it was produced. The job of vaccinating a large portion of the American public is now underway. Concerns about the safety, efficacy, and durability of the vaccine(s) are appropriate. The speed with which the vaccine(s) have been developed came about in part by simultaneously conducting studies on the proposed products rather than in the usual sequences. These vaccines are not grown in egg cultures but rather manufactured in laboratories using genetic sequencing techniques that identify various proteins of the virus

that can be targeted by antibodies responding to the vaccine(s) and, therefore, prevent or diminish the effect of the disease.

To date, few major side effects have been encountered with the first two available vaccines. There have been a very few patients who have developed sudden anaphylactic reactions after receiving the vaccine(s), but this may occur with any vaccine and when recognized can be treated without patient harm. The first two vaccines, Pfizer and Moderna, have been shown to have 95% and 94% effectiveness respectively. How long the immunization will last is yet unknown. Re-vaccination at some interval may be needed, as with the flu vaccine. Like the flu vaccine some patients may only experience partial immunity, meaning the vaccine will not prevent the disease but will significantly diminish the symptoms. We need about 70% of the American population to be immune from the COVID-19 virus in order to stop the epidemic in the United States.

Both the influenza vaccine and the vaccine(s) against the COVID-19 virus are vital to our health, not only as individuals, but as a nation as well. Do not be swayed by misinformation spread by media, factional groups, or even friends. Seek the scientific facts and get vaccinated. | [+](#)



# LUNG DISEASE CENTER OF CENTRAL PENNSYLVANIA

## The Lung Disease Center of Central PA Celebrates Ten Years



**The Lung Disease Center  
of Central PA**  
800 Chestnut Avenue  
Altoona, PA 16601  
814-946-2845  
[www.thelungspecialists.com](http://www.thelungspecialists.com) |

It is hard to believe that March 2021 will mark ten years since the Altoona Lung Specialists, the Sleep Disorder Network and the Lung Disease Foundation of Central Pennsylvania began to occupy the state-of-the-art facility known as the Lung Disease Center on Chestnut Avenue in Altoona.

Ten years doesn't seem like that long in the grand scheme of things, but a great deal has happened in the past ten years. Altoona Lung Specialists has grown from 8 employees to 18 employees; had the pleasure of adding many patients to its practice; moved to a "Team" concept for our physicians and staff; and just last September added

a Nurse Practitioner to help us better serve our patients. The Sleep Disorder Network has seen many changes, including the addition of the Zzzz Program geared toward the trucking industry; new recommendations relative to those undergoing anesthesia and their need to be screened for the risk of sleep apnea; the move by insurance companies to require home sleep studies in some cases and our ability to meet that need; as well as new and innovative equipment and mask availability. The Lung Disease Foundation has also experienced many advances including its designation as the Tobacco Control Service Provider for

Blair and Bedford Counties; its affiliation with the Cribs for Kids Program; as well as taking on vaping education for community organizations, schools, and students.

The Lung Disease Center of Central PA looks forward to celebrating many anniversaries to come as a healthcare presence in the community. We enjoy the opportunity to provide a home to the Altoona Lung Specialists; the Sleep Disorder Network; and the Lung Disease Foundation of Central Pennsylvania and to help serve their patients with the best care and customer service available in the industry. |



**Cardiology Associates  
of Altoona, L.L.P.**

**Specializing in Cardiovascular and Venous Disease**



Joseph W. Gattuso  
Jr., MD



Hany F.  
Shanoudy, MD



Michael J.  
Larkin, DO



Gorgi  
Kozeski, DO



Michael J.  
Sabatini, MD, PhD



James A.  
Gerardo, M.D., Ph.D.



Medhat F.  
Zaher, MD



Sarah  
Schroeder, MD



Michelle  
Stoudt, DO



Kasalah  
Makam, M.D.

**ACCEPTING NEW PATIENTS**

**1321 Eleventh Avenue, Altoona, PA | 814-942-2411 | [www.cardiologyaltoona.com](http://www.cardiologyaltoona.com)**



**"Individuals might accomplish a few things, but groups of people working together can do the really big things."**

*That's the philosophy behind the Foundation's "A Beacon of Light on Lung Cancer".*



**Dr. George M. Zupko,**  
Chairman



**Sherri Stayer,**  
Executive Director

**Dedicated to Inform,  
Empower and Educate  
Individuals on how to Improve  
All Aspects of Lung Health.**



**Call today and join our Beacon Team.**  
Together we can reduce Lung Disease.

Find us on

**814-946-2845**  
**www.lungdiseasefoundation.org**



## LUNG DISEASE FOUNDATION

**T**he Lung Disease Foundation of Central PA continues to provide resources pursuant to its designation as the Tobacco Control Service Provider, through a grant from the American Lung Association, for both Blair and Bedford Counties, which provides us with the opportunity to offer Freedom From Smoking programs on a regular schedule, free of charge, at the Lung Disease Center, our offices in the Bedford County Chamber of Commerce building, and at the Blair Regional YMCA in Hollidaysburg when it is safe to begin to do so. We are also able to offer programs to organizations and agencies in Blair and Bedford Counties upon their request.

This year was very difficult due to the COVID pandemic; however, we continue to attempt to provide educational efforts to administrators, teachers, parents, and students in many area school districts relative to the risks and concerns related to vaping, which continues to be an epidemic among our youth. These efforts include the creation of a Train the Trainer program thanks to a grant from the Rotary Club of Altoona.

The Foundation is very excited that this year brought the opportunity to collaborate with Ronald McDonald House Charities of Mid-Penn, who provided us with a grant to assist the Foundation with the purchase of vaping sensors for the Hollidaysburg Area School District, as well as the UPMC Altoona Foundation, who provided us with a grant to assist us

with the purchase of vaping sensors for the Altoona Area School District. These efforts will help address the issues that have arisen in our schools due to the vaping epidemic.

The Foundation received a grant from the United Way of Blair County, once again, to assist with the Cribs for Kids program.

Thanks to their generous grant, we have been able to continue to



purchase cribs and provide safe sleep education and a safe sleep environment to parents of newborns in an effort to alleviate the occurrence of SIDS cases in our community.

The Foundation continues to work with the Healthy Blair County Coalition and its work group, which has now changed its name to the Alliance for Nicotine Free Communities.

National Lung Cancer Awareness month in November once again brought the publication of a full page flyer to inform, empower and educate individuals; as well as the Foundation's participation in two "Dining to Donate" events at Applebee's in the Logan Valley Mall, who generously donated 15% of a diner's check, upon presentation of a coupon, to the Foundation.

The Lung Disease Foundation of Central PA continues to encourage those who have been affected by lung disease to donate to the Foundation to allow us to continue with our very important programs and education. A donation of any amount is appreciated.

Please visit our website at [www.lungdiseasefoundation.org](http://www.lungdiseasefoundation.org) to find out more information about our Foundation or to donate. |







**FREEDOM**  
FROM SMOKING®

Free classes designed specifically for adults like you,  
who want to quit tobacco use.

Make the decision to quit smoking today! **Register for the Next Series of Classes**

ALTOONA CLASS DATES	TIME
March 2 to April 13	4:30 – 6:30pm
May 12 to June 22	4:30 – 6:30pm
July 6 to August 17	4:30 – 6:30pm
September 7 to October 19	4:30 – 6:30pm
November 9 to December 21	4:30 – 6:30pm
BEDFORD CLASS DATES	TIME
Every Tues Mar 16- April 27 with extra class on Thurs April 8.	4:30 – 6:30pm
Every Tues May 11-June 22 with extra class on Thurs June 3.	6:00 – 7:30pm
Every Tues July 13- Aug 24 with extra class on Thurs Aug. 5	4:30 – 6:00pm
Every Tues Sept 7-Oct 19 with extra class on Thurs Sept. 30	4:30 – 6:00pm
Every Tues Oct 26-Dec 7 with an extra class on Thurs Nov. 18	3:00 – 4:30pm

**Lung Disease Center of Central PA**  
800 Chestnut Avenue, Altoona, PA 16601  
To Register Call 814-946-2845

**Bedford County Chamber of Commerce**  
203 South Juliana Street, Bedford, PA 15522  
To Register Call 814-977-4455



800 Chestnut Avenue,  
Altoona, PA 16601  
[www.lungdiseasefoundation.org](http://www.lungdiseasefoundation.org)  
[info@lungdiseasefoundation.org](mailto:info@lungdiseasefoundation.org)  
814-946-2845, Ext. 200   
**Visit our website for more information!**

The project was funded through a Pennsylvania Department of Health grant.

**Free Participation and  
Nicotine Replacement Therapy**



*Dedicated to Inform, Empower, and Educate Individuals  
on how to Improve All Aspects of Lung Health*

### EARLY DETECTION PROGRAM

- For those at high risk of lung cancer
- 55 or older with a 30-pack-year smoking history
- 300+ participants currently enrolled

### RESOURCES AND PROGRAMS RELATED TO TOBACCO CONTROL

- Freedom From Smoking Classes (free-including Nicotine Replacement Therapy) held at the Lung Disease Center or your Organization/Location
- Young Lungs at Play Signs for parks, playgrounds, recreational facilities
- Tobacco Resistance Units (TRU Groups) for students, youth groups, etc.
- Strengthening or creating policies for tobacco free environments for Businesses, Multi-Unit Housing, and Municipalities
- Advocacy

### E-CIGARETTES, VAPING AND JUULING EDUCATION

- Informative Programs on the Dangers of E-Cigarettes, Vaping and Juuling
- Education for Students/Youth
- Education for School Districts (Parents, Educators, Administrators, Counselors and School Nurses)
- Cessation Programs

### COMMUNITY IMPACT OF THE LUNG DISEASE FOUNDATION

- 39 Families in 2018-2019 fiscal year received safe sleep education and a safe sleep environment (pack-n-play)
- 134 Individuals participated in Freedom From Smoking programs in Blair County
- 12 Individuals participated in Freedom From Smoking programs in Bedford County
- Assisted recreational facilities in securing Young Lungs at Play signs
- Hundreds of educators, parents, and students with E-cigarette and Juuling education for area school districts with more scheduled for the upcoming year

\*Designated as the Tobacco Control Service Provider, through a grant from the American Lung Association, for Blair and Bedford Counties.

800 Chestnut Avenue, Altoona, PA 16601 • 814-946-2845 • [lungdiseasefoundation.org](http://lungdiseasefoundation.org)



# NICOTINE DEPENDENCE

## How The Type Of Cigarette You Smoke Helps Determine Your Dependence On Nicotine

Over 42 million Americans still smoke, although most of them want to quit. Smoking accounts for nearly 500,000 deaths in the United States, and five million worldwide. In the developing world, smoking is on the increase. Lung cancer, which is highly associated with tobacco smoking, is the leading cause of cancer death in the United States. In 1964 the Surgeon General, Luther Terry, announced to a room of reporters that cigarette smoking causes cancer and probably causes heart disease as well. This was a bold statement for the time since tobacco was, and still is, big business. The announcement was conducted on Saturday so as not to affect the stock market. Smoking was very common in 1964 with 42% of the country smoking tobacco, primarily cigarettes.

In response to the dismal outlook for patients with lung cancer, physicians began to look for screening techniques which could help detect lung cancers early, when there is a better chance for cure. The problem had been that most lung cancers began in regions of the lung which did not cause immediate symptoms. Unfortunately, once symptoms did occur the chance for cure was greatly diminished. In 2011,

data was published on what was called the National Lung Screening Trial. The trial found that using a now common scanning technique called computerized axial tomography, which we now simply call CT scanning, on an annual basis, on patients who have smoked for 30 pack years and were at least 55 years of age, we could reduce the mortality due to lung cancer by 20%. This ongoing study has led to many secondary analyses.

A recent analysis of data from the National Lung Screening Trial dealt with the degree of nicotine dependence which is present in the screening group, and how the type of cigarette being smoked may influence the degree of tobacco dependence. This is an important piece of information in the fight against tobacco and, specifically, cigarette use. Patients presenting for lung cancer screening are highly nicotine dependent with 34% smoking within 5 minutes and 74% smoking within 14 minutes of waking. These levels are significantly higher than the average smoker in the United States. This level of dependence warrants aggressive tobacco treatment. It is instructive to go back to 1964, and the Surgeon General, Luther Terry's, report on the relation between smoking and lung cancer.

As a result of this report consumers began looking for a "safer" cigarette. In response to this consumer pressure cigarette companies began to market and develop "low tar" products which were touted as being a safe alternative to quitting and would reduce the risk of harm to smokers. There, of course, was no scientific evidence that this was true.

In an effort to reduce the tar levels in cigarettes, tobacco companies made several changes to the construction and content of cigarettes. Tar is a very complex combination of highly carcinogenic compounds causing serious health risks for smokers. The first attempt to reduce tar per cigarette was the addition of filters. Companies also tried many other innovations to reduce the tar levels in cigarette smoke. Some of these innovations included using less tobacco per cigarette, increasing filter efficiency (ventilating or increasing the density of the filters), increasing the burn rate to the tobacco column (increasing the paper porosity), using reconstituted, expanded, or puffed tobacco to decrease the density of the tobacco in the cigarette. Ultimately, ventilation of the filters by increasing the number or size of the holes was found to be the best and most efficient way



to reduce the tar content in the smoke from cigarettes of similar design. Despite the fact that cigarette companies developed filters to reduce the tar load and reduce harm to the smoker, internal company research found that the risk of mainstream smoke could not be made safer, after which filters became purely a marketing tool. Many cigarettes were labeled as “low tar” or “mild”, “light”, or “ultra-light.”

The Federal Trade Commission, in an effort to standardize the tar levels in any given cigarette category, used a specially designed smoking machine that would “inhale” a cigarette at a standardized rate and burn the cigarette to a specific butt length and determine the amount of tar produced. The different category of cigarettes (mild, light, ultra-light, etc.) did produce different amounts of tar. Additional internal industry research found that this method of measurement did not adequately reflect how smokers reacted to the lower tar productions, e.g. when smokers switched to “light” cigarettes they increased their puff volume to maintain similar levels of smoke and nicotine delivery. This adjustment is called compensatory smoking and it allows smokers of light/ ultra-light cigarettes to achieve a higher nicotine level by increasing the puff volume, number of puffs per cigarette and the length of the puff. Additionally, these smokers will smoke more cigarettes per day, smoke to a shorter butt length and obstruct the filter ventilation holes with their fingers to deliver more nicotine and tar into their lungs. Studies have shown that smokers who switch from higher tar to lower tar

cigarettes still maintain the same level of nicotine and tobacco smoke toxins in their blood stream.

The U.S. Food and Drug Administration, in 2010, introduced regulations banning the use of terms such as “low tar”, “light”, “ultra-light” in cigarette advertising noting that these terms were misleading. By this time, smokers had already associated these terms with the color and style of the packaging for these cigarettes and smokers continued to recognize and buy these products as light cigarettes.

One additional modification to the content of cigarettes was the addition of menthol. The use of menthol was designed to reduce the burning sensation of tobacco smoke so as to promote continued use. Menthol produces an analgesic, anesthetic and cooling effect. The companies then used these effects to promote their products to specific ethnic populations. Menthol laced cigarettes were heavily promoted to the young, female, and black community. Mentholated cigarettes are the most popular brands among black communities to this day. It has been postulated that this has contributed to the disparity in lung cancer related mortality, for black subjects 84% of

which admitted to smoking menthol cigarettes, compared to only 24% of whites.

This secondary analysis of nicotine addiction and smoking habits concluded that those smoking unfiltered cigarettes are more nicotine dependent, but

those smoking light/ ultra-light cigarettes, although less dependent, were not more likely to quit. Finally, there was no difference in quit rates between those smoking menthol or non-menthol cigarettes.

Regardless of the attempts to make a “safer” cigarette, cigarette smoking remains the cause for 80% of the lung cancer diagnosis, which is the leading cause of cancer death worldwide.

## **Regardless of the attempts to make a “safer” cigarette, cigarette smoking remains the cause for 80% of the lung cancer diagnosis, which is the leading cause of cancer death worldwide.**

Despite advances in cancer treatment, the five year survival rate remains low at 18%. This underscores an increased need for primary and secondary prevention along with lung cancer screening. There is no “safe” cigarette. Individuals who smoke, regardless of the type of cigarette they smoke, should realize the serious health risks associated with smoking and make every effort to quit. Those smokers seeking lung cancer screening appear to have special needs, and require a more aggressive approach to smoking cessation. | ✦







# SLEEP MEDICATIONS AND PREGNANCY

## Risks and Concerns for Medication Treatments

**S**leep disturbances are common in pregnancy. Long established polling data indicates that 80% of women experience disturbed sleep at some time during a pregnancy. Hormonal shifts in pregnancy and lactation modify the structure of sleep in the brain. The respiratory system undergoes significant physiologic changes that may influence breathing during sleep. The rise in reproductive hormones leads to increased upper airway edema and nasal congestion. Metabolic changes may also affect sleep disorders such as restless leg syndrome (RLS). Evidence suggests that chronic sleep loss may be associated with an increased risk of mortality, cardiovascular disease, diabetes, and obesity.

Insomnia is the most commonly reported sleep disturbance in pregnancy, and its frequency advances with the duration of the pregnancy. RLS is common during pregnancy, occurring in approximately 20% of pregnant women. The symptoms of RLS are also associated with the progression of the pregnancy. A small group of women may enter pregnancy with a previous diagnosis of narcolepsy (an extreme tendency to fall asleep whenever in relaxing surroundings). Snoring occurs with increased frequency during pregnancy, and previously diagnosed

sleep apnea may be made worse.

Prescribing medications in pregnant and lactating women poses some unique concerns over drug toxicities, both to the fetus and the breastfeeding infant as well as changes in the way certain drugs may be metabolized, requiring changes in dosing schedules. There is a significant lack of information regarding the effects of many sleep medications on the long-term health of infants and their mothers. The Food and Drug Administration (FDA) has attempted to provide some guidance on drug safety during pregnancy. However, much of the data is derived from animal experiments. Breastfeeding mothers present special issues such as the presence of maternal drugs in the breast milk; does the drug affect the production of milk; and is the drug able to be absorbed from the infant's GI tract.

Non-pharmacologic management of insomnia includes regular sleep-wake cycles, stimulus control, reduced fluid intake to avoid nocturia (peeing at night), and avoiding caffeine before bedtime. Cannabis is being used by an increased number of pregnant women as a sleep aid and as a treatment for nausea. Clear guidance on the use of cannabis in pregnancy is lacking, but studies have shown that cannabis use in pregnancy has been associated with pre-term birth and small-for –

gestational-age birth.

A complete list of drugs acceptable for sleep conditions, and ones that are harmful, are too extensive for this article and cannot be recommended but can be obtained from the FDA website. There are potentially recommended medications for insomnia and RLS. Some of the drugs used for RLS are teratogenic (cause fetal harm) and should not be used. For patients with narcolepsy, treatment needs to be individualized since many drugs used for treatment are teratogenic. The decision for treatment in narcolepsy is usually based on concerns about the severity of the narcolepsy. Some of these concerns include the risk of falls and motor vehicle accidents. The treatment for women with obstructive sleep apnea (OSA) remains mechanical with encouragement to comply with CPAP therapy. There is currently no recommendation for any drug therapy for OSA.

Sleep disturbances are common in pregnancy. The physician caring for a pregnant woman, as well as the sleep specialist, need a good understanding of the available safety data on drugs used for sleep disorders to better help reduce anxiety regarding medication use in pregnancy. | ✦



# ALTOONA LUNG SPECIALISTS

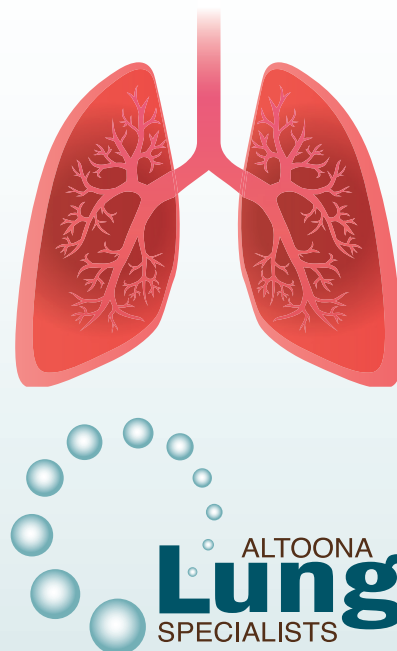
**T**he Altoona Lung Specialists team weathered a very difficult year during 2020, and continues to dedicate themselves to providing the best care possible to each and every patient who visits our practice.

2020 was a very difficult year for everyone, but no less so for the Healthcare Heroes who create the team of dedicated professionals at Altoona Lung Specialists, nor the patients they serve. Our team tries to balance the concern for each patient's health and safety by cancelling appointments and performing Telehealth visits when it isn't absolutely vital to see the patient in-person, and trying to convey the importance to those patients who must be seen, in securing CT scans for annual lung

cancer screenings and pulmonary function tests to insure that their lung disease is being maintained to the best possible degree in the event that they would have to deal with a COVID diagnosis.

We understand that many patients are afraid to go out in public due to the risk of contracting COVID; however, it is also important for them to continue to secure testing and medical treatment to insure that their health is the best it can be.

You can be assured that the professional and caring Altoona Lung Specialists Team will provide the very best treatment and customer service to each and every patient who visits our practice. | ✨



**Altoona Lung Specialists**  
**800 Chestnut Avenue**  
**Altoona, PA 16601**  
**814-946-2845**  
**thelungspecialists.com | f**

## Altoona OB/GYN Associates, Inc.

**Excellent Women's Care**

**Fertility to Postnatal Care,  
 We Are There With You  
 EVERY STEP OF THE WAY**

**"The use of tobacco products including cigarettes, smokeless tobacco and e-cigarettes during pregnancy is the most important modifiable risk factor associated with adverse maternal, fetal and neonatal outcomes."**

— Ryan J. Zlupko, MD



**Dr. Patricia M.  
Hoyne, MD**



**Dr. Liang R.  
Bartkowiak, MD**



**Dr. Ryan J.  
Zlupko, MD**



**Swathi  
Malepati, DO**



**Christina R.  
Carpenter, PA-C**



**Lora A.  
Steffie, CRNPP**

**Altoona OB/GYN Associates** provides a full range of obstetrics and gynecology services for women of all ages. Obstetrics covers your health needs from conception, through your pregnancy, delivery, and postpartum. Our gynecological services cover a broad range of women's reproductive health, including procedures, exams, diagnostics, and tests.

**814-944-5062 | 1701 12th Avenue, Suite A, Altoona, PA 16601**  
**Monday-Thursday: 8:00am - 4:30pm, Friday: 8:00am - 4:00pm**  
**www.altoonaobgyn.com | f**

# LUNG CANCER SCREEING IN THE TIME OF COVID

## How The COVID Pandemic Affected Lung Cancer Screening

Since the initial reports from the National Lung Screening Trial showed that regular surveillance of high risk patients with CT scans of the chest could improve lung cancer mortality, pulmonary physicians in particular, have encouraged their patients to participate in regular screening visits and CT scans. Keep in mind that this data was first rolled out in 2011, but patients are still having problems with insurance coverage for this valuable tool.

The COVID pandemic has placed additional hurdles on physicians and patients when it comes to diagnosis and treatment of primary lung cancer. Keep in mind that despite the pandemic, the usual problems have not gone away. Abnormal CT scans still exist, and so do undiagnosed nodules. Trying to find a way to interact with patients safely was one of the early issues. Many patients did not keep their follow up appointments, or postponed initial visits, for fear of contracting the coronavirus in offices and medical centers. Offices closed or limited patient contact in an effort to protect patients, and telemedicine became a common method of interaction. However, a phone or even a video visit, does not take the place of an in-person visit and examination, and nothing takes the place of a new or follow-up CT scan.

Scheduling patients for their imaging visits became more of an issue when hospital and health organizations closed or limited access to the out-patient radiology departments. Fortunately, at our facility having an in-house CT scanner allowed us to remain fully operational. Many organizations need to prioritize patients into at least 3 categories: High or Urgent, meaning studies were needed now; Moderate, meaning studies could wait several weeks or even months; and Low, meaning the studies could wait until the end of the pandemic. The assignment to a category was often subjective. The same sort of categorization applied to patients needing diagnostic tests. Generally, patients undergoing invasive tests for diagnosis will also be subjected to studies that will provide information about staging. The use of EBUS, or endobronchial ultrasound, is the most common study used for this purpose, although it may be combined with some type of navigational bronchoscopic study. All of these procedures require the patient to be placed under some type of anesthesia and can expose the physicians and nurses and exam room assistants to aerosolized COVID. Patients with lung cancer may also have concurrent COVID. Making sure the patient was COVID-free prior to any exam was an important consideration before scheduling.

Lastly, those patient who might benefit from a curative surgery needed to be identified and prioritized in the same way as mentioned above. However, being able to get a patient scheduled for a surgery during the pandemic depended on several factors, including the number of intensive care beds available for post-op care. During many intervals, the ICU's were stretched to the maximum with most, and sometimes all, beds being occupied with COVID patients in need of ventilator support. When patients could be admitted for surgery, families found that they were not allowed in to visit because of COVID concerns. Also to be considered was the demand for operating rooms and ICU beds for those patients with other serious problems such as cardiac surgery, trauma, and other life threatening issues.

Vaccines and better compliance with mitigation efforts will help to reduce the impediments to lung cancer screening and treatment seen over the last year. The next 3-6 months will help determine if we have controlled this pandemic. If you are high risk pulmonary patients, defined as smoking at least 30 pack years and are at least 55 years of age, do not delay an appointment for lung cancer screening. If you are someone who is already in a screening program, do not cancel or delay your usual appointment. You should contact your physician's office for instruction about their requirements for your visit and to give them any information about your contact with the COVID-19 virus. | [↗](#)



# Our Doctors



## George M. Zlupko, M.D., FCCP

Dr. George M. Zlupko is the senior partner and founder of Altoona Lung Specialists. He is the Director of the Lung Disease Center of Central Pennsylvania, which he founded in 2011. He also founded the Lung Disease Foundation of Central Pennsylvania.

Many of the current advanced procedures used locally in pulmonary medicine had their beginnings more than thirty years ago when Dr. Zlupko arrived in

Altoona to add knowledge, direction, and expertise to the critical care unit and respiratory care department of the, then, Altoona Hospital. He brought with him the techniques of fiber-optic bronchoscopy, followed by navigational bronchoscopy, and the new technique of Endobronchial Ultrasound most recently introduced by his son, Dr. Michael Zlupko.

Dr. Zlupko's mission has been to provide high quality pulmonary medicine services which would rival tertiary care facilities, close to home for more convenient patient care. ✦

## Timothy A. Lucas, M.D., FCCP

Dr. Timothy Lucas joined Altoona Lung Specialists in 2000. He received a Bachelor of Science Degree in Biology from the University of Pittsburgh. Dr. Lucas attended medical school, performed his internship, residency, and fellowship training, all at The Pennsylvania State University College of Medicine in

Hershey, Pennsylvania.

Dr. Lucas is certified by the American Board of Internal Medicine in Pulmonary Disease, as well as the American Board of Sleep Medicine. He enjoys the distinction of being a Fellow of the American College of Chest Physicians.

Dr. Lucas has privileges at UPMC Altoona and is the Medical Director of the Sleep Disorder Network in the Lung Disease Center of Central Pennsylvania ✦



## Alan J. Kanouff, D.O., FCCP

Dr. Kanouff received his education at the Pennsylvania State University spending his first two years in Altoona before finishing up at University Park. He completed his medical education at the Philadelphia College of Osteopathic Medicine. He performed his residency at Conemaugh Valley Memorial Hospital in Johnstown, Pennsylvania, and underwent his

pulmonary training at Allegheny General Hospital in Pittsburgh, Pennsylvania. He joined the Lung Disease Center of Central Pennsylvania in 2009.

Dr. Kanouff is certified by the American Board of Internal Medicine in Sleep Medicine and Pulmonary Diseases. He is also certified in Critical Care Medicine and Internal Medicine, and is licensed by the State of Pennsylvania as a Doctor of Osteopathy. Dr. Kanouff has the distinction of being a Fellow of the American College of Chest Physicians. ✦

## Michael C. Zlupko, M.D.

Dr. Michael C. Zlupko joined the Altoona Lung Specialists in 2013. He graduated summa cum laude with a Bachelor of Arts in Biology from Franklin and Marshall College in Lancaster, PA. Dr. Zlupko received his medical degree from the University of Pennsylvania School of Medicine in Philadelphia, PA. He performed his internal medicine residency at the University of Virginia in Charlottesville, VA and completed his pulmonary

and critical care training at the Cleveland Clinic Foundation in Cleveland, OH.

Dr. Michael C. Zlupko is Board Certified by the American Board of Internal Medicine in Internal Medicine, Pulmonary Disease, and Critical Care Medicine. He is licensed to practice medicine by the State of Pennsylvania with privileges at UPMC Altoona, Tyrone Hospital, Encompass Health Rehabilitation Hospital of Altoona, and the James E. VanZandt Veteran's Memorial Hospital. ✦



**The Lung Disease Center  
of Central PA**  
**800 Chestnut Avenue**  
**Altoona, PA 16601**  
**814-946-2845**  
**[www.thelungspecialists.com](http://www.thelungspecialists.com)**



## rezk medical supply

an AdaptHealth company



PAP machines & supplies, oxygen  
equipment & more!

**Your path to better sleep is here.**

☎ **Call us today! 866-646-6818**

🌐 [adapthealth.com](http://adapthealth.com)

# Altoona Lung Specialists' Team of HEALTHCARE HEROES

The Altoona Lung Specialists' team of Healthcare Heroes include Receptionists, Medical Secretaries, Medical Assistants, Radiology Technicians, a Nurse Practitioner, and Sleep Technicians, each of whom have gone above and beyond during this very trying year to dedicate themselves to the needs of our patients.

We would like to thank each of our team of Healthcare Heroes who have risked their own health on a daily basis to help our practice succeed every year, but especially during the pandemic.

**Thank you!**



THANK  
YOU

**Sherri Stayer**  
Practice Manager



THANK  
YOU

**Patti Bickley**  
Nurse Practitioner



THANK  
YOU

**Shirley**  
Clinical Supervisor



THANK  
YOU

**Rose**  
Clinical



THANK  
YOU

**Dena**  
Clinical



THANK  
YOU

**Lisa**  
Clerical



THANK  
YOU

**Carolyn**  
Clinical



THANK  
YOU

**Heather**  
Clerical



THANK  
YOU

**Josh**  
Clinical



THANK  
YOU

**Haley**  
Clerical



THANK  
YOU

**Kylie**  
Clerical



THANK  
YOU

**Samantha**  
Clinical



THANK  
YOU

**Jaleesa**  
Check-In Receptionist



THANK  
YOU

**Kayla**  
Check-Out Receptionist



THANK  
YOU

**Lindsey**  
Receptionist



THANK  
YOU

**Tina**  
Clerical, Sleep Disorder Network



THANK  
YOU

**Chris**  
Sleep Disorder Network

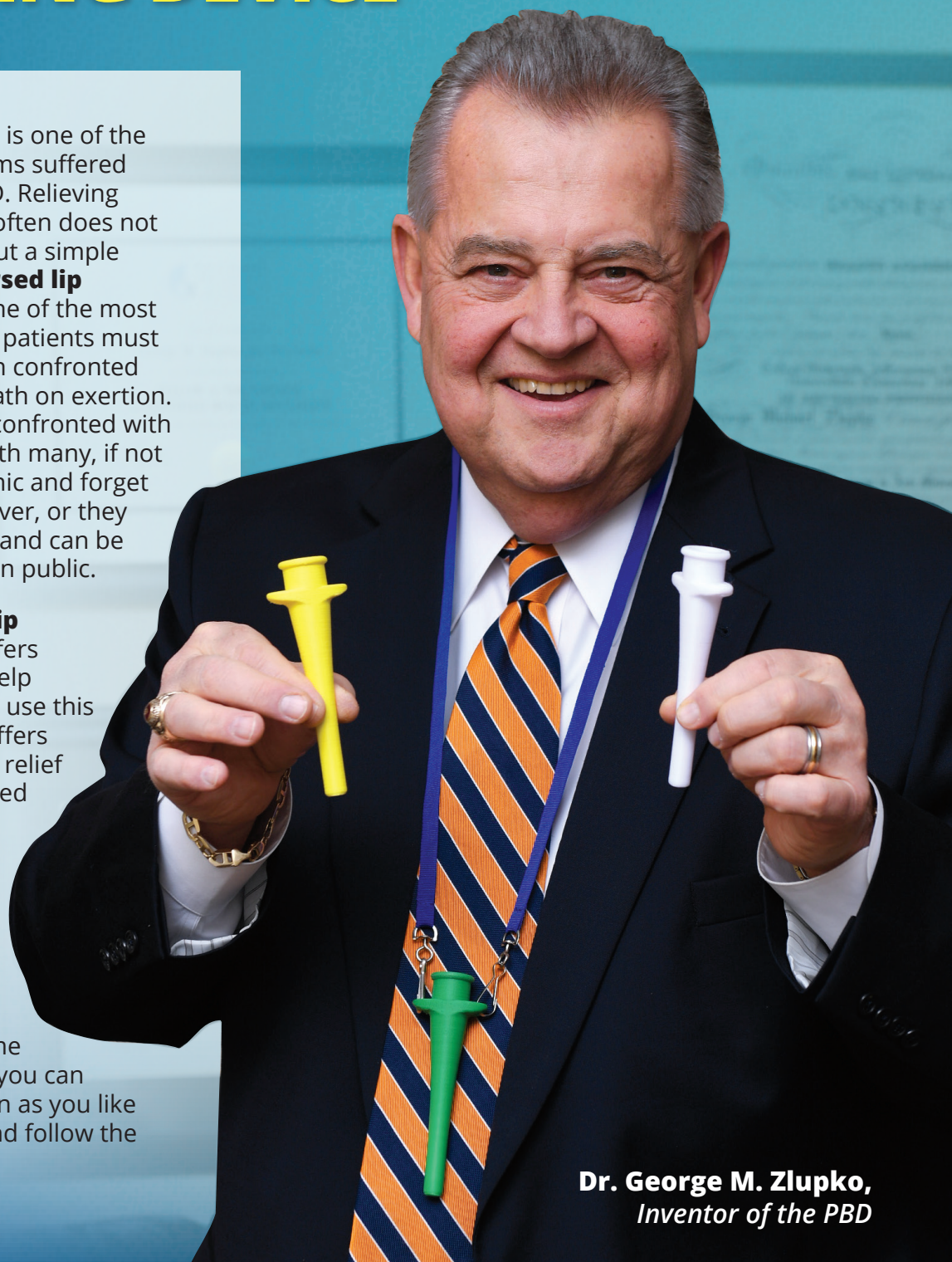


# *Don't reach for your inhaler, reach for your* **PURSED LIP BREATHING DEVICE**

**Shortness of breath** is one of the most difficult symptoms suffered by patients with COPD. Relieving this discomfort most often does not require medication, but a simple maneuver called "**pursed lip breathing**". This is one of the most important techniques patients must remember to do when confronted with shortness of breath on exertion. Unfortunately, when confronted with this shortness of breath many, if not most, patients will panic and forget this important maneuver, or they do not do it correctly, and can be embarrassed to do it in public.

The **PBD** or **Pursed-Lip Breathing Device** offers a unique method to help patients remember to use this technique. The **PBD** offers security, comfort, and relief when used as instructed in difficult situations.

You are encouraged to go to the website at **[pbd-copd.com](http://pbd-copd.com)** to listen to and see a brief video explaining the device and why it is helpful. Orders come with instructions and you can view the video as often as you like to help understand and follow the instructions for use.



**Dr. George M. Zlupko,**  
*Inventor of the PBD*

**Order your Pursed Lip Breathing Device today!**  
**[www.PBD-COPD.com](http://www.PBD-COPD.com) | Like us on **



# LUNG

DISEASE CENTER  
OF CENTRAL PENNSYLVANIA

Wheezing? Coughing? Shortness of Breath?  
Abnormal CT/X-Ray? Sleep Problems?

In-House Services: X-Ray, Pulmonary Studies,  
Oxygen Testing, CT Scanning, Sleep Testing

Timothy A.  
Lucas, M.D.,  
FCCP

George M.  
Zlupko, M.D.,  
FCCP

Michael C.  
Zlupko, M.D.

Alan J.  
Kanouff, D.O.,  
FCCP

*Can't sleep?*

**Maybe it's a sleep disorder.**

**Call the Sleep Disorder Network today.**

**What do you have to lose, except another sleepless night!**

