The Pediatric Pulmonology Division provides outpatient and inpatient care to children with respiratory and airway disorders. We take care of children with asthma, cystic fibrosis (CF), chronic lung disease of prematurity, complicated pneumonia, neuromuscular disorders, airway and lung malformations, aspiration syndromes, and pulmonary hypertension among several other breathing disorders. We strive to provide patient and family centered care through a team approach. Our team is made up of doctors, nurse practitioners, specialty nurses, respiratory therapists, social work and support staff.

Our pediatric cystic fibrosis program is accredited by the CF Foundation. Our CF clinic is a multidisciplinary effort between pediatric pulmonologists, pediatric gastroenterologists, pediatric endocrinologists, nurses, social work, respiratory therapists, nutritionists and child life specialists. We have an adolescent transition clinic to help children with cystic fibrosis develop independence as they move from the pediatric to adult cystic fibrosis team. Our CF Center is active in quality improvement and clinical trials of new therapies in order to provide our patients with the most up to date care. Our efforts were recognized by the CF Foundation when they awarded us with the 2014 Quality Care Award. More importantly, data from the CF Foundation shows that our patients are in the top 25% for nutrition and lung function.

We are committed to providing care to children with pulmonary issues as well as complex medical issues. For children who have airway and breathing problems requiring tracheostomy tubes, ventilators or other breathing devices, we have a special multidisciplinary clinic called the Tracheostomy and Ventilator Clinic. We have a Pediatric Aerodigestive Clinic for children who aspirate or have a significant airway problem. Both of these specialized clinics provide coordinated care and education from multiple providers in one day.

We offer several diagnostic procedures to help diagnose and treat children with breathing problems. We are able to perform flexible bronchoscopy, flexible laryngoscopy, pulmonary function testing and sweat chloride testing. We strive to explain the results with patients and their families in a way that promotes education and understanding of their illness.

Our Pediatric Pulmonology Division is patient and family centered in our approach to clinical care, teaching, advocacy, research and quality improvement.
The flu is caused by influenza viruses. These tiny organisms spread when people sneeze. The virus can last several hours on a surface or on your hands (if you don’t wash them), and if there’s an outbreak it is almost impossible not to be exposed. These viruses invade your nose and airways, and cause sneezing, coughing, sore throat, body ache and high fevers. The flu viruses can cause pneumonia and even death.

The good news is that there’s a very effective way to stop you from getting the flu. That’s to get vaccinated. Why do we have to get vaccinated every year? For many things we need to be vaccinated only every few years. The reason we need the flu vaccine so often is that the flu virus changes from year to year. So if you’ve got an infection or a vaccination one year, it’s not going to protect you from the flu the next year. Scientists and physicians have to figure out how the flu virus changes from year to year, and based on this, a different flu vaccine is recommended each year. The vaccine usually contains a mixture which will protect you against 3 or sometimes 4 forms of different flu viruses.

What leads to major break outs of flu like the “Swine Flu” we had a few years ago? That virus arose from genes of a human virus mixing with genes from a swine virus. This can happen because the influenza viruses are able to infect human and pigs (and birds). Some of the genes from that virus originally came from the major flu pandemic that occurred in 1918, and killed millions of people world-wide (“The Spanish Flu”).

So far it looks like we’re gearing up to face a regular flu season. That means anyone with respiratory disease should get vaccinated. There will still be plenty of other viruses, other than the flu virus, circulating this winter. That means you can still get colds and coughs. The best way to protect yourself from these other viruses is to stay away from people when they are sick, and to be careful about handwashing.

Stay healthy this winter!

Interested in Being a Research Volunteer?

Things to Know: The Vermont Lung Center is responsible for making sure you know what is expected of you in regards to the research study:

1. Once the study is explained to you, you will be asked to read and sign an “Informed Consent”. This form is designed to explain everything you need to know about the study.
2. Studies may be therapeutic (involving observation of lung function). However, The Vermont Lung Center can make no claims that your involvement in a research study will improve your condition.
3. Compensation may or may not be provided to you for your involvement in a study. If compensation is provided, it is meant to cover your time and expenses incurred—it does not constitute employment.

If you are interested in volunteering for a research study, please call us at (802)-847-2193
Currently Recruiting for the following studies:

**ASTHMA**

**APR (Asthma Patient Registry)** Volunteers: Asthmatics ages 12 +, What: A registry to identify patients especially specific subgroups (e.g. smokers, elderly, and demographics) to contact for future studies, and develop future research studies.

**NAC: Effects of BMI On Allergic Responses**
Volunteers: Asthmatics and Healthy Controls ages 18—65 yrs / 2-3 visits / Compensation: Up to $200

**Pfizer: Biomarkers In Uncontrolled Asthma**
Volunteers: Asthmatics 15-70 yrs. using Advairr, Symbicort, Dulera, or Spiriva / Visits: 3-4 / Compensation: up to $300

**UVM MG: Airway Compliance In Relation to BMI In Asthma**
Volunteers: Asthmatics and Healthy Subjects 35-55 yrs / Visits: 3-4 / Compensation: up to $300—$600

**IDIOPATHIC PULMONARY FIBROSIS (IPF) STUDIES**

**Roche (A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Assess the Efficacy and Safety of Lebrikizumab in Subjects with IPF)** Volunteers: Age 40 and over, with IPF -- Up to 34 visits over a 2 year period -- Compensation for travel over 100 miles

**Fibrogen-067 (A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of FG-3019 in Subjects with IPF)** Volunteers: Age 40-80 years inclusive with IPF -- Up to 38 visits over a 2 year period -- Compensation: up to $3,800

**CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)**

**VHIP (The Effect of Pulmonary Rehabilitation on Ventilation Heterogeneity in Patients with COPD)**
Volunteers: Patients enrolled in the University of Vermont Medical Center Pulmonary Rehab program -- 2 Visits

**EMPROVE: A Prospective, Randomized, Controlled, Multicenter Clinical Study to Evaluate the Safety and Effectiveness of the IBV Valve System for the Single Lobe Treatment of Severe Emphysema**
Volunteers: Patients diagnosed with Severe Emphysema -- Please call Sara Ardren at 802-656-7953 for more information.

**ACE (Anxiety and COPD Evaluation)**
Volunteers: Patients diagnosed with COPD -- 2 Visits -- Compensation: up to $100

**CYSTIC FIBROSIS**

**VX 809-109: A Phase 3, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Efficacy and Safety of Lumacaftor in Combination With Ivacaftor in Subjects Aged 6 Through 11 Years With Cystic Fibrosis, Homozygous for the F508del-CFTR Mutation.** 11 study visits over 8 months -- compensation: up to $1,187

**Anthera: A Phase 3, Randomized, Open-Label, Assessor-Blind, Non-Interiority, Active-Comparator Study Evaluating the Efficacy and Safety of Liprotamase in Subjects with Cystic Fibrosis-Related Exocrine Pancreatic Insufficiency.**
Volunteers: 18 years and older, 10 visits over 6 months, compensation: up to $2,925

**PULMONARY ARTERIAL HYPERTENSION**

**DLCO-PAH (Changes in the Diffusion Capacity for Carbon Monoxide (DLCO) in Response to Vasodilator Therapy in Patients with Pulmonary Arterial Hypertension)**
Volunteers: Patients with Pulmonary Arterial Hypertension -- 3 Visits -- Compensation: up to $150
Vermont Lung Center received a kind donation to share. One of our COPD subjects who uses oxygen, decided to make herself a customized oxygen backpack. She had so much fun making it, and loved the comfortable fit, and thought others like herself would be happy to have one. She decided to make a variety of colors of the quilted backpacks and gave Vermont Lung Center some to give to our study subjects who may appreciate them. Our first subject, who gratefully accepted this wonderful gift, was Dave. His comment was “this feels so much better!” Check out the camouflage material! Thank you to all of our clinical research volunteers. You are helping doctors and scientists to understand pulmonary illnesses and improve in the care of patients.