Good Days…Bad Days…The Dog Days of Summer

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When most people think of the term “Dog Days of Summer,” they are picturing very hot and humid days when the sun rises early and sets pretty late. In many parts of the United States the temperatures are in the 70’s and 80’s before 10:00am. We all know that means it is going to be a tough day to get through for all of us, but especially patients with lung disease. In March alone of this year (2012) 15,000 high temperature records were broken across the U.S.

Actually the ancients who followed the stars and constellations were the first to use the term. The Dog Days of Summer are roughly defined as those days between early July and early September and primarily in the Northern Hemisphere. This is generally the hottest and muggiest part of the season, and commonly a period of stagnation and inactivity.

Back in the olden days, there were no towns or cities of any size. No smog either, and so various groups of people began to “connect the dots” to begin to draw images in the sky by “connecting the star dots.” And so the 88 constellations were identified. Interestingly (or maybe not) the Chinese saw different images than the Native Americans of the plains did, as did the inhabitants of northern Europe.

The brightest of all stars in the sky is Sirius. Sirius is also known as Canis Major or the big dog. It is so bright the Romans actually thought it added heat from the Sun to our earth. From early July into September, Sirius rises and sets with the sun. As July dragged on into August and the days got hotter and more humid, our ancient ancestors began calling this period of time as the “Dog Days” after the Dog Star. Although today’s night sky is not exactly the same as viewed by the Romans, in modern times the Dog days typically occur between July 3rd and August 11th. We now know of course that the Dog Days of summer are not due to the addition of Sirius’s heat to our own suns, but rather the change in earth’s axis that occurs at that time of the year.

So how are the “Dog Days of Summer” related to our topic of Good days…Bad Days? It is pretty widely known that some patients with Arthritis or other autoimmune disorders can tell when a weather front is moving in. Whether it is the barometric pressure, temperature, humidity, or some other factor is not exactly known, but many of these patients swear by
their predictions. Patients with Chronic lung disease also get a bit prescient but in a slightly different way. Chronic lung patients talk about “good air days” and “bad air days.”

No one seems to be able to predict when these good and bad air days may show up. They do seem to come out of nowhere, and usually when things are moving along pretty well for the patient. For some patients with Chronic lung disease, these bad days may cause some fear and anxiety. Sometimes it is hard for a patient to distinguish a bad air day from the start of an infection like a bronchitis or pneumonia. Some patients may be afraid of a hospitalization, or a general worsening of their disease.

Well, it turns out we do know quite a bit about the weather (or environment) and patients with lung disease. There have been dozens of peer-reviewed papers over the years describing the effects of different weather patterns and coping with lung disease. Let’s review some of the more common environmental factors that can affect your breathing.

**Temperature**

Most of us know that a normal body temperature is 98.6 degrees F. Our body works full time to maintain this normal temperature. When we are exposed to higher temperatures, we have to work a bit harder to stay cool. Working harder increases our demand for oxygen, and if you have lung disease you are already starting out with a deficit. On the flip side is when the air temperature is very low. Irritant receptors in our airways react to cold air by constricting the airways. A good percentage of asthmatics do quite well until they must go out and breathe cold winter air. Exercised induced asthma is a very real threat. Wearing a mask or scarf over the mouth and nose can prevent this form of asthma to a large extent.

The respiratory system does not respond well to very low or very high temps.

**Humidity**

Many, many patients complain of increased shortness of breath on days with high ambient humidity. Patients typically say the air they are breathing feels heavy or difficult to move in and out. This may be explained by the fact that as humidity increases so does the density of air. This can increase the resistance to the movement of air in and out of your lungs. The result is an increase in the work of breathing and the patient will simply feel
short of breath. Another possibility that should not be overlooked is that in very humid environments the incidence of many known airborne allergens increases. It is possible that there could be an increase in molds and other organisms that might then put the patient at risk.

High humidity days can make breathing more difficult for patients with lung disease.

**Barometric pressure**

Some patients are exquisitely sensitized to changes in barometric pressure. Although uncommon, if the barometric pressure really drops as we sometimes see when a big storm passes, the barometric pressure can drop as much as 40 millimeters. This means that the pressure of oxygen that is available to the lungs is also decreased, and although small, in certain patients it just might increase their shortness of breath.

A simple wall barometer can warn of upcoming changes in the weather.

**Other Environmental Irritants**

Since air pollution has been a topic of conversation for many years now, we know that both indoor and outdoor pollution can have significant effect on patients with lung disease. Increased hospitalizations for respiratory patients have been documented following air inversions. There is very little you or I can do about outside pollution in your immediate town or city, but you can do a great deal to cut down on indoor pollution.

Although Americans love their pets, there may be problems with allergies to specific pets. It is easy to overlook the simple things like sprays, molds, dust, various cleaning solutions,
or anything else (even perfume) that might produce a certain smell, fume, or mist. There is even a whole syndrome called “Sick Building Syndrome.”

Are you sick or is your building sick…Radon…Asbestosis…Molds….

Many patients with chronic lung disease report that they can breathe a little easier by having extra air circulating in their immediate environment. Something as simple as a fan blowing air right at their face. In addition to cooling the patient down, it may even be the air blown by the fan actually aids the total amount of air the patient can breathe in, thereby reducing shortness of breath. Many patients can be seen during the warm summer months with small, battery powered personal sized fans for just this purpose.

patients enjoy the breeze on hot, humid days. A couple of battery powered fans

So what can you do about your environmental conditions? Generally speaking there is really nothing YOU can do about your local weather. But here are a few simple steps that can help you to at least influence your own environment.

1. Although you may be a very “adherent” patient, make sure you become even more adherent and take all your ordered medications and oxygen exactly how it is prescribed by your doctor.
2. When the weather turns very hot or very cold, arrange your schedule to go out when the weather is most moderate. Try to beat the hot sun on summer mornings, and perhaps put off activities until the cooler evening hours. When winter comes, try to get your errands run in the afternoon when it tends to be a bit warmer.
3. Since early in 2012 most of the United States has been under extreme drought conditions. Try to stay in air-conditioned rooms as much as possible as air conditioners do remove humidity from the air as it cools it. Be aware of special programs and agencies that are set up to provide services to the elderly in the community.
4. When you leave the house during the cold winter months, be ready to wear a scarf over your mouth and nose to warm the air you are breathing in. Cold air masks are available from a variety of pharmacies.

5. Many patients with lung disease like to travel to someplace with a more favorable climate to get through periods of difficult weather. Before you make any permanent plans to move, try going to the new area you want to live for a bit of an extended time. Many patients over the years have been disappointed that AFTER moving they didn’t get the expected improvements in their breathing. This may be complicated by the fact that they are now away from friends and family, and the rest of their support system.

6. This may seem so obvious that it doesn’t need to be listed, but for God’s sake don’t smoke!

7. Avoid wood-burning stoves or fireplaces.

8. If weather extremes prevent you from exercising outside your house, you can still exercise indoors.

9. Make sure you have your rescue inhaler with you if you do exercise in cold weather. As I said earlier, the cold irritant receptors located in the lung can be negated to a certain extent with your rescue inhaler.

10. One last thing you can do especially on hot and humid days is to drink plenty of fluids. This can be water, juice, ice tea, even popsicles. Fluids affect electrolyte balance in the body and that is important to all of us.

Don’t let the dog days of summer get you down. Maybe we can all take a lesson from the dogs themselves!