



David E. Simai M.D.

Board Certified Pediatrician

660 Central Avenue, Suite #3
Cedarhurst, New York 11516
Tel. (516) 374-2228
Fax. (516) 374-2044
Email: DrSimaiPediatrics@Gmail.Com
Website: www.DoctorSimai.com

Simple Advice That Will Simplify Your Life - Part II To Humidify or Not to Humidify

Dear Readers,

In effort to help you deliver optimal care for your loved ones, I would like to share some important information on the safety of humidifiers.

First, a short story that is vividly engraved in my memory. It was 10 years ago, when I started practicing medicine in Kiryas Joel, I was asked to write a prescription for a humidifier by a nice parent. I gave her the prescription and was about to leave the room when she remarked: “doctor, I would like to ask for a *warm vaporizer*, the cool mist humidifier just doesn't work”. I told her that as far as I know, cool mist humidifiers are *more effective* than the warm vaporizers, and I added that warm vaporizers could easily cause burns to the infants, if they mistakenly pull on the cord or if a toddler passes her hand over the hot mist even momentarily. But the mother insisted and I gave in.

A week later, I entered into an examination room and noticed that the mother had a large, thick white dressing wrapping her entire hand. I looked up and recognized the face, it was the same mother who insisted on the warm vaporizer. I inquired as to what happened to her hand, and my heart almost dropped. She recalled how she was sitting down in her baby's room, she happened to extend her arm sideways when she felt scalding steam burning her skin. She forgot that the vaporizer was placed in the spot right next her, and inflicted a *third degree burn* over a significant part of her hand.

I think of this story *every time* a discussion about vaporizer occurs at my office. Thanks to that lady, many parents were persuaded to stop using the dangerous machines, but my heart still aches for this regrettable story that I was unfortunately involved in.

A few months ago, I stopped advocating the use of *cool mist humidifiers* for several reasons:

1. Most units sold are small and do not significantly change the humidity in small rooms, especially if the doors open and close throughout the night.
2. My kids' carpets used to get very wet from these machines, and I noticed that when we

renovated their rooms, there was mold growing on several walls.

3. Humidifiers have to be cleaned *once a day* to ensure that they do not spread any germs or molds, a task that is very burdensome on our already overworked parents in our neighbourhood.

When patients asked me what I suggest instead of humidifiers, the usual reply was: open the window in your room a few inches and you will feel the difference. Did you ever wake up with an irritated, dry scratchy throat and wonder why you felt all the pain without having strep or flu symptoms? It may turn out that your room is “too warm for comfort”. I advocated lowering the thermostat at home to a cool 69-71 degrees (Fahrenheit). My litmus test to discover if the temperature is set to high in the house is the following question: do you feel comfortable walking around the house without a sweater? if the answer is yes - your home is too warm. I remind parents that they should put those expensive sweaters they purchased to use while its cold.

Recently, news from Israel added more power to my opinion. Israel’s Pediatric Society published a statement authored by leading committee members (3 Leading Pediatric Pulmonologists and one Intensive Care physician) that warns against the use of humidifiers, *both cool and warm*.

In addition to quoting several articles that point to the inefficiency of the humidifiers in treating common colds, croup and even bronchiolitis, the statement warns of very dangerous findings.

Recently, four young patients in Israel contracted the dangerous disease known as **Legionnaires Disease** - causing severe respiratory failure and subsequent septic shock. *Legionella*, the bacteria responsible for Legionnaires disease grows in moist places, like air conditioning units and humidifiers. It was first described after an outbreak of pneumonia at a Bellevue-Stratford Hotel in Philadelphia, in 1976. The hotel was hosting the American Legion Convention and hence the name Legionnaires. Of the 182 cases, 29 died subsequently.

The Israeli cases:

- In 2013, a healthy toddler contracted the disease after use of a cool mist humidifier in her room.
- In the same year a Legionnaires outbreak was reported after being exposed to a humidifier in a newborn nursery.
- In 2008, an infant was prescribed a cool mist humidifier for the treatment of Croup. He was subsequently hospitalized with severe respiratory distress, and eventually expired from respiratory failure. Cultures of the humidifiers were performed by the Israeli Department of Health and confirmed that all the cases were caused by Legionella.

While these are rare occurrences, the authors of the article feel that using a humidifier poses more risk than benefit. This news were convincing enough to motivate me to dispose of the old nebulizer tucked away in my attic.

When my own kids come down with the croup, we dress them up in extra warm pajamas and use heavier blankets (for older toddlers that could handle heavy blankets, not infants!!!). Then, we proceed to open their windows. Each room has its own humidity requirements and sometimes I find that a window needs to be *almost completely open* for the child to stop barking.

Alternatives to opening windows wide open are:

- Use of steam showers.
- A quick walk outside.
- When all fails, a dose of oral prednisone can be prescribed by your doctor.
- If you notice signs of respiratory distress, your child may need to be seen urgently at the Emergency Department.

Kids in respiratory distress show chest retractions, nasal flaring and have very persistent coughs - I will try to upload videos of children in respiratory distress to my website soon - visit www.doctorsimai.com to check on those. Every parent should be able to tell when their children are struggling to breath and when they are at their baseline, normal pattern. A good way to monitor breathing is to simply observe the chest area when you change your infant's clothing. You may notice that your infant breathes a little faster than you at rest, which is totally normal. Just as a reference, adults normally take 12- 20 breaths per minute, toddlers take 20-30 breaths per minute and newborns take 30-60 breaths per minute.. Having said that, with G-d's help, I have not admitted any patients with the croup in more than 6 years and most of my patients do not end up using oral prednisone for the croup.

I hope this advice brings you and yours quiet and restful nights. Remember my following rhyme:
If you so care for your tender kids' nares, please dare to give them some fresh air.

Sincerely,

David E. Simai M.D.

To view this or previous articles, please visit my website at www.doctorsimai.com