

Children's Environmental Health Center of the Hudson Valley

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CHILDREN'S ENVIRONMENTAL HEALTH CENTER OF THE HUDSON VALLEY

PROTECTING CHILDREN AGAINST ENVIRONMENTAL THREATS

www.ChildrensEnvironment.org

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Humidifiers and Dehumidifiers**

HUMIDIFIERS AND DEHUMIDIFIERS

Humidity is the amount of water vapor in the air. The season, weather, and where you live can all affect the humidity level inside and outside your home. It is important to talk with your doctor before using a humidifier if your child has allergies or respiratory diseases. Humidifying the air can be helpful, but humidifiers can be harmful if you do not care for them or use them properly

In the summer months humidity levels are higher. High levels of humidity in your home can make it feel stuffy. Condensation on walls or other surfaces can trigger growth of harmful organisms, dust mites, and trigger allergy and/or asthma flare-ups. The winter months bring lower humidity which can lead to dry eyes, dry skin, dry throat and dry sinuses.

Ideally, the humidity level in your home should be between 30 -50%. Wondering what the level is in your home? It is very easy to find out! You will need to purchase a hygrometer which can be found in hardware stores, department stores, or online at low cost. You should monitor the humidity level in your home if you decide to use a humidifier.

There are several types of humidifiers. Central humidifiers are built inside your home's heating and air conditioning system. Ultrasonic humidifiers are very quiet and work with an ultrasonic vibration. Impeller humidifiers use a rotating disc. Evaporators force air through a wet wick or filter. These devices all create a cool mist. Steam vaporizers use electricity to heat up water to produce steam. This type of vaporizer should be avoided if you have children.

If the humidity in your house is too high, there are several steps you can take to help lower it. First use your air conditioning, central or a window unit. A dehumidifier may be needed. These devices collect excess water in the air and deposit it into a reservoir. Often these are used to dry out damp basements to avoid growth of mold.

Dirty reservoirs and filters can quickly lead to contamination with harmful bacteria and mold. If not taken care of immediately, even better prevented, these bacteria and mold spores are spread into your home as you run the humidifier. These organisms in your air can lead to even health people developing flu-like symptoms, allergies, and even lung infections.

Maintaining your humidifier to keep it free from growing harmful organisms requires you to be vigilant. You must follow the recommendations of the manufacturer.

These tips can help you keep your humidifier clean.

- 1) Clean your humidifier every 3 days – always unplug humidifier before cleaning. Remove any mineral deposits (white film) on the tank or other parts. Use hydrogen peroxide, white vinegar, or bleach.
- 2) Always rinse the tank well after cleaning – this keeps chemical residue from remaining and being dispersed into the air
- 3) Change the humidifier water often – don't allow film or deposits to develop. Empty and dry the reservoir often and fill with clean water
- 4) Use distilled or demineralized water – this water has a much lower mineral content than tap water. If using tap water you may see a fine white film or powder on your furniture. If your manufacturer recommends it, use demineralization cartridges or filters
- 5) Change filters regularly
- 6) Clean and dry thoroughly before storing and again when preparing for use next season
- 7) Consider replacing older humidifiers. Over time deposits develop that are difficult to remove. These deposits encourage bacterial growth

Some devices have a built-in hygrometer. You can set the hygrometer for the humidity level you desire, and the humidifier will target your selected number. It is important to measure humidity levels once you start using a humidifier. Too much humidity can be as much of a problem as too little humidity. If there is a person in the household with respiratory or allergy problems, targeting their bedroom is a good place to start humidification.