



The Independent

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PRESIDENT'S MESSAGE

Greetings!

"The plumber protects the health of the nation".* Sound familiar? We are sometimes remiss about pointing out how important our plumbing trade is to our nation's health and well being. It is well known that only the bad news travels. It is really tough to get a headline that reads "Nobody got sick this year from water borne diseases"! We have come to expect this to be a fact, and rightly so. However, the past couple of weeks the local newspapers have brought our attention to some cases of Legionnaires disease, with two possible deaths! The IMPW October, 2004 meeting was held at Miraggio's in Yorktown, and was sponsored by Rathe Associates with a presentation by the Cash Acme representative. The program addressed this very problem. We had examples of situations that were potential hazards along with solutions to these problems. The attendees received valuable information applicable to today's systems. See the article in this issue with excerpts from The Cash Acme web site.

It is worthwhile to get to these meetings. The information garnered is more valuable than you will get anywhere else. Plus, you will get the combined experience of your peers and how they handled similar situations making it worth the effort. This month's presentation by Bob O'Rourke is a case in point. We also have a special guest this month, Bob Dapice, Chief Plumbing Inspector of White Plains (see "SPECIAL GUEST" this issue).

See you at the next meeting – May 19, 2005, 6:30 PM @ Sir John's Restaurant.

Respectfully,

Jim DeMaria

*Note to our friends, American Standard ran a promotion that most plumbers have been exposed to with this statement as a theme

**THE NEXT
MEETING
OF THE
IMPW IS
SCHEDULED FOR**

**Thursday, May 19th
at 6:30 P.M.**

AT:

**SIR JOHN'S
RESTAURANT
915 North Broadway
North White Plains, NY**

**Call Mrs. Wiggins to
RSVP
(914) 337-0982**

Hot Water Temperature, Scalding, and Legionnaires' Disease

Hot water temperature and its impact on the incidence of scalding and Legionnaires' disease is a hot topic in the industry at the moment. The issue is being discussed at Plumbing Code hearings and not a month goes by that the subject is not mentioned in the trade magazines. We have assembled a range of information here related to the issues. We hope you find it interesting and informative.

Scalding Facts

- Destroying the bacteria that causes Legionnaires' disease requires raising the temperature of water to at least 140° (60° C).
- But, at the temperature 140°F (60° C), water can cause third-degree burns in children in one second and adults in five seconds.
- The U.S. Consumer Product Safety Commissions states that approximately 3,800 injuries and 34 deaths are directly related to dangerously hot tap water in residences (The National Safe Kids Campaign lists the number of scalding injuries as high as 6,500).
- The Answer to preventing both Legionnaires' disease and harmful water temperatures is to store the water at a high temperature and temper it to a safer temperature before distribution to the fixture.

Legionella Facts

- Legionnaires' disease acquired its name in 1976 when an outbreak of pneumonia occurred among persons attending a convention of the American Legion in Philadelphia.
- The bacterium is spread through inhalation, which can occur while showering, washing or drinking the water.
- An estimated 8,000 to 18,000 people get Legionnaires' disease in the United States each year (5%-30% of the cases are fatal).
- Legionnaires' disease can cause fever, chills, and a cough, which can be dry or may produce sputum. Some patients also have muscle aches, headaches, tiredness, loss of appetite, and, occasionally, diarrhea. Legionella may also cause cases of pneumonia that may be difficult to diagnose.
- Improved design and maintenance of cooling towers and plumbing systems to limit the growth and spread of Legionella organisms are the foundations of preventing the disease.

Limitations of the Water Heater

- The thermostat of a water heater is a static control device intended only to allow the heater to perform its intended function as a hot water generator and storage device.
- The thermostat can be "set" with an accuracy of $\pm 5^{\circ}\text{F}$ ($\pm 3^{\circ}\text{C}$) at best.
- The difference between the "off" and "on" points of the water heater can be as much as 15°F (9°C), resulting in decreased efficiency.

Ideal Conditions for Legionnaires' Disease

- Legionella Pneumophila, the bacteria that causes Legionnaires' disease, thrives in warm, stagnant water.
- A water temperature of 120°F does not kill the bacteria; a minimum temperature of 140°F is required.
- A water heater set at 120°F can contain water as low as 100°F.
- To eliminate the bacteria, several steps need to be taken, including eliminating dead-legs and system flushing. But, without a storage temperature of 140°F, all other steps cannot solve the problem.
- In a recent test, 24% of a 21-family test group was found to have Legionella bacteria in their home water.
- A combination of new and old research now suggests that the bacteria may thrive in residential hot water pipes, and the water supply used in residential homes may be directly responsible for 20% of Legionnaires cases.
- Bacteria in natural water sources (not unlike those used by residential dwellings) do not undergo the processes of filtration and chemical disinfection that municipal water supplies go through. Instead, natural water sources must be treated by the private owner, a process which is often inconsistent or incomplete.

How the Issue is Being Addressed Around the World

- Several countries around the world, including many in Europe, have adopted regulations requiring water to be stored at 140°F or higher and delivered at 120°F or lower.
- The aggressiveness with which countries have addressed this issue indicates the importance of water storage safety.