**Chet Root is Red All Over**

**Challenge:** Chet Root, the Head of the metal casting group at Anaconda American Brass in Waterbury has come down with a rash. The rash is from his neck, to his ankles, to his wrists. He has had it for a month and has gone to four doctors and there is no Diagnosis. Chet cannot sit, lie down, or even walk.

**Time:** December of 1973

**Questions:** What is wrong with Chet? What happened to him?

**Background:** The Waterbury casting shop consists of many 10,000 pound melting furnaces. Their average temperature is 1900 degrees F. There are many copper alloys produced and the metals utilized include copper, zinc, lead, cadmium, tin, silicon, and nickel.

There is no heat in the casting shop. In the summer all of the windows are open, and there are hoods over the furnaces exhausting any metal fumes. In the Fall, on or about November 1, the windows are closed in order to keep the heat from the furnaces inside. When this happens, for one day everyone in the shop comes down with metal fume fever, which lasts one day. Afterward, everyone is acclimatized and all goes well. The windows are reopened on or About April 1.

**Conclusion:** After a ten-minute conversation over coffee, the problem was

 solved. The rash was gone after 2 days.

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