# **FEATURE**



An old Britains ambulance and medical personnel symbolize how sometimes toy figures need first aid.

# First Aid Tips for Your Toy Figures

The Toy Soldier Museum's James H. Hillestad offers expert advice on how to protect a precious collection from all the mortal enemies of metal soldiers and civilians

**TEXT AND PHOTOS:** JAMES H. HILLESTAD

oy soldiers prefer an environment just like that preferred by those who collect them – one that is clean and of moderate temperature and humidity. Even though figures are made of seemingly durable metal, they can be damaged by excessive humidity, high temperatures and chemical reactions.

## **BATTLING LEAD ROT**

Unlike people who collect them, however, toy soldiers are subject to lead oxidization, more commonly referred to as "lead rot." Impure metal mixes and the absence of a sealing primer sow the seed of the problem, which blossoms in a humid atmosphere.

Lead rot is readily detected by pockmarked figures with white flakes at their bases. The flakes are actually metal residue – a figure with lead rot is literally decomposing before your eyes.

What can you do? First and fore-

most, reduce humidity. A dehumidifier will help in this effort. A humidity gauge will monitor success – the optimum range is 40 to 60 percent.

The good news is that lead rot is seldom found in figures made after 1960. Better quality control of the metal mix and lower quantities of lead in the mix have contributed to this happy state of affairs.

Other dangers lurk, however.

"Steer clear of display cases made of oak. Oak exudes tannic acid, which can cause lead rot."

# STORAGE WARS

If you need to keep your figures in storage, wrap them in lightweight paper, such as facial tissue. Place them in cardboard boxes in a dry area.

Do not use plastic wrap nor put them in airtight containers because any trace of moisture would be sealed in with your figures.

In addition, do not put your figures directly into the foam cutouts that they came in. Paint and foam both can contain petroleum products which can interact over time. In fact, paint can transfer to the foam, then a once glossy figure can mysteriously develop a matt finish.

If you wish to use the original packaging, wrap the figure with a layer of tissue before inserting it into the cavity.

# FIGHT AGAINST DUST

Keep your collection as dust-free as possible. A display of figures covered with dust looks neglected, not attractive

Cosmetics aside, dust is in it-

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TOY SOLDIER & MODEL FIGURE

# **FEATURE**



These 80-year-old figures suffer from metal oxidation (lead rot), a condition exacerbated by high humidity.

self harmful. It is made up of many microscopic components, including pollutants such as sulfur and carbon.

Also, dust is hygroscopic – meaning it absorbs and holds moisture from the air. A dust-coated figure is therefore wrapped in a mantle of dampness, which can encourage corrosion.

# **KEEP TROOPS HAPPY**

For displaying figures, avoid cases that hermetically seal in your figures. Lucite boxes, glass domes and cases with tight-sealing hinged doors are not recommended for the same

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reasons you should not store your figures in airtight boxes.

Choose a case with sliding glass doors. The small space between the doors where they meet and overlap allows good air circulation. You'll never have to guess what the environment is within the case, since you're sharing it.

Steer clear of display cases made of oak. Oak exudes tannic acid, which can cause lead rot.

Oak is a popular wood for the so-called barrister bookcases: glass-fronted bookcases which were popular at the turn of the last century. Many old figures have been lost this way.

### MUSTERING LIGHTING

If you can't see your figures, you're missing a great deal of enjoyment.

If you display figures in a case (thus eliminating dust and unwelcome handling), use fluorescent tubes as a light source. Because they are cool, they will not damage the paint on your figures.

Finally, don't worry about handling your figures. The oils on your hands are good for them. And handling your figures is good for you. Have fun!



# ABOUT THE WRITER

James H. Hillestad is the proprietor of The Toy Soldier Museum in Cresco, Pa., USA.



Paint on a figure has transferred to the packing foam while in storage.



Writer Jim Hillestad in his museum, where display cabinets with sliding glass doors let toy soldiers and model figures "breathe."

TOY SOLDIER & MODEL FIGURE 25