

# What's New with Pressure Treated Lumber

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The pressure treatment of wood began more than 130 years ago when railroad builders needed a strong and resilient crosstie that wouldn't rot or be destroyed by termites. The first wood preservative was creosote which is still the preservative of choice for railroad ties.

Another type of wood preservative is pentachlorophenol, also called penta. Penta is used to protect utility poles—more than 50 percent of utility poles are treated with penta. Penta is a hazardous material, it

is now unavailable to the general public, but people may find old containers of penta in their garage or basement. We encourage Lancaster County residents to bring this and other old pesticides to the Household Hazardous Waste Collections (see back page for schedule).

Many people are familiar with green Chromated Copper Arsenate (CCA) treated wood. It has been widely available since the 1970s; literally millions of decks have been built of CCA-treated wood. It is very resistant to termites and decay, but because arsenic is a known carcinogen, this wood will not be available for residential use

after December 2003.

The decision to phase out CCA-treated wood for residential structures has people asking what to do with existing structures made with this material. The EPA does not suggest tearing down structures made of CCA-treated wood. According to the EPA, people should take common sense precautions, especially when it comes to children. Kids should wash hands after playing on structures and keep food from direct contact with CCA-treated wood.

Some non-arsenic substitutes for CCA-treated wood include:

**Alkaline Copper Quater-**

**nary (ACQ).** This treated wood has been used successfully for more than 10 years and has the same green look as CCA-treated wood, but does not contain arsenic or chromium. It has been found to have performance characteristics similar to wood treated with CCA. Preserve®, Preserve Plus®, NatureWood® are brand names for ACQ pressure-treated wood.

**Copper Boron Azole (CBA).** CBA is a copper-based preservative with an organic fungicide. The treated wood is a dark honey brown color and turns a silver-gray after it weathers. Wood products treated with Copper Azole have

been used successfully since 1992. Wolmanized Natural Select™ is a brand name for CBA-treated wood.

**Plastic and Composite Materials.** There are two types of lumber products made from recycled plastic. One is 100 percent plastic. The other type is a composite material made from recycled plastic and waste wood fiber, like sawdust. Plastic and wood composite lumber need no maintenance or sealing and do not rot, chip or warp. They are also impervious to insects. Composite products have guarantees ranging from 10 to 50 years.

## WEST NILE VIRUS NEWS

### West Nile Virus Concerns Horse Owners

Summer weather brings out mosquitos and with them comes the increased potential for horses to contract West Nile Virus.

First documented in the United States in October 1999, West Nile Virus is an arbovirus that's transmitted by mosquitos. It typically affects birds, horses and humans, but any type of mammal is susceptible. West Nile Virus is generally spread when an infected bird is bitten by a mosquito. When that mosquito bites horses, humans or other mammals, they can come down with the virus. It's not spread by person-to-person contact or from horses to humans.

Some of the neurologic signs present in horses that have contracted West Nile Virus include loss of coordination, stumbling, muscle tremors and even death. There is no reason to destroy a horse that has been infected with the virus. Many horses

have recovered from it.

There is no treatment for West Nile Virus, other than standard, veterinary practices used on animals infected with any other virus. However, there is a vaccine available that may help prevent the virus that must be given by a veterinarian. The initial vaccine is a two shot series given three to six weeks apart. Both injections must be given to provide protection from West Nile Virus. Maximum protection occurs four weeks after the second shot. Foals may be vaccinated at 12 weeks of age and require a second dose three weeks later. If foals are vaccinated prior to 12 weeks of age, a three dose series is recommended.

Another way to help prevent West Nile Virus is to control mosquitoes. This can be done by eliminating standing water, decreasing exposure to mosquitoes, using traps and repellents. Insecticides for adult mosquitoes are not very effective because treatments must be repeated

often. Mosquito dunks or granules containing *Bacillus thuringiensis* (Bt), a bacteria that is specific to mosquito larvae, can be used in standing water or areas that flood. Products containing Bt are available at many retail outlets, including garden stores and farm supply stores.

Mosquitoes find warm-blooded animals, like birds, horses and humans, because they are attracted to carbon dioxide that is exhaled. Traps which generate carbon dioxide and attract mosquitoes are available, but are quite expensive. These traps should be placed away from the stable to draw mosquitoes away from the horses. It is wise to remove all birds, including chickens and other domestic fowl, close to the stable to reduce the distance between potentially infected birds and horses.

Sources: Kathy Anderson, extension horse specialist and Dave Keith, entomologist, UNL. (BPO)

### Dead Birds Being Accepted for Testing

The Nebraska Health and Human Services System (HHSS) is now accepting dead birds for testing as part of its surveillance program for West Nile virus.

Monitoring for West Nile virus (WNV) using dead birds has proven to be an accurate means of predicting where the virus will show up in humans, according to Wayne Kramer, state medical entomologist with HHSS. During the outbreak last summer, in over 80 percent of the counties where WNV was found in humans, HHSS surveillance detected it first in the bird population.

"Early detection is important because it can alert communities to conduct mosquito control efforts and heighten people's awareness of the presence of the disease," Dr. Kramer said.

West Nile Virus is transmitted through the bite of a mosquito that has picked up the virus by feeding on an infected bird. In turn, the

mosquito can pass the virus to humans. Last year, 174 cases of WNV were reported in Nebraska, with eight deaths. Ultimately, the virus was found in all 93 of the state's counties, in either mosquito, bird, horse or human populations.

HHSS will take reports of dead birds of any species, but the focus of the surveillance is on blue jays, crows, magpies, owls and hawks. HHSS and the state's local health departments will collect the birds and a selection in good condition and of the right species will be tested. All testing will be done at the Veterinary Diagnostic Center at the University of Nebraska-Lincoln

People who find dead birds should **call their local health department** to report them. In Lancaster County, residents should call the Lincoln-Lancaster County Health Department at 441-8000.

Although people have an extremely low risk of contracting WNV through the touching of dead birds, precautions should be taken when handling them. Bare hand contact with carcasses should be avoided and birds should be double-bagged using plastic bags and then frozen until they can be picked up.

The UNL Veterinary Diagnostic Center has already tested seven birds this year, and all were negative for WNV. These seven birds came from six different counties: Fillmore, Lancaster, Madison, Platte, Seward and Thomas.

Source: May 15, 2003 Press Release from Nebraska Health & Human Services System. For more information on Nebraska's surveillance program, visit [www.hhs.state.ne.us/wnv](http://www.hhs.state.ne.us/wnv). (SC)

### Do all Mosquitoes Carry West Nile Virus?

**The answer is NO.** Mosquitoes are a nuisance pest, but most do not transmit diseases. The principal transmitters of West Nile Virus are *Culex* mosquitoes. The most competent vector of West Nile Virus (WNV) has been shown to be *Culex tarsalis* (Cx. Tarsalis), a mosquito also called the "Western Equine Encephalitis" mosquito because it transmits Western Equine Encephalitis. Although it is found throughout Nebraska, *Cx. tarsalis* is more common in the western part of the state. In the spring, *Cx. tarsalis* females concentrate their feeding on nesting birds shortly after sunset, and, if birds carry WNV, the mosquitoes will become infected. During mid- to late-summer, the mosquito changes its behavior and feeds on mammals including rabbits, horses, cattle and humans. This is why we see cases of WNV in the summer and fall of the year. (SC)



An illustration depicting morphologic characteristics common to *Culex* mosquitoes.



Mosquitoes of the *Culex tarsalis* species have a distinct ring around the proboscis.



*Culex tarsalis* also have bands of white scales around the joints of their tarsi (legs).

CDC Public Health Image Library

South Dakota State University College Of Agriculture And Biological Sciences

**To learn more about mosquito control and West Nile Virus, visit [lancaster.unl.edu/enviro/pest/fly.htm](http://lancaster.unl.edu/enviro/pest/fly.htm).**