

## Results of school's lead tests differ

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Statesman Journal  
September 9, 2008

Tests done for the Salem-Keizer School District have confirmed the presence of lead dust on the artificial turf field at West Salem High School, but at lower levels than previous samples.

The test revealed levels similar to those considered safe by the Consumer Product Safety Commission. A wipe test conducted by the Statesman Journal last month showed levels that were "unacceptably high," according to an initial look by the state Public Health Division.

The state is reviewing the results and plans to issue a recommendation.

"In the meantime, normal use of the field will continue," said school district spokesperson Jay Remy.

Both the Statesman Journal's and school district's tests showed elevated lead content. The wipe tests, which determine how much lead dust comes off the field, both revealed dust but differed on the amount.

The district's results ranged from no lead to 65 micrograms per wipe while the newspaper tested an area about twice the size and registered results ranging from about 168 to 642 micrograms per square foot.

Differences in results could be attributed to differences in testing methods, said Deanna Connors public health toxicologist with the state Office of Environmental Public Health.

The school district worked with the state and followed methods similar to those employed in the Consumer Product Safety Commission report.

The Statesman Journal followed instructions provided with the tests.

Small variables such as the pressure applied when collecting the sample can effect the results, said Caroline Cox, research director with the Center for Environmental Health in Oakland, Calif.



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DeEtta Burrows (left) and Kathy Ellis, industrial hygienists with Wise Steps, do a lead wipe test at West Salem High School's football field Sept. 1.

### Wipe tests and results

Wipe tests, using a cloth similar to a wet wipe, help determine how much lead might be coming off the West Salem High School artificial turf field — possibly finding its way onto the bottom of athletes' shoes or the palms of their hands.

#### School district tests

The Salem-Keizer School District conducted wipe tests Sept. 1.

Officials attached a wipe to a 1.1 kg weighted disk, 8 centimeters in diameter. The disk was dragged down a 50-centimeter length of turf for 10 back-and-forth strokes.

The school district's certified industrial hygienist, DeEtta Burrows of Wise Steps, tested four areas. The results are listed in micrograms per wipe.

1. The green field in the center: 48 micrograms

2. The green field near the goal post: 65 micrograms

3. A white area at the 25-yard line: not detected

Regardless of the method, Cox said, both results show "significant lead exposure."

Conners declined to comment about the lead levels until the state finishes its evaluation of the results.

"We're reviewing the data," she said.

Lead dust poses a possible health risk because it can be ingested or transferred to other surfaces. Chronic lead exposure has been linked to learning problems, hyperactivity and other developmental issues, especially in young children.

There is no state or federal standard for lead in artificial turf. The issue gained prominence last April when New Jersey officials found high lead levels in fields around the state.

Public-health experts have been trying to determine the proper protocol for testing artificial turf, analyzing potential lead exposure and issuing recommendations.

In July, the Consumer Product Safety Commission declared artificial turf fields safe for kids after testing 14 fields and finding a maximum estimated exposure of 9.9 micrograms per day, which was about 5 micrograms shy of the level of concern.

The CPSC report has been criticized by consumer groups, state public-health officials and lead experts who argue that the commission sampled too few fields and used arbitrary methods to determine exposure. Rep. Rosa DeLauro, D-Conn. said the report was "hastily" compiled and has asked the U.S. Environmental Protection Agency to conduct its own review.

Some major public-health agencies also have countered that there is no safe level of lead exposure for children.

This month, Oregon Public Health Division entered the turf field arena by releasing its own general recommendations to schools and parks statewide.

The guidelines state that any turf field in good condition with lead content of 0.5 percent or lower should be considered safe. Fields with higher lead content, such as West Salem's field, older fields and those showing wear might warrant additional measures including annual testing, dust suppression or possible replacement.

California, which has the strictest lead guidelines in the country, took a different course. Last week, the state filed a lawsuit against several artificial-turf makers, including the one that installed the field at West Salem, because they "knowingly and intentionally exposed individuals within the State of California to lead," according to the complaint.

4. A yellow area at the 25-yard line: 59.2 micrograms

Burrows also took some turf fibers to determine the total lead content — tests the Statesman Journal and the school district had conducted in July. The results were 8,920 parts per million in the turf, 1,100 parts per million in the rubber and none detected in the dirt.

Statesman Journal tests

The Statesman Journal, following testing instructions, conducted wipe tests Aug. 13.

In the testing, a cloth similar to a wet wipe was drawn in an S-shaped pattern across a square-foot section of field. Schneider Laboratories Inc. in Richmond, Va., the same lab the school district used to initially determine if there was lead in the turf, analyzed the samples. The results are listed in micrograms per square foot.

The Statesman Journal wiped five areas and found:

1. The yellow line near the end zone: 168.8 micrograms.

2. The middle of the end zone, which is green: 301.8 micrograms.

3. The white area of the 30-yard line: 471.4 micrograms.

4. The green field in the center: 642.2 micrograms.

5. The area out of bounds next to the 40-yard line: 390.5 micrograms.

#### **CDC recommendations**

Centers for Disease Control and Prevention

Defendants include FieldTurf, which installed the field at West Salem High School in 2002, AstroTurf and the Beaulieu Group.

About 10 percent of the turf fields on the market contain lead. The Synthetic Turf Council has volunteered to follow the phase out schedule for lead in children's toys even though turf wasn't included in the legislation.

Terry Morrison, the president of the West Salem High School football boosters, said he has complete confidence in the administration at West Salem High School to deal with the issue appropriately.

"Their top concern is the kids and the program. I have no doubt they'll do whatever is necessary," he said.

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issued the following precautions to minimize the risk of lead exposure from artificial turf.

-Field managers should consider implementing dust-suppression measures.

-Children 6 and younger are most susceptible to lead's harmful health effects. To protect the public, in particular young children, consider posting signs indicating that:

1. After playing on the field, individuals are encouraged to perform aggressive hand and body washing for at least 20 seconds using soap and warm water.

2. Clothes worn on the field should be taken off and turned inside out as soon as possible after using the field to avoid tracking contaminated dust to other places. In vehicles, people can sit on a large towel or blanket if it is not feasible to remove their clothes. These clothes, towels and blankets should be washed separately and shoes worn on the field should be kept outside of the home.

3. Eating while on the field or turf product is discouraged.

4. Avoid contaminating drinking containers with dust and fibers from the field. When not drinking, close them and keep them in a bag, cooler, or other covered container on the side of the field.