

NEW MILFORD BOARD OF EDUCATION
New Milford Public Schools
50 East Street
New Milford, Connecticut 06776

FACILITIES SUB-COMMITTEE
MEETING NOTICE

DATE: September 2, 2014
TIME: 6:45 P.M.
PLACE: Lillis Administration Building—Room 2

AGENDA

New Milford Public Schools Mission Statement

The mission of the New Milford Public Schools, a collaborative partnership of students, educators, family, and community, is to prepare each and every student to compete and excel in an ever-changing world, embrace challenges with vigor, respect and appreciate the worth of every human being, and contribute to society by providing effective instruction and dynamic curriculum, offering a wide range of valuable experiences, and inspiring students to pursue their dreams and aspirations.

1. **Call to Order**
2. **Public Comment**

The Board welcomes Public Participation and asks that speakers please limit their comments to three minutes. Speakers may offer objective comments of items on this agenda. The Board will not permit any expression of personal complaints or defamatory comments about Board of Education personnel and students, nor against any person connected with the New Milford Public School System.

3. **Discussion and Possible Action**

- A. Overview of Summer Projects
- B. Summary of Summer Overtime

4. **Items of Information**

- A. The CT Department of Public Health Fact Sheet on Risk Assessment of Artificial Turf Fields
- B. The CT Department of Public Health EHS Circular Letter #2014-26 Recent News Concerning Turf Fields

5. **Adjourn**

Sub-Committee Members: Dave Littlefield, Chairperson
Angela C. Chastain
Robert Coppola
Wendy Faulenbach

Alternates: Theresa Volinski
John W. Spatola

RECEIVED
TOWN CLERK 3/HP
2014 AUG 29 A 10:33

NEW MILFORD, CT



NEW MILFORD PUBLIC SCHOOLS

FACILITIES DEPARTMENT

50 East Street
NEW MILFORD, CT. 06776

John E. Calhoun
Facilities Manager

Telephone : (860) 354-6265
Fax : (860) 210-2233

To: New Milford Board of Education
Re: Summer Projects 2014
Date: August 28, 2014

DISTRICT-WIDE

Stripped, scrubbed and re-waxed all of the floors district-wide in each and every building, shampooed carpets, sanitized rest rooms, cleaned, dusted, washed every wall, classroom, desk and surface in the entire school district.

Sanded and recoated every wood gymnasium floor, except the arena at the high school, sealed the synthetic gym floors throughout the district, as well as inspecting and servicing all gym partition doors.

Pumped, inspected and disposed of waste from every septic and grease tank at each of our facilities that have such tanks.

Inspected and repaired all fire extinguishers, fire alarms, emergency lights and fire suppression systems district-wide.

Cleaned and inspected all kitchen ductwork and hood systems in every kitchen in the district.

Cleaned, serviced and repaired all boilers, burners and hot water heater in every Board of Education building except Hill & Plain where we are replacing the boilers.

Replaced all stained and damaged ceiling tiles in every hallway, classroom and restroom as needed.

Replenished all of the playgrounds, islands and flower gardens with bark mulch to meet our internal safety standards and to beautify our property.

Repainted many areas throughout many of the school buildings as needed.

HILL & PLAIN ELEMENTARY

Repainted many hallways throughout the building.

Repainted the older parking lots and all of the fire lanes.

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with the school's SROs and school administrators.

Provided all of the custodial services outlined under the "district-wide accomplishments" section of this report.

Provided all of the contracted services necessary to meet all building and safety codes. These services are outlined under the "district-wide accomplishments" section of this report.

NORTHVILLE ELEMENTARY

Repainted the entire parking lots and all of the fire lanes.

Added asphalt walkway to gymnasium area.

Began the process of reconfiguring the wiring and controls for the rooftop exhaust units.

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with the school's SROs and school administrators.

Provided all of the custodial services outlined under the "district-wide accomplishments" section of this report.

Provided all of the contracted services necessary to meet all building and safety codes. These services are outlined under the "district-wide accomplishments" section of this report.

PETTIBONE ELEMENTARY

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with the school's SROs and school administrators.

Provided all of the custodial services outlined under the "district-wide accomplishments" section of this report.

Provided all of the contracted services necessary to meet all building and safety codes. These services are outlined under the "district-wide accomplishments" section of this report.

SARAH NOBLE INTERMEDIATE SCHOOL

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with the school's SROs and school administrators.

Completed hallway, LMC & cafeteria lighting upgrades.

Completed several painting projects throughout the building.

Repainted the entire parking lots and all of the fire lanes.

Replaced a split system a/c unit in the server room to preserve the valuable IT equipment housed within.

Removed old booster club building that was in disrepair and created a rest area that includes the addition of a new wooden picnic table and concrete patio.

Removed a large pine tree near old field house building that was leaning and considered unsafe.

Provided all of the custodial services outlined under the "district-wide accomplishments" section of this report.

Provided all of the contracted services necessary to meet all building and safety codes. These services are outlined under the "district-wide accomplishments" section of this report.

SCHAGHTICOKE MIDDLE SCHOOL

Completed several repainting projects in classrooms and other misc. areas.

Replaced the floor tile and repaired a large crack in concrete slab in the rear first floor corridor.

Assisted in the modification and removal of unusable equipment in the café serving area.

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with the school's SROs and school administrators.

Provided all of the custodial services outlined under the "district-wide accomplishments" section of this report.

Provided all of the contracted services necessary to meet all building and safety codes. These services are outlined under the "district-wide accomplishments" section of this report.

NEW MILFORD HIGH SCHOOL

Repainted many areas inside the building that were in poor condition due to normal wear and tear of the building. These areas included main hallways, classrooms, cafeteria serving areas, cafeteria, etc.

Re-seeded and repaired many areas of the athletic fields to provide athletics with safe well-conditioned fields.

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with the school's SROs and school administrators.

Repainted the entire parking lots and all of the fire lanes.

Resurfaced, refinished and repainted the Arena floor.

Reconfigured the office area to accommodate SRO and Secretary.

Completed concrete repairs on several deteriorated sidewalks.

Rewired, modified and expanded Project Lead the Way rooms.

Provided all of the custodial services outlined under the "district-wide accomplishments" section of this report.

Provided all of the contracted services necessary to meet all building and safety codes. These services are outlined under the “district-wide accomplishments” section of this report.

CENTRAL OFFICE

Removed a large Sycamore tree on northwestern side of the property. This tree was deemed very unsafe as the root system was totally exposed.

Carpet was replaced in the Fiscal Services office.

Added signage, speed bumps and line painting to control traffic flow.

Continued the installation of new security enhancements to the building. Many of these improvements were outlined in the security assessment as well as discussed with central office administrators.

OVERTIME SUMMARY FOR 07/01/14 TO 08/29/14

<u>Overtime Event</u>	<u>Department</u>	<u>Program</u>	<u>\$ Amount</u>	<u>Explanation of expenditure</u>
Rental Reimbursement:	Custodial	2610	\$4,917	Salary that is reimbursed by user groups for Custodial overtime. Monies will be transferred back into salary account.
Snow Removal:	Custodial	2610	\$0	Number of snow events: 0
Snow Removal:	Maintenance	2620	\$0	Number of snow events: 0
After Hours Repairs:	Maintenance	2620	\$3,900	Examples of repairs are: Tile replacement, Plumbing, Heating and Cooling issues and any other any other repairs to the building which could not be done in time for the opening of school.
Fire, Burglar, Access, CCTV and ID Cards:	Maintenance	2620	\$254	Security initiatives, Badges, Camera repairs, software repairs, Door electronics, Misc. fire and Burglar repairs.
Summer School Moving Expenses:	Maintenance	2620	\$0	Cost to move in and out the various equipment, furniture and supplies to support the Special Ed. Summer school program.
Summer Cleaning Expenses:	Custodial	2610	\$3,498	Cost to get schools ready, while supporting Special Ed. summer school and any other school based activities.
Shift Coverage for Absences:	Custodial	2610	\$703	Contractual overtime to cover custodial absences while school is in session or for the Central Office Custodian.

OVERTIME SUMMARY FOR 07/01/14 TO 08/29/14

<u>Overtime Event</u>	<u>Department</u>	<u>Program</u>	<u>\$ Amount</u>	<u>Explanation of expenditure</u>
Winter Building Checks:	Maintenance	2620	\$0	Preventative maintenance building checks. Two major issues were prevented this winter alone by doing these checks. Costs of potential repairs would far exceed the cost of this measure.
Building Emergencies and Alarms:	Maintenance	2620	\$1,226	These expense are for alarm call-ins and any building emergency that required afterhour service.
Security Device Installation:	Maintenance	2620	\$907	In house labor to provide security enhancements. Monies are transferred back into salary account from the capital account.
Unreimbursed OT for School and Town Events	Custodial	2610	\$2,937	Cost to provide services for: Athletic field prep and events, Town events (Voting, Youth Agency, Etc.), School activities (student & staff orientation).
Unreimbursed OT for School and Town Events	Maintenance	2620	\$3,208	Cost to provide services for: Athletic field prep and events, Town events (Voting, Youth Agency, Etc.), School activities (student & staff orientation).
Gym Floor Refinishing:	Custodial	2610	\$4,469	In house labor to refinish the gymnasium floors previously done by outside contractors. Monies will be transferred back into salary account from the 433/2620 account. Savings including labor and materials is just over \$24,000



FACT SHEET

Connecticut Department of Public Health
 Environmental & Occupational Health Assessment Program
 Environmental Health Section
 410 Capitol Avenue, MS # 11EOH, PO Box 340308
 Hartford, CT 06134-0308
 Telephone: (860) 509-7740 Fax: (860) 509-7785
<http://www.ct.gov/dph/>

August 2010

The CT DPH Risk Assessment of Artificial Turf Fields



Background

A new study of artificial turf fields containing crumb rubber infill has just been completed through a joint agreement between the CT Department of Environmental Protection (DEP), the University of Connecticut Health Center (UCHC), the CT Agricultural Experiment Station (CAES) and the CT Department of Public Health (DPH). The table below shows the main areas of responsibility for each of these participating agencies. This fact sheet focuses upon the risk assessment performed by DPH which draws upon the UCHC findings from five fields tested in Connecticut in July 2009. The overall report containing each of the individual agency reports can be obtained at www.ct.gov/dep/artificialturf. Also shown in the table is the fact that the Connecticut Academy of Science and Engineering (CASE) reviewed a draft of these reports and their comments were incorporated into the final reports.

Components of the State of Connecticut Artificial Turf Study

Agency	Activity	Methods
DPH	Human health risk assessment	Convert air concentrations measured by UCHC to the level of health risk to users of the fields from inhaling emitted chemicals
UCHC	Human exposure field investigation	Measured air concentrations of approximately 200 chemicals at 5 fields during active play
DEP	Environmental field investigation	Measured leaching of metals from fields during rain events
CAES	Laboratory study	Measured offgasing and leaching of chemicals from crumb rubber under defined laboratory conditions
CASE	Document review	Assembled 9 member expert panel to review all aspects of the State of CT reports on artificial turf fields

Why This Study

Some Connecticut municipalities have opted for or are considering artificial turf fields to replace natural grass fields. The most common type of field to date uses recycled rubber from tires as a crumb rubber infill to cushion the playing surface. Advantages over natural grass fields are reduced watering and maintenance, avoiding the need for pesticides, reduced injuries, and ability to play on the fields in a wider variety of

weather conditions.

Questions have been raised regarding health, safety and environmental aspects of the rubber infill material. Rubber contains a variety of industrial chemicals that, in small quantities, can be released into the air on warm days and from sports activities on the fields. Previous studies in Europe and the United States have tested a limited number of fields for the release of chemicals of potential concern (COPCs). The current study was designed to evaluate outdoor and indoor fields in Connecticut for airborne chemicals that are emitted from the crumb rubber under summertime active play conditions. The artificial grass blades were also tested for lead content due to concerns raised in New Jersey that the plastic blades can contain lead. This study enhances the database on crumb rubber fields by increasing the number of fields tested, by evaluating an indoor field, something that has not previously been done in the US, by using personal monitoring techniques to better assess the exposure of players on the fields, and by expanding the risk assessment by focusing on acute health risks in general and benzothiazole, in particular. Benzothiazole is the main chemical that vaporizes from the crumb rubber.



What Was Done

A. The Field Investigation

UCHC sent a team of researchers to four outdoor fields and one indoor field spread across CT. Sampling occurred on warm, sunny and low wind days in July 2009. Sampling equipment was set up on the field as well as at upwind background locations to determine what was coming off the field. Three soccer players at each field were equipped with personal monitoring devices and these results together with the stationary samplers (on field and background) were used to characterize the possible exposures. Overall, approximately 200 chemicals were tested for at each field including 60 volatile organic chemicals (VOCs), 22 polycyclic aromatic hydrocarbons (PAHs), 7 nitrosamines, 5 specially targeted rubber-related chemicals, 93 miscellaneous air pollutants, lead and particulate matter (PM₁₀). The samples were sent to a laboratory in Wisconsin that is capable of detecting even very small amounts of chemicals in air samples. In addition, bulk samples of crumb rubber and turf fibers were analyzed for lead by a laboratory in Connecticut.

B. The Risk Assessment

DPH reviewed the UCHC data to identify chemicals that were coming from the field rather than from background sources of air pollution. Any chemical found to be 25% higher on the field than upwind was considered to be field-related. A total of 27 COPCs were identified on this basis and run through the human

health risk assessment. The table below shows the four hypothetical exposure scenarios evaluated. The outdoor fields were combined into one assessment by using the highest concentration of each chemical found at any of the outdoor fields to represent what is possible regardless of where it was found. The indoor field was analyzed separately because conditions indoors and outdoors were considerably different. Two different groups were analyzed, children aged 6-18 and adults. The greater breathing rate associated with active sports was incorporated into exposure equations for children and adults.

Exposure Scenarios Analyzed in DPH’s Risk Assessment

Field Type	Exposure Group	Exposure Frequency
Outdoor	Child 6-18 yr old	3 hr/day, 138 day/year, 12 yr
Outdoor	Adult	3 hr/day, 138 day/year, 30 yr
Indoor	Child 6-18 yr old	3 hr/day, 138 day/year, 12 yr
Indoor	Adult	3 hr/day, 138 day/year, 30 yr

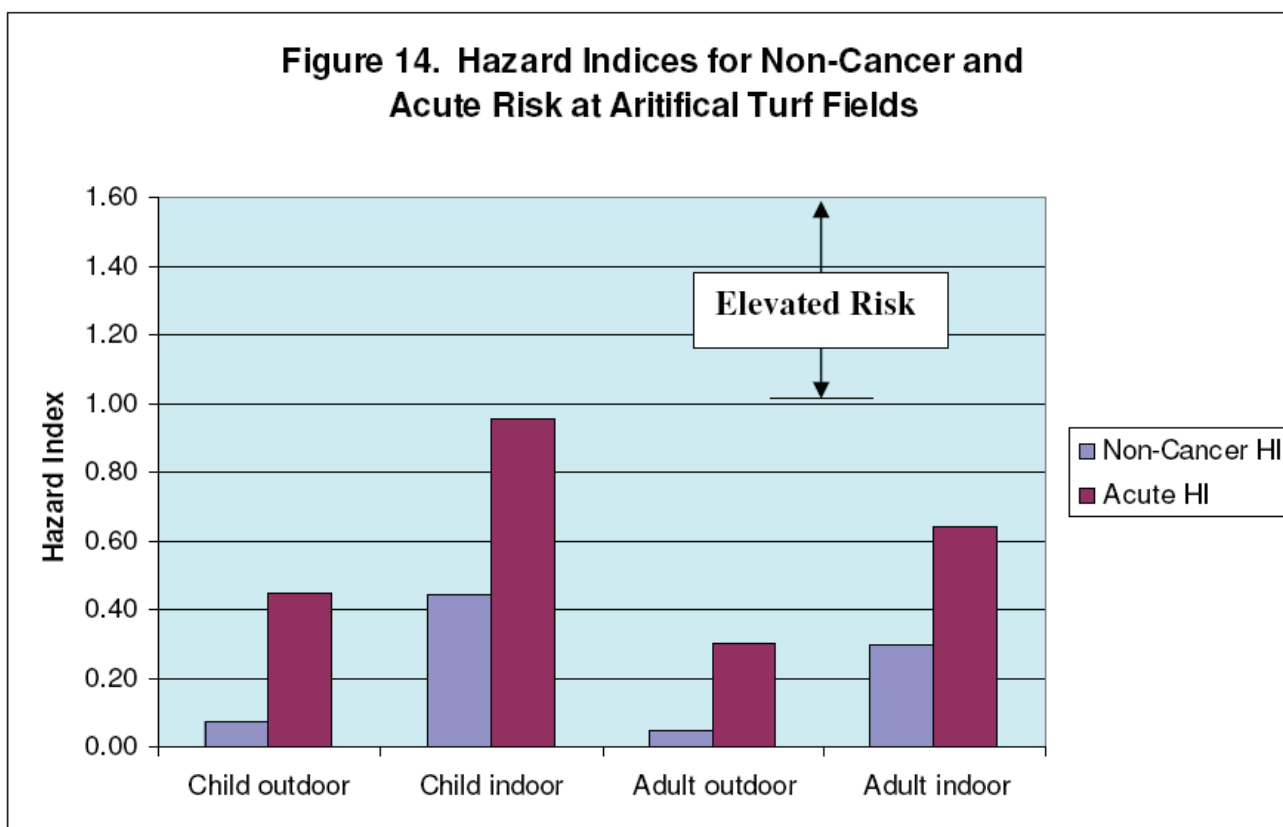
The DPH risk assessment represents a screening analysis in which high end assumptions were used for the amount of exposure possible from playing on the fields. Our worst case approach included the use of the maximum detection found at any field across all chemicals, assessing risks for benzene and methylene chloride even though they were only detected in the personal monitors and thus may not be coming from the fields, and the use of sunny low wind conditions to represent every day of playing. A screening level risk assessment is used to determine whether there is the potential for elevated risks when using worst case assumptions. If this is not the case, no further analysis is needed.

What Did We Find?

Risk estimates were not elevated into a range of health concern for cancer or non-cancer endpoints for children or adults at the outdoor fields. Risk levels were somewhat higher indoors because the concentrations of benzothiazole and naphthalene were greater indoors. These risks were still below a health concern (see Figure below) but the acute risk to children playing indoors is borderline (Hazard Index almost 1) resulting in a greater amount of uncertainty over whether an adverse effect is possible. The theoretical concern is an acute irritation response from benzothiazole and other volatile compounds released from crumb rubber indoors. The indoor field tested had no ventilation which presents a worst case condition.

Regarding the potential concern raised in New Jersey over lead in the crumb rubber or blades of artificial grass, the UCHC results showed that lead levels were low and not a health concern at the five fields tested.

Figure 14. Hazard Indices for Non-Cancer and Acute Risk at Artificial Turf Fields



(The Hazard Index is the ratio between actual exposure and the safe exposure level; an index below 1 signifies no increase in risk)

Another area of uncertainty is that this study did not evaluate newly installed fields under peak summer heat conditions. UCHC tested a range of newer (less than 2 years old) and older fields. However, the CAES data demonstrate that crumb rubber rapidly ages and emits much lower levels of chemicals after several weeks of being outdoors. Thus it is possible that greater exposures on outdoor fields are possible if the rubber infill is brand new during the summer months. Since this exact scenario was not tested, its health implications are unknown although if there was a risk, it would be short lived.

CASE Review

The main areas of CASE comments were that 1) the cancer risks calculated by DPH may have been overestimates because of the inclusion of benzene detections that are likely not coming from the playing field but from the players themselves; 2) the uncertainty with respect to the benzothiazole risk assessment since so little toxicology data are available for benzothiazole; and 3) the potential for allergic reactions to occur due to the presence of latex antigen in natural rubber. To address these comments, the risk assessment

describes the issues and finds that they do not change the overall conclusions and are unlikely to present added risk. For example, the public is commonly exposed to rubber particles in street dust without obvious reactions to the latex in these particles, so this does not appear to be a major risk at crumb rubber fields. Nevertheless, those who think they are experiencing an allergic reaction to the fields (skin rash, breathing difficulty) should report this to their doctor and to local health officials.



What Does It All Mean?

Outdoor Fields: DPH's assessment finds no health concern from inhaling chemicals at outdoor crumb rubber fields. It is important to note that these fields are typically hotter than natural grass fields and so summer users of these fields should take added precautions to avoid heat exhaustion (more frequent rest breaks, hydration). Further, it would be best to install new crumb rubber in cooler months to avoid the peak exposure that might occur with fresh rubber in hot weather.

Indoor Fields: DPH's assessment finds that exposures can be considerably greater indoors than out and this creates an uncertainty in terms of the potential for acute risks for children playing indoors. It is prudent for building operators to ventilate the indoor fields to decrease these exposures. The level of ventilation needed will vary from field to field. New indoor fields should consider alternatives to crumb rubber infill as a cushioning agent.

While allergic reactions on the skin or in the lungs are not anticipated from outdoor or indoor fields, anyone experiencing such reactions should report the incident to their doctor and the local health department.

Limitations And Relationship To Other Studies

Like all scientific studies, our evaluation of artificial turf fields has limitations. It did not specifically evaluate the risks from dermal exposure or ingestion of the crumb rubber, two pathways which are expected to be of lower concern and have received some attention in previous studies. The data are still from a small number of fields and days of sampling. Finding VOCs such as benzene only in personal monitoring samples raises questions about the utility of those data that could not be resolved in the current study. The default

approach was to include the questionable data for this screening level risk assessment. The potential for allergic reactions at these fields was not a focus and in general is difficult to analyze.

While there are still some uncertainties with crumb rubber fields, they have been tested more than many other products. Neither the testing done here in Connecticut nor that done by New York City, New York State, California, USEPA or the Norwegian government have found data supporting a health concern, especially at outdoor fields where exposures are generally lower than what has been found at indoor fields.

Where To Get More Information:

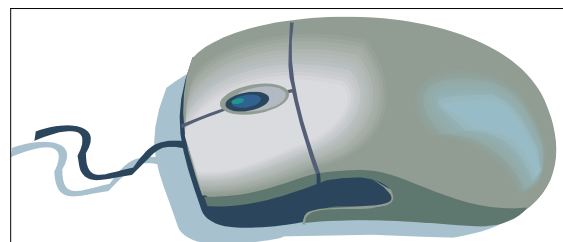
Previous DPH fact sheets on crumb rubber provide more background on the issue and can be found at:

- ◆ [http://www.ct.gov/dph/lib/dph/environmental_health/pdf/artificial_turf_\(2\).pdf](http://www.ct.gov/dph/lib/dph/environmental_health/pdf/artificial_turf_(2).pdf)
- ◆ http://www.ct.gov/dph/lib/dph/environmental_health/eoha/pdf/artificial_turf_tech_fs_10-07.pdf

⇒ For health questions contact DPH at 860-509-7740.

⇒ For questions about the UCHC study contact UCHC at 860-679-4634.

⇒ For questions about the environmental aspects of artificial turf fields contact DEP at 860-424-3867.



STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH



Jewel Mullen, M.D., M.P.H., M.P.A.
Commissioner

Dannel P. Malloy
Governor
Nancy Wyman
Lt. Governor

EHS Circular Letter #2014-26

DATE: June 6, 2014

TO: Local Health Departments and Districts

FROM: Brian Toal, Supervising Epidemiologist IV
Environmental and Occupational Health Assessment Program

RE: Recent News Concerning Artificial Turf Fields

This letter is being sent to inform you that a news story has been circulating that soccer goalies may be at increased cancer risk from playing on artificial turf fields. Since many Connecticut towns have installed or are considering artificial turf fields an elevated cancer risk would be an important consideration. However, this news story is based upon very preliminary information and does not change CTDPH's position that outdoor artificial turf fields do not represent an elevated health risk.

The Connecticut Department of Public Health has evaluated the potential exposures and risks from athletic use of artificial turf fields. Our study of 5 fields in Connecticut in 2010-2011 was a comprehensive investigation of releases from the fields during active play. This study was conducted as a joint project with the CT DEEP and the University of CT Health Center and was peer-reviewed by the Connecticut Academy of Science and Engineering. Our study did not find a large amount of vapor or particle release from the fields confirming prior reports from Europe and the US. We put these exposures into a public health context by performing a risk assessment. Our risk assessment did not find elevated cancer risk. These results have been published as a set of 3 articles in a peer review journal and are available on the DPH artificial turf webpage (<http://www.ct.gov/dph/cwp/view.asp?a=3140&q=464068>).

The new report suggests soccer players and especially goalies, may have an elevated cancer risk from playing on artificial turf fields. This is based upon anecdotal observations of a university soccer coach (<http://www.komonews.com/news/local/Soccer-coach-Could-field-turf-be-causing-cancer-259895701.html>). Reportedly the coach is developing a list of soccer players with rare forms of cancer. However, the types of cancer are undocumented and so it is impossible to say whether they represent a common effect and there has been no reporting on how long the goalies played on artificial turf fields to see if there was plausible exposure and latency. There are many reasons why someone collecting a list of cancer cases may appear to find a cluster including the fact



Phone: (860) 509-7740 • Fax: (860) 509-7785 • VP: (860) 899-1611
410 Capitol Avenue, P.O. Box 340308
Hartford, Connecticut 06134-0308
www.ct.gov/dph

Affirmative Action/Equal Opportunity Employer and Provider
If you require aid or accommodation to full and fairly enjoy this publication,
please phone (860) 509-7293

that when you have a single-minded focus on finding cases you do not capture all the non-cases that would tend to disprove the cluster. Documentation of an increased rate in soccer players would require an epidemiological study in which the total number who play on turf fields in a given region was also known so that a cancer rate could be established and compared to those that do not play on artificial turf fields. The current news report does not constitute epidemiological evidence and thus is very preliminary.

Our risk assessment did cover carcinogens that are known to be in recycled tires and the crumb rubber used to cushion fields. Once again, we found there to be very little exposure of any substances, carcinogenic or not, in the vapors and dust that these fields generate under active use, summer conditions. Background levels of chemicals in urban and suburban air from heating sources and automobile traffic are much more significant sources of airborne carcinogens. The fact that we sampled 5 fields (4 outdoor and 1 indoor) of different ages and composition suggests that the results can be generalized to other fields, a conclusion supported by the fact that results were similar to what was found in California, USEPA and European studies. Our study did not evaluate ingestion of the crumb rubber itself as players are unlikely to ingest an entire rubber pellet.

However, a California study did evaluate the cancer risk if children ingested a mouthable chunk of playground rubber (10 gram), using laboratory extraction methods to estimate the amount of chemicals that might become available in the stomach and absorbed into the body. The California analysis found very low cancer risk from this scenario (Cal OEHHA 2007: <http://www.calrecycle.ca.gov/Publications/Detail.aspx?PublicationID=1206>). Thus, CT DPH finds no scientific support for a finding of elevated cancer risk from inhalation or ingestion of chemicals derived from recycled tires used on artificial turf fields. US EPA has a similar position: "At this point, EPA does not believe that the field monitoring data collected provides evidence of an elevated health risk resulting from the use of recycled tire crumb in playgrounds or in synthetic turf athletic fields." (<http://www.epa.gov/epawaste/conserve/materials/tires/health.htm>)

In summary, federal and state authorities have taken seriously the concerns that artificial turf fields may present a health risk due to contaminants in recycled rubber. The best way to investigate these concerns is via an exposure investigation. Studies conducted in Connecticut and elsewhere have shown a very low exposure potential, less than from typical outdoor sources of air pollution. The current news reports of a list of soccer players with cancer does not constitute a correlation or causality and thus raises a concern that currently lacks scientific support. Thus, the CT DPH position expressed in 2011 at the conclusion of the Connecticut study, that outdoor artificial turf fields do not represent an elevated health risk, remains unchanged. For further information please contact Brian Toal or Gary Ginsberg at 860-509-7740.

cc Suzanne Blancaflor, MS, MPH, Section Chief, Environmental Health
Ellen Blaschinski, RS, MBA, Branch Chief, Regulatory Services