

ED COMMITTEE #2
October 24, 2013
Discussion

MEMORANDUM

October 22, 2013

TO: Education Committee

FROM: Essie McGuire, Senior Legislative Analyst *EMcG*

SUBJECT: **Discussion – School Facility Maintenance Policies and Practices**

Today the Education Committee will discuss policies and practices related to facility maintenance issues that affect health and safety in Montgomery County Public Schools (MCPS). Rolling Terrace Elementary School has had a problem with mold in the facility this school year. Members of the school community raised concerns about the health and safety of the facility as well as about MCPS' remediation and communication efforts. The Committee scheduled this worksession both to receive an update on the efforts at Rolling Terrace Elementary School and to discuss the overall policies and practices that MCPS has in place for addressing health and safety issues in its schools. The following individuals are expected to participate in this discussion:

- James Song, Director, Department of Facilities Management, MCPS
- Sean Gallagher, Assistant Director, Department of Facilities Management, MCPS
- Sean Yarup, Team Leader, Environmental Services and Indoor Air Quality, MCPS
- Dr. Ulder Tillman, County Health Officer

A representative from the Rolling Terrace Elementary School (RTES) Parent Teacher Association (PTA) has been invited to participate in the discussion as well.

Background

MCPS provided the responses on circles 1-2 that describe the school system's overarching practices related to facility issues that affect health and safety. MCPS notes on circle 1 that a wide range of situations fall into this category, including fire safety, indoor air quality, hazardous materials, pests, contagious illnesses, weather events, and some structural building issues.

Most of these issues are the primary responsibility of the Department of Facilities Management (DFM). Unless a situation is an emergency requiring 911 assistance, a school administrator reports any serious condition to the Office of School Support and Improvement and also to DFM if it is related to the facility or physical environment. DFM then has teams with expertise and responsibility to address specific situations.

Council staff highlights below some discussion issues related to the overall approach to school facilities that were also raised in the context of RTES.

I. COMMUNICATION

MCPS states (circle 1) that the primary point of contact for school communications is the principal. DFM supports the principal in providing information for distribution and also provides information to the Office of Communications if information is required for distribution outside of the immediate school community.

Many RTES parents expressed initial concerns that information was not being provided quickly or completely (also discussed in the RTES PTA letter on circle 12). At this juncture, the following information has been posted to the RTES website:

- Summary of September 16 Presentation and Discussion
- MCPS Indoor Air Quality Team Reports
- Information about cleaning products used in remediation at RTES
- Results of the independent consultants' review of the RTES indoor air sampling
- Action plan and timeline regarding work on the RTES HVAC system

Discussion issues

1. The issue has been raised that RTES has a large community of families with Limited English Proficiency, and that not all information has been translated. The Committee may want to ask MCPS to discuss its practices regarding translating this type of information, and what timeframes are possible for translating documents.
2. While communication has increased at RTES, are there ways to ensure that information about facility issues is disseminated routinely to the entire school community in future situations?

II. REMEDIATION

On circle 5 MCPS details its initial response to cleaning the affected classrooms, surfaces, and materials at RTES, as well as its monitoring and testing actions. MCPS states that it follows the standards and guidelines provided by the Environmental Protection Agency (EPA) and the Centers for Disease Control and Prevention (CDC) regarding mold remediation. Council staff has attached information on mold from both the EPA and CDC websites at circles 15-23.

Both the EPA and the CDC state that since mold exists in the natural environment, it is not practical to eliminate all mold and spores indoors. Both agencies provide guidelines to control and inhibit its growth, and the EPA has an extensive guide to mold remediation in schools.

Since the initial mold event in September, additional mold growth has been identified in RTES. Council staff understands that MCPS continues to clean the affected areas and is working to understand the underlying causes.

MCPS outlines the roles of the Indoor Air Quality (IAQ) teams on circle 2. These include response to critical events and also preventive planning with school administrators and building service staff. One example of preventive guidance is the information that MCPS provides to schools regarding limiting mold through proper thermostat usage (circle 8).

The MCPS Capital Improvements Program (CIP) has an Indoor Air Quality project to “fund mechanical retrofits and building envelope modifications necessary to address schools experiencing Indoor Air Quality (IAQ) problems.” Examples of work supported in this project include “carpet removal, floor and ceiling tile replacement, and minor mechanical retrofits”.

MCPS commissioned an outside entity to conduct testing of the mold and air quality at RTES. The results indicated that the air quality was “within acceptable ranges” with the exception of one classroom. It is important to note that air quality sampling reflects one snapshot in time and, as noted above, additional mold has been identified since. The PTA requests more frequent testing, but also notes the time elapsed between the test and the results. Council staff understands that time delay is inherent in the testing process; as a result, more frequent testing may not provide the “real time” information that the community is seeking.

Discussion issues

1. The Committee will want to hear from MCPS staff as to the status of ongoing remediation efforts and the recurrence of mold in RTES.
2. MCPS staff will be able to more fully discuss the results of the testing and what options and best practices exist for monitoring air quality in RTES and other facilities.
3. It may be helpful to have more discussion of the role of the IAQ teams, the kind of preventive activities they conduct with schools, and their role in monitoring and assessing air quality in MCPS facilities on a regular basis.

III. HVAC systems

Replacement of Heating, Venting, and Air Conditioning (HVAC) systems has been an area of critical need and priority for MCPS in recent years. The Education Committee has frequently discussed the critical needs in this project area. The HVAC Replacement Project was reviewed in the most recent Infrastructure Maintenance Task Force (IMTF) Report, produced in March 2012. This report estimated a total funding backlog of HVAC projects for MCPS of \$163.7 million.

The report identifies an Acceptable Annual Replacement Cost (AARC) of how much money should be budgeted annually for replacement or rehabilitation so that, if continued, ultimately the entire inventory of the element will last over its acceptable life span. Rarely is the AARC achieved, but if funds are available it is useful as a target. For HVAC, the report identified an AARC of \$25.8 million.

HVAC Replacement is a CIP project. The Board of Education requested significant increases for this project in the FY11-16 CIP and the FY12 capital budget and CIP amendments.

The Council approved an increase in the level of effort but not as much of an increase as was requested by the Board, funding \$15 million each year FY11-12. In FY13, the Council funded the full Board request of \$22 million. In FY14, the Council approved \$10.36 million for HVAC, which was less than the Board requested but more than the \$6.54 million recommended by the County Executive.

On circle 2 MCPS outlines the factors it considers in evaluating system infrastructure projects, including HVAC systems. The funding for replacing HVAC systems is separate from the IAQ project described above.

The action plan for addressing the RTES HVAC system is attached on circles 9-10 (and available on the RTES website). It indicates that while full replacement of the HVAC system is not scheduled until 2016-2017, several components will be repaired or replaced in the interim. These components were identified as contributing to the initial mold issue as well as temperature issues on the second floor of the building.

Discussion issues

1. The Committee may want MCPS staff to elaborate on the proposed timeline of work to address HVAC issues at RTES. Given that full replacement of HVAC systems is typically a multi-year process, it may be helpful to understand how the planned replacement of components in the near term will coordinate with the larger effort.
2. As indicated by the significant estimated backlog in HVAC systems, MCPS has more need for HVAC project work than can be afforded in the near term of the budget process. The Committee may want to understand how MCPS prioritizes projects for the CIP program, as well as how it adjusts the scope of work when emergencies or other urgent situations arise.

IV. HEALTH CONCERNS

A major issue of concern among parents is the health effects of exposure to mold in RTES. The PTA letter on circle 11 details this concern. On September 26, the County Health Officer, Dr. Tillman, issued a letter to RTES parents regarding mold exposure (attached on circle 24) and advising parents to follow up with their doctor if their children exhibit respiratory symptoms.

MCPS and DHHS have in place a Memorandum of Understanding (MOU) that addresses the provision of health-related services in MCPS as well as establishes the interagency process for planning and resolving issues (attached at circles 25-33). MCPS also outlines its coordination with the County Health Officer in its response on circles 2-3. Typically, MCPS works with the School Health Nurse to report health concerns and to implement disease control procedures or programs, such as immunizations.

In the section on “Safety and Environmental Health”, (circle 30), the MOU states that MCPS DFM “will lead investigations of all safety and environmental health concerns, consulting with DHHS and the County’s Department of Environmental Protection as necessary.”

Both the CDC and the EPA identify mold as an allergen that can cause a wide range of respiratory symptoms and reactions. Both the CDC and the EPA also state that no regulations or standards have been set for airborne mold contaminants, or for what is or is not an acceptable level of mold. Both agencies emphasize that individual reactions to mold vary greatly.

Discussion Issues

1. Council staff understands that MCPS and DHHS have met recently to discuss their communication in this and similar environmental situations. The Committee may want to hear more from Dr. Tillman and MCPS staff about their intended coordination plan going forward.

2. The PTA letter on circle 11 recommends that “parents notify the school nurse of illnesses that could be related to mold”. This would seem consistent with the role of School Health Services as liaison between MCPS and DHHS and could provide additional information to both agencies. The Committee may want to hear more on this recommendation from MCPS staff and the Health Officer.

3. It may be helpful for Dr. Tillman to further discuss her understanding of the health impacts of indoor mold and her advice for the RTES community and other school communities.

This packet contains the following:	Circle #
MCPS response to Committee questions	1
Summary of September 16 presentation to RTES	4
RTES HVAC action plan	9
Letter from RTES PTA	11
CDC materials on indoor mold	15
EPA materials on indoor mold	18
Letter to RTES community from Dr. Tillman	24
MOU between MCPS and DHHS	25

**County Council Education Committee questions and
response by Montgomery County Public Schools (MCPS)**

October 8, 2013

- **When conditions in a school arise that impact health and safety, how are MCPS administrators outside of the school notified or made aware of the situation?**

If school-based administrators become aware of a serious condition related to health or safety, they report it to the Office of School Support and Improvement. As most of these conditions are related to the facility or caused by the physical environment, the school-based administrator also reports the situation to the Division of Maintenance. In the event of an emergency, such as a fire, the smell of smoke or natural gas, the school-based administrator first reports this condition to the County's emergency 911 communications center.

- **What are communication protocols with parents, school personnel, and community stakeholders, including elected officials?**

The communication protocols vary depending on the audience. The school principal is primary point of contact responsible for communications with the school's parents, students, and school-based staff. The Office of Communications is responsible for communications with elected officials, community stakeholders, and media inquiries. In a situation that is unfolding, there is the need to balance timely communication with the need to provide accurate information that has been properly verified.

The school administrators and the Office of Communications is supported by the Office of the Chief Operating Officer and the Department of Facilities Management (DFM). The technical assessment, response, action plan, and determination of the safety of the building are handled by subject matter experts. As the information becomes available, DFM provides the technical information to the principal, the Office of the Chief Operating Officer, and the Office of Communications.

- **Please discuss how remediation efforts are determined and coordinated. What source of funding is typically used for these efforts?**

A large variety of situations and conditions are included under the heading of health and safety. These include fire safety, indoor air quality, hazardous material exposure, pests, contagious illnesses, security, safety of site and building systems (e.g., structural integrity), and weather related events. The vast majority of these categories are with the responsibility of facilities management. DFM coordinates and response to these categories of situations by ensuring that the appropriate team is tasked with the response to a specific event or condition. Depending on the magnitude of the event or condition, coordination is provided by team supervisors or division directors. There is a limited amount of funding that is budgeted for these responses. Overtime, contractors, extra supplies and materials all require funds. Depending on the situation, funding maybe available from insurance for fires and floods, or the Federal government may share in the cost in the case of weather emergencies that are declare Federal

disasters. In the cases where funding is from MCPS, needs may have to be reprioritized so as to balance accounts from budgeted sources. In cases where this is not possible, a supplemental funding request is needed for situations that exceed the available resources.

- **What is the role of IAQ in addressing air quality issues in a school?**

The Environmental Safety Unit of the Division of Maintenance ensures indoor air quality (IAQ) is provided in MCPS facilities through proactive and reactive capabilities. The proactive programs include:

- periodic education communications to school-based staff regarding mold prevention strategies and procedures, see attachment.
- development of Building Maintenance Plans that provide school-based facility operators a plan for properly operating and maintaining the physical plant to ensure good air quality

The reactive capabilities include a formal investigation process where IAQ concerns are evaluated and the appropriate measures taken to resolve IAQ issues.

- **Please discuss the factors that MCPS considers in evaluating and prioritizing systemic infrastructure projects across facilities. In addition to age, are periodic assessments made of systems' conditions or functioning?**

Factors for prioritizing the order of replacement include:

- Amount of useful life remaining, typically reflective of age
- Availability of parts needed for typical service repairs
- The absence of other large capital projects scheduled for that building, i.e., modernizations, additions
- Repair history and reliability

There is currently a substantial backlog of systemic infrastructure replacement needs. Over the next decade, the need for systemic infrastructure replacements will rapidly grow as a substantial number of systems reach the end of life.

- **In what circumstances is the Health Officer notified of or involved in health and safety situations at schools?**

MCPS works closely with the County Health Officer through coordination with the Montgomery County Department of Health and Human Services (DHHS) to address issues affecting student health and safety. MCPS routinely consults with DHHS School Health Services for guidance in managing various programs related to student health and safety. Recent examples of this coordination include development of epi-pens procedures, concussions in athletics, student immunizations, procedures to address Methicillin-resistant Staphylococcus aureus (MRSA), and School Based Health Centers. MCPS also notifies DHHS of significant student health or safety-related incidents. These notifications are primarily involving communicable diseases at MCPS schools.

MCPS notifies DHHS of suspected or confirmed cases of reportable communicable diseases such as tuberculosis, meningitis, and pertussis, as required by state law, COMAR 13A.05.05.07. Additionally, MCPS notifies DHHS of conditions such as an unusually high student absentee rate that might indicate the occurrence of a communicable disease at a school. When needed, DHHS assists MCPS in implementing disease control procedures such as with the H1N1 influenza outbreak. MCPS also reports other significant issues, such as elevated occurrences of specific types of student injuries or illnesses that might require DHHS assistance.

Rolling Terrace Elementary School

September 16, 2013 Presentation Outline and Discussion Summary

Ms. Jennifer Connors, principal, Rolling Terrace Elementary School, and Mr. James Song, director, Department of Facilities Management, presented updates on the mold remediation process and plans for Heating Ventilation and Air Conditioning (HVAC) mechanical system replacement.

Mr. Song was accompanied by:

- Mr. Sean Yarup, team leader, Environmental Services/Indoor Air Quality
- Mr. Seth Adams, assistant director, Division of Construction

Joined in audience included:

- Mr. Christopher Barclay, president, Board of Education
- Ms. Bronda Mills, Associate Superintendent of Elementary Schools
- Mr. Michael Bayewitz, director, School Support and Improvements

Mr. Song's presentation included following topics:

- What was the cause? - Causes
- What has been done? - Response
- What is the future plan? - Action Plan
- Recommended practices
- Question and answer session

What was the Cause? - Causes

Three primary causes included:

1. Weather conditions
2. Malfunctioning of Energy Management System (EMS) controls for 2 Energy Recovery Unit (ERU), mechanical ventilation equipment that controls outside air
3. Thermostats settings well below recommended temperature settings

Weather conditions

- Over the Labor Day Weekend, local area experienced hot and humid weather conditions
- Over the Labor Day Weekend, temperatures were above 90 degree with humidity in 70-100% range
- Indoor temperatures ranged 74-77 degrees with humidity in 60-73%, exceeding recommended humidity range of 60% or below

Malfunctioning of EMS controls for 2 ERU

- Rolling Terrace ES has two large ERU units on the roof.
- The primary function of ERU is to bring outside air and mix with conditioned inside air and supplies conditioned air into the building.
- The mechanical EMS controls for 2 ERU malfunctioned and supplied cold air into building filled with humid air.
- This caused condensations and mold.

Thermostats

- Indoor Air Quality (IAQ) team discovered that the thermostats were set between 68 to 70 degrees, well below the recommended settings.
- This has cooled the indoor air even further.
- When outside weather condition is hot and humid, tendency is to lower thermostat settings, not knowing it's unintended consequences.

What have we done? - Response

- Removed contaminated furnishings
 - Cleaned & sanitized surfaces and equipments
 - Inspected and re-calibrated thermostats to correct settings
 - Performed necessary minor repairs/tuning to HVAC mechanical system
 - Placed portable dehumidifiers to lower indoor humidity level
 - Commissioned third-party independent agency to test mold and IAQ
-
- When school came back in session after the three day weekend on Tuesday (9/3), wide spread of mold was discovered in building.
 - IAQ Team assessed the conditions and contaminated furnishings, such as rugs and furniture, were removed and discarded.
 - IAQ Team began cleaning/sanitizing surfaces and equipments soon after school ended on Tuesday (9/3).
 - IAQ Team conducted indoor air test for Volatile Organic Compounds (VOC) and determined school building was safe to occupy. One classroom and couple of offices had to be relocated.
 - As classrooms were being cleaned, the EMS controls for the ERU were repaired and the thermostats were re-calibrated.
 - Cleaning and sanitizing efforts continued through the week and weekend.
 - In efforts to lower the humidity level of air inside the building, dehumidifiers were placed.
 - IAQ Team monitored outside weather conditions (temperatures/humidity levels) and indoor air quality on daily basis and adjusted the HVAC mechanical equipments.
 - During the weekend of September 7th-9th, boiler and heating system was turned on Friday/Saturday to dry out the indoor air and changed back to cooling mode on Sunday (09/09).
 - As of Saturday (09/08), indoor temperatures ranged 74-76 degrees with humidity levels below 50% range.

What the future plan? - Action Plan

- Closely monitor weather conditions/indoor air conditions and ensure HVAC mechanical system is operating properly.
- Closely monitor weather conditions and possibly change to heating mode on or before 10/1.
- Replace existing pneumatic EMS controls for 2 ERU with direct-digital controls to better control the ERU units. (This work is complete.)
- Comprehensive HVAC mechanical system replacement
 - By end of summer 2014, replace 2 ERU
 - By December 2014, replace EMS controls for entire building
 - Fiscal Year (FY) 2017 - replace fan coil units throughout building, air handling unit serving instructional media center, administration office, multi-purpose room, gymnasium, and pipe insulations (Pending funding approval)
 - Fiscal Year (FY) 2018 - replace boiler, chiller, and pumps (Pending funding approval)
 - Overall, \$3M HVAC mechanical system replacement program pending on funding approval through CIP

Recommended Practices

- DO NOT adjust setting in thermostats
- Keep exterior doors and windows closed - Need to maintain positive pressure in building
- Do not use excessive water in cleaning building - Raises humidity level in indoor air quality
- Report any leaks for repairs

Question and Answer Session

- Many parents have raised concerns related to impact of mold on human health. Mr. Song responded that individuals respond differently to mold. He further stated that Mr. Yarup will research and provide useful information from leading organizations. Following information is provided in response:

With regard to mold and its impact to health, industry professionals identify the CDC and EPA as recognized authorities.

- <http://www.cdc.gov/MOLD/>
- <http://www.epa.gov/mold/>

In terms of maintaining ideal indoor environmental conditions and identifying best practices, OSHA, the American Industrial Hygiene Association (AIHA) and ASHRAE are recognized leaders:

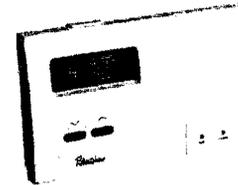
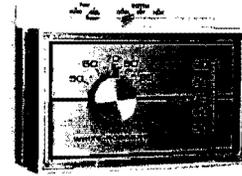
- <https://www.osha.gov/SLTC/molds/>
 - <http://www.aiha.org/get-involved/VolunteerGroups/Documents/BiosafetyVG-FactsAbout%20MoldDecember2011.pdf>
 - <https://www.ashrae.org/about-ashrae/position-documents> (Limiting Indoor **Mold** and Dampness in Buildings)
- A request was made to share assessment reports and test results. Mr. Song agreed to share the information and provided attached files (Rolling Terrace ES IAQ Assessment Reports dated 09/03/2013, 09/12/2013, 09/21/2013). The test results from the independent testing agency will be provided when it becomes available.
 - A request was made to share Material Safety Data Sheet for chemicals used in mold remediation. Mr. Song agreed to share the information and provided attached file (MSDS sporocidin, MSDS spray-nine, MSDS masterclean coil cleaner, Masterclean Coil Cleaner - Diluted Form Used). Mr. Yarup explained that all chemicals used by the IAQ Team in the mold remediation process are approved products. The products include Sporocidin Disinfectant Solution, Spray-Nine Germicidal Cleaner, and Masterclean Coil Cleaner (diluted solution). When reviewing products for use, MCPS follows Environmentally Preferred Purchasing Guidelines by choosing products that have a lesser or reduced effect on human health and the environment when compared with others that serve the same purpose. When reviewing information using the product's material safety data sheet, MCPS refers to specific health and environmental requirements cited in Green Seal Organization standards. Approval is typically based on whether the product meets the criteria specified for that particular standard.
 - Several parents commented that the communication with parents need to be improved and requested that the presented information be shared with parents not present at the September 16, 2013. While a letter was sent to parents, Mr. Song agreed that communication process could be improved and that he will work with Ms. Connors and staff on the process improvement. Following the request, this presentation outline is being shared with all parents. In addition, the progress on implementation of HVAC mechanical replacement project will be shared with Ms. Connors and parents.
 - Several comments were related to many rooms being overheated, especially the spaces on the second floor. Mr. Song agree to investigate and take appropriate actions to ensure temperatures are within the recommended range. Mr. Song reports that the investigation is proceeding and temperature monitoring devices have been placed throughout the building to gather the data on the temperature fluctuations. Based on investigation and data analysis, recommended actions will be followed.

The information included in this report reflects general outline of presentation and discussion held on September 16, 2013 and responses to the raised questions and comments.

MCPS Thermostat Usage – Q & A's for the Cooling Season

It's really hot and humid. Can I have my thermostat set lower?

From spring to fall, high humidity can make us feel too warm, even in air-conditioned buildings. But turning down the thermostat is not the solution! Lowering the temperature in your room below 76° F can increase relative humidity. Temperatures below 76° F also create condensation in our buildings as explained below. To comply with MCPS policies and protect our buildings from costly damage, thermostats should be set no lower than 76° F for cooling.



Examples of thermostats found in MCPS schools.

Why is condensation a problem?

Moisture promotes growth of **mold and mildew**. Excessive moisture also damages drywall, ceiling tiles, carpeting, and insulation and harms electronic equipment such as computers.

How can a temperature set point cause water to condense in a building?

During warm weather in our region, the outdoor air contains a large amount of water. This water can easily condense out of the air; all it takes is the right temperature, called the "dew point". When the weather becomes humid, the dew point can range between 65 and 75° F. Water condenses wherever humid air comes in contact with a surface below the dew point. This is why water droplets form on a pitcher of ice water during the summer. Basements become damp when the walls are below the dew point. Air conditioning a room below 76° F can create the same effect! Figure 1 below illustrates when space temperatures become a problem during periods of high humidity.

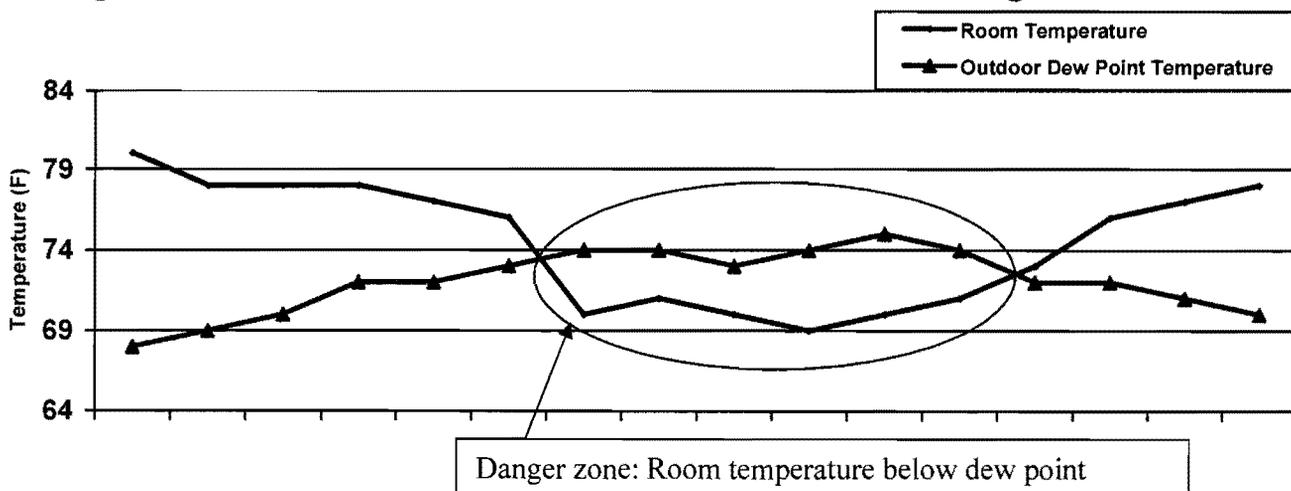
What can I do to prevent moisture problems in my school?

- Set thermostats no lower than 76° F during the cooling season. Exceptions are computer labs and media centers which should be set to 75° F to meet more demanding cooling requirements.
- Do not change thermostat settings.
- Turn unit ventilator fan settings to their lowest speed, this increases their dehumidification effect.
- Keep windows and doors closed, especially during rainy and humid weather.
- Keep exhaust fans turned off in unoccupied areas, especially the kitchen and large assembly areas.
- Keep air flow to all grilles and thermostats clear of any obstructions.
- Report any moisture or mold in your room to your building service manager promptly.

Who can I contact for more information?

Contact the MCPS Environmental Services/Indoor Air Quality at 301-926-4409 for assistance or additional information.

Figure 1 – Environmental conditions favorable for mold growth



Rolling Terrace Elementary School HVAC Renovation Work – Action Plan

As discussed at the community meeting on September 16th, 2013, the Department of Facilities Management will be implementing multiple HVAC system modifications to improve indoor air quality, as well as occupant comfort. The below is a list of specific tasks within the overall HVAC renovation process and a timeline of implementation for each.

Renovation Tasks:

1. Dedicated Outdoor Air Unit (Energy Recovery Unit) – Dual temperate control valve conversion from pneumatic to electronic controls. Work also includes replacement of valves
2. Dedicated Outdoor Air Unit (Energy Recovery Unit) – Outside air, exhaust air, and by-pass damper conversion from pneumatic to electronic controls. Work also includes replacement of damper motors
3. Replacement of Dedicated Outdoor Air Units (Energy Recovery Unit)
4. Repair of existing chiller machines that provide chilled water to the building for air-conditioning purposes
5. Replacement of second floor control valves on fan coil units that regulate space temperature
6. Full building energy management and control system upgrade
7. Replacement of plant equipment (chiller and boiler systems)
8. Replacement of building air-handling units (office area, multipurpose room, instructional media center, gym) and all classroom and office space fan-coil units

Timeline:

Tasks 1 & 2: The work is complete and final control programming is currently underway. This work will ensure air temperatures entering each classroom are within the design parameters of the current HVAC system design. These valves and damper motors will be salvaged prior to full unit replacement for reuse.

Task 3: MCPS has procured the services of James Posey and Associates to develop the design for the replacement of the two primary dedicated outdoor air units. The current schedule is for the engineer to complete the design by the end of December and bid the work to approved mechanical contractors the month of January 2014. The replacement work is scheduled for summer break 2014 with completion prior to school opening.

Task 4: The building change-over process (the two-pipe heating/cooling system conversion to heating mode) is scheduled for completion the week of October 7th. Once complete, MCPS will bid a scope of services that includes factory repair and preventative maintenance of the existing chillers. The scope of work will continue through the next cooling season (April – October 2014).

Task 5: It has been determined that the cause of the second floor overheating is primarily due to the inconsistent operation of the chiller units and fan coil control valves. MCPS is addressing the chiller operation through the preventative maintenance process (task 4) and the control valve operation will be addressed by energy management and control system upgrade (task 6). In an effort to provide

immediate improvement to comfort conditions we will be exploring options to accelerate a portion of the control system upgrade. The control contractor involved with tasks 1 and 2 has reviewed the classroom fan coil operation and currently developing options for implementation. We will review these options with the school administration the week of October 14, 2013, and report on progress.

Task 6: The energy management unit of the Division of Maintenance is currently in the design phase of the building energy management and control system upgrade. The construction and implementation is scheduled for completion by December 2014. Updates will be provided as the project develops through the various stages of design and construction.

Tasks 7 & 8: The building HVAC systems, to include classroom and office fan coil units, five major air-handling units, and the plant equipment, are planned for replacement over the span of two years with work occurring during summer break. It is anticipated the work will occur in 2016 and 2017 with project scope and budget included in the Fiscal Year 2016 and 2017 HVAC Replacement project. The timeline is contingent upon the funding level of the HVAC Replacement project within the Fiscal Year 2015-2020 Capital Improvements Program (CIP) as adopted by the County Council. Final adoption of the Fiscal Year 2015-2020 CIP is expected in June of 2014.

The Division of Construction will continue to track each task and provide the school administration with bi-weekly updates as work progresses. If there are any questions or concerns please feel free to contact Seth Adams, assistant director, Division of Construction, at 240-314-1000.

Parent Teacher Association (PTA) of
Rolling Terrace Elementary School
705 Bayfield Street
Takoma Park, MD 20912

October 18, 2013

Valerie Ervin, Chair
Phil Andrews
Craig Rice
Education Committee
Montgomery County Council

Dear Members Ervin, Andrews, and Rice:

As you are aware, Rolling Terrace Elementary School has been battling a severe mold problem since before the start of this school year. The PTA, parents, teachers and staff continue to be extremely concerned about this issue. We greatly appreciate that Councilwoman Ervin was able to visit the school on Wednesday, October 16, 2013 to see the problem firsthand and to discuss all these issues with concerned parents. However, we considered it prudent to document our concerns so that all of Montgomery County leaders would be fully aware of the issues. This letter outlines our concerns and will present several recommendations for action.

The health of children and staff is being compromised.

Many parents are reporting an array of symptoms that are unusual for their children and can be linked to mold exposure. These range from severe, debilitating asthma attacks (requiring emergency room visits) to headaches, hives, itchy and red eyes, and scratchy throats and coughs. We know that some of these have been reported to the school's nurse, however many families are simply taking their children to their personal physicians. There have been numerous requests by the PTA to conduct a survey of all families to better understand the extent of impacts, but no action has been taken. Many parents believe that the chemicals being used to clean moldy surfaces may be causing additional health problems.

As we all know, when a child's health is compromised, so is his or her learning ability. When an entire classroom is too hot, has strange odors, or workers coming and going because of the mold issue, the quality of the teaching and learning environment is completely compromised. Our children, teachers, and school administration deserve better than this.

The PTA considers it important to better understand the extent of the impacts to help Montgomery County and the School Department improve their remediation plans to both help Rolling Terrace **now** and potentially other schools in the future. The lack of data and information will only continue to compromise resolving the problem.

Recommendations:

- Request that parents notify the school nurse of illnesses that could be related to mold. This would provide more information regarding total health impacts.

- Work with an epidemiologist to develop a survey design and implement a statistically valid survey to better understand mold impacts on the school population (children and all staff).

Consistent and complete communications from MCPS is lacking and is not reaching all families with children at the school.

To not mince words, it has been a struggle for parents and the PTA to get answers to our questions and concerns. As one parent noted, "it's like pulling teeth." There have been improvements the past couple of weeks—some parents with children exhibiting severe allergic reactions are being informed of new mold findings, as is the PTA President and Task Force Chair – but not the entire school community. Despite the school's large community of families with limited English proficiency, not all notices have been translated.

Many parents were not fully informed or aware of the issue after the first notice was sent home with students because it completely downplayed the severity, extent, and potential health risks of the problem. Some information has been inconsistent, for instance, when exactly mold was first discovered. Some parents didn't even receive the notice – message by 'student backpack' is not sufficient, especially in the case of younger students. Since then, there was only one additional notice to all parents. This second notice made parents aware of the symptoms they may see if their children are sensitive to mold, but encouraged parents to go to their own doctor, not notify the school or school nurse.

Furthermore, only parents who have reported symptoms have been receiving ongoing communication, as noted above. What appears to be a lack of outreach by the Administration could be misconstrued as an environmental justice issue. Being more proactive will improve trust and confidence that MCPS is working to eliminate the mold problem.

Finally, some letters and emails sent to Superintendent Starr, other staff, School Board members, and the Council have gone completely unanswered. A lack of response makes it appear that the leadership doesn't care or worse, is hiding something.

Recommendations

- Develop a standardized approach to notify all parents of the students in an affected classroom, not just those with known allergens, of new mold spots and the cleaners used. Have documents prepared in advance in English and Spanish (or any other language necessary) so that only the room number/teacher name has to be added.
- Proactively provide a weekly update that is posted to the front page of the school website and posted in a prominent location near the front door of the school. Any description of rooms with mold should identify the room by teacher name and grade, in addition to room number, so that parents can better understand where the mold has been found.
- Use robo-calls more frequently to provide information/notices to the school community.
- Continue sharing print information in the Wednesday folders.
- School Administrators and/or senior staff working on the mold issue should offer to hold meetings with the school community at least once a month to improve and maintain better dialog and to work together on resolving problems.

The root cause has not been adequately identified; mold continues to reoccur and be found in new locations.

Although Mr. James Song, director, Department of Facilities Management, sounded extremely confident the mold was contained and being effectively remediated (cleaned) when he spoke at the school meeting on September 16, that is obviously not the case. Mr. Song noted that after the cleaning mold might come back in the spring, however it is persisting without abatement. Mold continues to be regularly found and cleaned away from walls, furniture, and ceiling tiles. But this is only a symptom of a deeper problem. It is obvious to parents the mold is widespread and pervasive due to the poor condition of the school's heating and cooling system (discussed below). The source or sources have not been properly found and contained. Mold is likely persisting behind the ceiling tiles, along pipes, in the insulation or in other hidden spaces.

An indoor air quality survey was conducted by an external third party on September 18, and though the results look relatively good, it is only providing a snapshot of the problem at one point in time. It did note that one classroom in particular had nearly three times the level of *Cladosporium* spores as compared to outdoor concentration. This room may prove to be a 'hotspot' or source. However, the test was done nearly one month ago. It seems more prudent to routinely test the indoor air quality to both focus in on the sources and vectors, and better understand the actual air quality conditions in real time since it could have serious impacts on our children and staff.

Recommendation

- A more complete and larger scale inspection and abatement of the persistent mold needs to be conducted. Consideration should be given to potentially moving students to a separate site or to closing the school for a couple of days (possibly near a holiday or school break), if this is needed.
- If the school is closed for a period of time, MCPS and the County Administration should consider how best to provide support to families that may not have alternative care options for their children, particularly if they cannot miss work.
- Conduct indoor air quality testing more frequently throughout the school, possibly as frequently as two or three times per week.

The schedule of the HVAC Renovation Action Plan for Rolling Terrace is completely insufficient considering the emergency situation that exists.

An 'HVAC Renovation Work – Action Plan' was shared with the Rolling Terrace Community after the September 18 meeting and is now posted on the RTES website. Unfortunately, the schedule for replacing some components is far into the future --- as far as FY 2016 or FY2017. To parents, the PTA, and wider school community, this is unacceptable. The current failures of the heating and cooling system, and problems that have persisted for many years, is exacerbating the mold problem.

Rather than spending precious dollars for continuous, ongoing cleanups that are proving ineffective, it seems time and funds would be better spent to shorten the timeline of this Action Plan and to get as much done as feasibly possible within the next six months to one year.

Recommendation

- Reassess the emergency nature of the persistent mold problem at Rolling Terrace and elevate the full replacement of all components to the top of the County and MCPS priority list.

In closing, the PTA and Rolling Terrace school community appreciate your prompt attention to the issues we have raised. We have strived to make positive recommendations, but you or others may have additional suggestions. The PTA Mold Task Force and PTA leadership at Rolling Terrace Elementary School are available to work with your Committee and other County or MCPS officials to resolve the mold and HVAC system problems at Rolling Terrace as quickly as possible.

Respectfully,

Craig Sharman, Chair
PTA Task Force

Mindy Kassaraba, President
Rolling Terrace Elementary School PTA

On behalf of the Rolling Terrace Elementary School PTA and school community

Cc:

Jennifer Connors, Principal
Joshua Starr, Superintendent
Bronda Mills, Associate Superintendent
Montgomery County School Board



Centers for Disease Control and Prevention

CDC 24/7: Saving Lives. Protecting People.™

Facts about Mold and Dampness

There is always some mold everywhere - in the air and on many surfaces. Molds have been on the Earth for millions of years. Mold grows where there is moisture.

Mold and Your Health

Exposure to damp and moldy environments may cause a variety of health effects, or none at all. Some people are sensitive to molds. For these people, molds can cause nasal stuffiness, throat irritation, coughing or wheezing, eye irritation, or, in some cases, skin irritation. People with mold allergies may have more severe reactions. Immune-compromised people and people with chronic lung illnesses, such as obstructive lung disease, may get serious infections in their lungs when they are exposed to mold. These people should stay away from areas that are likely to have mold, such as compost piles, cut grass, and wooded areas.

In 2004 the Institute of Medicine (IOM) found there was sufficient evidence to link indoor exposure to mold with upper respiratory tract symptoms, cough, and wheeze in otherwise healthy people; with asthma symptoms in people with asthma; and with hypersensitivity pneumonitis in individuals susceptible to that immune-mediated condition. The IOM also found limited or suggestive evidence linking indoor mold exposure and respiratory illness in otherwise healthy children.

In addition, in 2004 the IOM found sufficient evidence to link exposure to damp indoor environments in general to upper respiratory tract symptoms, cough, and wheeze in otherwise healthy people and with asthma symptoms in people with asthma. The IOM also found limited or suggestive evidence linking exposure to damp indoor environments in general to shortness of breath, to respiratory illness in otherwise healthy children and to potential development of asthma in susceptible individuals. In 2009, the World Health Organization issued additional guidance, the [WHO Guidelines for Indoor Air Quality: Dampness and Mould](http://www.euro.who.int/document/E92645.pdf) [PDF - 2.52 MB] (<http://www.euro.who.int/document/E92645.pdf>) (<http://www.cdc.gov/Other/disclaimer.html>). Other recent studies have suggested a potential link of early mold exposure to development of asthma in some children, particularly among children who may be genetically susceptible to asthma development, and that selected interventions that improve housing conditions can reduce morbidity from asthma and respiratory allergies, but more research is needed in this regard.

A link between other adverse health effects, such as [acute idiopathic pulmonary hemorrhage among infants](/mold/hemorrhage_infants.htm) (/mold/hemorrhage_infants.htm), memory loss, or lethargy, and molds, including the mold *Stachybotrys chartarum* (*Stachybotrys atra*), has not been proven. Further studies are needed to find out what causes acute idiopathic hemorrhage and other adverse health effects.

Mold and Your Home

Mold is found both indoors and outdoors. Mold can enter your home through open doorways, windows, vents, and heating and air conditioning systems. Mold in the air outside can also attach itself to clothing, shoes, bags, and pets can and be carried indoors.

Mold will grow in places with a lot of moisture, such as around leaks in roofs, windows, or pipes, or where there has been flooding. Mold grows well on paper products, cardboard, ceiling tiles, and wood products. Mold can also grow in dust, paints, wallpaper, insulation, drywall, carpet, fabric, and upholstery.

You Can Control Mold

Inside your home you can control mold growth by:

- Controlling humidity levels;
- Promptly fixing leaky roofs, windows, and pipes;
- Thoroughly cleaning and drying after flooding;
- Ventilating shower, laundry, and cooking areas.

If mold is growing in your home, you need to clean up the mold *and* fix the moisture problem. Mold growth can be removed from hard surfaces with commercial products, soap and water, or a bleach solution (/mold/dampness_facts.htm#note) of no more than 1 cup of bleach in 1 gallon of water.

Mold growth, which often looks like spots, can be many different colors, and can smell musty. If you can see or smell mold, a health risk may be present. You do not need to know the type of mold growing in your home, and CDC does not recommend or perform routine sampling for molds. No matter what type of mold is present, you should remove it. Since the effect of mold on people can vary greatly, either because of the amount or type of mold, you can not rely on sampling and culturing to know your health risk. Also, good sampling for mold can be expensive, and standards for judging what is and what is not an acceptable quantity of mold have not been set. The best practice is to remove the mold and work to prevent future growth.

If you choose to use bleach to clean up mold:

- Never mix bleach with ammonia or other household cleaners. Mixing bleach with ammonia or other cleaning products will produce dangerous, toxic fumes.
- Open windows and doors to provide fresh air.
- Wear non-porous gloves and protective eye wear.
- If the area to be cleaned is more than 10 square feet, consult the U.S. Environmental Protection Agency (EPA) guide titled *Mold Remediation in Schools and Commercial Buildings*. Although focused on schools and commercial buildings, this document also applies to other building types. You can get it by going to the EPA web site at http://www.epa.gov/mold/mold_remediation.html (http://www.epa.gov/mold/mold_remediation.html) & (<http://www.cdc.gov/Other/disclaimer.html>).
- Always follow the manufacturer's instructions when using bleach or any other cleaning product.

MOLD PREVENTION TIPS

- Keep humidity levels as low as you can—no higher than 50%—all day long. An air conditioner or dehumidifier will help you keep the level low. Bear in mind that humidity levels change over the course of a day with changes in the moisture in the air and the air temperature, so you will need to check the humidity levels more than once a day.
- Be sure your home has enough ventilation. Use exhaust fans which vent outside your home in the kitchen and bathroom. Make sure your clothes dryer vents outside your home.
- Fix any leaks in your home's roof, walls, or plumbing so mold does not have moisture to grow.
- Clean up and dry out your home thoroughly and quickly (within 24–48 hours) after flooding.
- Add mold inhibitors to paints before painting.
- Clean bathrooms with mold-killing products.
- Remove or replace carpets and upholstery that have been soaked and cannot be dried promptly. Consider not using carpet in rooms or areas like bathrooms or basements that may have a lot of moisture.
- To learn more about preventing mold in your home, see the Environmental Protection Agency's publication [A Brief Guide to Mold, Moisture, and Your Home](#)

<http://www.epa.gov/mold/moldguide.html>  <http://www.cdc.gov/Other/disclaimer.html> at
<http://www.epa.gov/mold/moldguide.html> <http://www.epa.gov/mold/moldguide.html> 
<http://www.cdc.gov/Other/disclaimer.html>.

Page last reviewed: July 13, 2009

Page last updated: September 18, 2012

Content source: [National Center for Environmental Health](#)

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA 30333, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - [Contact CDC-INFO](#)





<http://www.epa.gov/mold/moldresources.html>

Mold and Moisture Mold Resources

- [Ten Things You Should Know About Mold](#)
- [Asthma and Mold](#)
- [Floods/Flooding](#)
- [Health and Mold](#)
- [Homes and Mold](#)
- [Indoor Air Regulations and Mold](#)
- [Large Buildings and Mold](#)
- [Schools and Mold and Indoor Air Quality](#)
- [Publications](#)

Ten Things You Should Know About Mold

1. Potential health effects and symptoms associated with mold exposures include allergic reactions, asthma, and other respiratory complaints.
2. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.
3. If mold is a problem in your home or school, you must clean up the mold and eliminate sources of moisture.
4. Fix the source of the water problem or leak to prevent mold growth.
5. Reduce indoor humidity (to 30-60%) to decrease mold growth by: venting bathrooms, dryers, and other moisture-generating sources to the outside; using air conditioners and de-humidifiers; increasing ventilation; and using exhaust fans whenever cooking, dishwashing, and cleaning.
6. Clean and dry any damp or wet building materials and furnishings within 24-48 hours to prevent mold growth.
7. Clean mold off hard surfaces with water and detergent, and dry completely. Absorbent materials such as ceiling tiles, that are moldy, may need to be replaced.
8. Prevent condensation: Reduce the potential for condensation on cold surfaces (i.e., windows, piping, exterior walls, roof, or floors) by adding insulation.
9. In areas where there is a perpetual moisture problem, do not install carpeting (i.e., by drinking fountains, by classroom sinks, or on concrete floors with leaks or frequent condensation).
10. Molds can be found almost anywhere; they can grow on virtually any substance, providing moisture is present. There are molds that can grow on wood, paper, carpet, and foods.

If you have IAQ and mold issues in your school, you should get a copy of the [IAQ Tools for Schools](#) Action Kit. Mold is covered in the IAQ Reference Guide under [Appendix H - Mold and Moisture](#).

Asthma and Mold

Molds can trigger asthma episodes in sensitive individuals with asthma. People with asthma should avoid contact with or exposure to molds. Read more about asthma triggers on EPA's [Asthma Website](#)

Additional Asthma Resources:

- [Allergy & Asthma Network/Mothers of Asthmatics \(AAN/MA\)](#) [\[EXIT Disclaimer\]](#) (800) 878-4403
- [American Academy of Allergy, Asthma & Immunology \(AAAAI\)](#) [\[EXIT Disclaimer\]](#) For information, see www.aaaai.org/global/contact-us.aspx [\[EXIT Disclaimer\]](#)
- [American Lung Association](#) [\[EXIT Disclaimer\]](#) (800) LUNG-USA (586-4872); See also www.lung.org/healthy-air/ [\[EXIT Disclaimer\]](#)
- [Asthma & Allergy Foundation of America](#) [\[EXIT Disclaimer\]](#) (800) 7ASTHMA (727-8462)
- Canada Mortgage & Housing Corporation "[Fighting Mold - The Homeowner's Guide](#)" [\[EXIT Disclaimer\]](#)
- U.S. Dept. of Health and Human Services, National Institute of Health, [National Institute of Allergy and Infectious Diseases](#) (866) 284-4107/(301) 496-5717
- [National Jewish Medical and Research Center](#) [\[EXIT Disclaimer\]](#) (800) 222-LUNG (5864)

Floods/Flooding

Mold growth may be a problem after flooding. EPA's Fact Sheet: [Flood Cleanup: Avoiding Indoor Air Quality Problems \(PDF\)](#) (2 pp, 67 K, [about PDF](#)) discusses steps to take when cleaning and repairing a home after flooding. Excess moisture in the home is cause for concern about indoor air quality primarily because it provides breeding conditions for microorganisms. This fact sheet provides tips to avoid creating indoor air quality problems during cleanup. U.S. EPA, EPA Document Number 402-F-93-005, August 1993.

Additional Flood Resources:

- [Federal Emergency Management Agency \(FEMA\)](#): (800) 480-2520, See [Flood information](#)
- U.S. Dept. of Health and Human Services (HHS), Centers for Disease Control and Prevention's (CDC) [Emergency Preparedness and Response page](#) and [Key Facts About Hurricane Recovery](#)

Introduction to Molds

Molds produce tiny spores to reproduce. Mold spores waft through the indoor and outdoor air continually. When mold spores land on a damp spot indoors, they may begin growing and digesting whatever they are growing on in order to survive. There are molds that can grow on wood, paper, carpet, and foods. When excessive moisture or water accumulates indoors, mold growth will often occur, particularly if the moisture problem remains undiscovered or un-addressed. There is no practical way to eliminate all mold and mold spores in the indoor environment; the way to control indoor mold growth is to control moisture.

- See also: [An Introduction to Molds and Related Links](#)

Basic Mold Cleanup

The key to mold control is moisture control. It is important to dry water damaged areas and items within 24-48 hours to prevent mold growth. If mold is a problem in your home, clean up the mold and get rid of the excess water or moisture. Fix leaky plumbing or other sources of water. Wash mold off hard surfaces with detergent and water, and dry completely. Absorbent materials (such as ceiling tiles & carpet) that become moldy may have to be replaced.

Floods/Flooding

[Information on Flood Cleanup](#)

[EPA's Natural Disasters and Weather Emergencies](#)

Emergency Preparedness at <http://www.ready.gov/>

For information regarding Hurricane Sandy Response and Recovery, see www.epa.gov/sandy

- University of Minnesota, [Department of Environmental Health and Safety](#) [EXIT Disclaimer](#) [Flood Information](#) [EXIT Disclaimer](#)

Health and Mold

How do molds affect people?

Some people are sensitive to molds. For these people, exposure to molds can cause symptoms such as nasal stuffiness, eye irritation, wheezing, or skin irritation. Some people, such as those with serious allergies to molds, may have more severe reactions. Severe reactions may occur among workers exposed to large amounts of molds in occupational settings, such as farmers working around moldy hay. Severe reactions may include fever and shortness of breath. Some people with chronic lung illnesses, such as obstructive lung disease, may develop mold infections in their lungs.

EPA's publication, [Indoor Air Pollution: An Introduction for Health Professionals](#), assists health professionals (especially the primary care physician) in diagnosis of patient symptoms that could be related to an indoor air pollution problem. It addresses the health problems that may be caused by contaminants encountered daily in the home and office. Organized according to pollutant or pollutant groups such as environmental tobacco smoke, VOCs, biological pollutants, and sick building syndrome, this booklet lists key signs and symptoms from exposure to these pollutants, provides a diagnostic checklist and quick reference summary, and includes suggestions for remedial action. Also includes references for information contained in each section. This booklet was developed by the American Lung Association, the American Medical Association, the U.S. Consumer Product Safety Commission, and the EPA, 1994.

Allergic Reactions - excerpted from [Indoor Air Pollution: An Introduction for Health Professionals](#) section on: [Animal Dander](#), [Molds](#), [Dust Mites](#), [Other Biologicals](#).

"A major concern associated with exposure to biological pollutants is allergic reactions, which range from rhinitis, nasal congestion, conjunctival inflammation, and urticaria to asthma. Notable triggers for these diseases are allergens derived from house dust mites; other arthropods, including cockroaches; pets (cats, dogs, birds, rodents); molds; and protein-containing furnishings, including feathers, kapok, etc. In occupational settings, more unusual allergens (e.g., bacterial enzymes, algae) have caused asthma epidemics. Probably most proteins of non-human origin can cause asthma in a subset of any appropriately exposed population."

Damp Buildings and Health

For information on damp buildings and health effects, see the 2004 Institute of Medicine Report, *Damp Indoor Spaces and Health*, published by The National Academies Press in Washington, DC. You can read a description of the report and purchase a copy at http://www.nap.edu/catalog.php?record_id=11011 [EXIT Disclaimer](#)

The **Center for Disease Control and Prevention (CDC's) National Center for Environmental Health (NCEH)** (800) CDC-INFO (232-4636), cdcinfo@cdc.gov

- Frequent Questions on Mold - www.cdc.gov/mold/faqs.htm
- *Stachybotrys chartarum* and health effects - www.cdc.gov/mold/stachy.htm

Homes and Molds

The EPA publication, "[A Brief Guide to Mold, Moisture, and Your Home](#)", is also available in PDF ([English](#) (PDE, 20 pp., 257 K) and [Spanish](#) (PDE, 20 pp., 796 K)). This Guide provides information and guidance for homeowners and renters on how to clean up residential mold problems and how to prevent mold growth.

Biological Pollutants in Your Home - This document explains indoor biological pollution, health effects of biological pollutants, and how to control their growth and buildup. One third to one half of all structures have damp conditions that may encourage development of pollutants such as molds and bacteria, which can cause allergic reactions — including asthma — and spread infectious diseases. Describes corrective measures for achieving moisture control and cleanliness. This brochure was prepared by the American Lung Association and the U.S. Consumer Product Safety Commission. The publication was updated by CPSC in 1997 www.cpsc.gov/cpscpub/pubs/425.html

Moisture control is the key to mold control, the Moisture Control Section from *Biological Pollutants in Your Home* follows:

There are many ways to control moisture in your home:

- Fix leaks and seepage. If water is entering the house from the outside, your options range from simple landscaping to extensive excavation and waterproofing. (The ground should slope away from the house.) Water in the basement can result from the lack of gutters or a water flow toward the house. Water leaks in pipes or around tubs and sinks can provide a place for biological pollutants to grow.
- Put a plastic cover over dirt in crawlspaces to prevent moisture from coming in from the ground. Be sure crawlspaces are well-ventilated.
- Use exhaust fans in bathrooms and kitchens to remove moisture to the outside (not into the attic). Vent your clothes dryer to the outside.
- Turn off certain appliances (such as humidifiers or kerosene heaters) if you notice moisture on windows and other surfaces.
- Use dehumidifiers and air conditioners, especially in hot, humid climates, to reduce moisture in the air, but be sure that the appliances themselves don't become sources of biological pollutants.
- Raise the temperature of cold surfaces where moisture condenses. Use insulation or storm windows. (A storm window installed on the inside works better than one installed on the outside.) Open doors between rooms (especially doors to closets which may be colder than the rooms) to increase circulation. Circulation carries heat to the cold surfaces. Increase air circulation by using fans and by moving furniture from wall corners to promote air and heat circulation. Be sure that your house has a source of fresh air and can expel excessive moisture from the home.

Moisture Control

Water in your home can come from many sources. Water can enter your home by leaking or by seeping through basement floors. Showers or even cooking can add moisture to the air in your home. The amount of moisture that the air in your home can hold depends on the temperature of the air. As the temperature goes down, the air is able to hold less moisture. This is why, in cold weather, moisture condenses on cold surfaces (for example, drops of water form on the inside of a window). This moisture can encourage biological pollutants to grow.

- Pay special attention to carpet on concrete floors. Carpet can absorb moisture and serve as a place for biological pollutants to grow. Use area rugs which can be taken up and washed often. In certain climates, if carpet is to be installed over a concrete floor, it may be necessary to use a vapor barrier (plastic sheeting) over the concrete and cover that with sub-flooring (insulation covered with plywood) to prevent a moisture problem.
- Moisture problems and their solutions differ from one climate to another. The Northeast is cold and wet; the Southwest is hot and dry; the South is hot and wet; and the Western Mountain states are cold and dry. All of these regions can have moisture problems. For example, evaporative coolers used in the Southwest can encourage the growth of biological pollutants. In other hot regions, the use of air conditioners which cool the air too quickly may prevent the air conditioners from running long enough to remove excess moisture from the air. The types of construction and weatherization for the different climates can lead to different problems and solutions.

Moisture On Windows

Your humidistat is set too high if excessive moisture collects on windows and other cold surfaces. Excess humidity for a prolonged time can damage walls especially when outdoor air temperatures are very low. Excess moisture condenses on window glass because the glass is cold. Other sources of excess moisture besides overuse of a humidifier may be long showers, running water for other uses, boiling or steaming in cooking, plants, and drying clothes indoors. A tight, energy efficient house holds more moisture inside; you may need to run a kitchen or bath ventilating fan sometimes, or open a window briefly. Storm windows and caulking around windows keep the interior glass warmer and reduce condensation of moisture there.

Humidifiers are not recommended for use in buildings without proper vapor barriers because of potential damage from moisture buildup. Consult a building contractor to determine the adequacy of the vapor barrier in your house. Use a humidity indicator to measure the relative humidity in your house. The American Society of Heating and Air Conditioning Engineers (ASHRAE) recommends these maximum indoor humidity levels.

Outdoor Recommended Indoor Temperature Relative Humidity

Temperature Outdoors	Indoor Relative Humidity
+20° F.	35%
+10° F.	30%
0° F.	25%
-10° F.	20%
-20° F.	15%

Source: Anne Field, Extension Specialist, Emeritus, with reference from the Association for Home Appliance Manufacturers (www.aham.org ^{EXIT} [Disclaimer](#)).

How to Identify the Cause of a Mold and Mildew Problem

Mold and mildew are commonly found on the exterior wall surfaces of corner rooms in heating climate locations. An exposed corner room is likely to be significantly colder than adjoining rooms, so that it has a higher relative humidity (RH) than other rooms at the same water vapor pressure. If mold and mildew growth are found in a corner room, then relative humidity next to the room surfaces is above 70%. However, is the RH above 70% at the surfaces because the room is too cold or because there is too much moisture present (high water vapor pressure)?

The amount of moisture in the room can be estimated by measuring both temperature and RH at the same location and at the same time. Suppose there are two cases. In the first case, assume that the RH is 30% and the temperature is 70°F in the middle of the room. The low RH at that temperature indicates that the water vapor pressure (or absolute humidity) is low. The high surface RH is probably due to room surfaces that are "too cold." Temperature is the dominating factor, and control strategies should involve increasing the temperature at cold room surfaces.

In the second case, assume that the RH is 50% and the temperature is 70°F in the middle of the room. The higher RH at that temperature indicates that the water vapor pressure is high and there is a relatively large amount of moisture in the air. The high surface RH is probably due to air that is "too moist." Humidity is the dominating factor, and control strategies should involve decreasing the moisture content of the indoor air.

Should You Have the Air Ducts in Your Home Cleaned? - excerpt on duct cleaning and mold follows, please review the entire document for additional information on duct cleaning and mold.

You should consider having the air ducts in your home cleaned if:

There is substantial visible mold growth inside hard surface (e.g., sheet metal) ducts or on other components of your heating and cooling system. There are several important points to understand concerning mold detection in heating and cooling systems:

- Many sections of your heating and cooling system may not be accessible for a visible inspection, so ask the service provider to show you any mold they say exists.
- You should be aware that although a substance may look like mold, a positive determination of whether it is mold or not can be made only by an expert and may require laboratory analysis for final confirmation. For about \$50, some microbiology laboratories can tell you whether a sample sent to them on a clear strip of sticky household tape is mold or simply a substance that resembles it.
- If you have insulated air ducts and the insulation gets wet or moldy it cannot be effectively cleaned and should be removed and replaced.
- If the conditions causing the mold growth in the first place are not corrected, mold growth will recur.

Additional Resource

- U.S. Dept. of Agriculture, Food Safety and Inspection Service fact sheet - [Safe Food Handling- Molds on Foods: Are They Dangerous?](#) September 2005
- [A Brief Guide to Mold in the Workplace](#), U.S. Dept. of Labor, Occupational, Safety and Health Administration, Safety and Health Bulletin 03-10-10

Indoor Air Regulations and Mold

Standards or Threshold Limit Values (TLVs) for airborne concentrations of mold, or mold spores, have not been set. Currently, there are no EPA regulations or standards for airborne mold contaminants.

Large Buildings and Mold

EPA has a number of resources available, you can start with the Indoor Air Quality Building Evaluation and Assessment Model (I-BEAM). I-BEAM updates and expands EPA's existing Building Air Quality guidance and is designed to be comprehensive state-of-the-art guidance for managing IAQ in commercial buildings. This guidance was designed to be used by building professionals and others interested in indoor air quality in commercial buildings. I-BEAM contains text, animation/visual, and interactive/calculation components that can be used to perform a number of diverse tasks. See www.epa.gov/iaq/largebldgs/i-beam/index.html.

See also "[Building Air Quality: A Guide for Building Owners and Facility Managers](#)".

Excerpt from the *Building Air Quality: A Guide for Building Owners and Facility Managers*, [Appendix C - Moisture, Mold and Mildew](#):

How to Identify the Cause of a Mold and Mildew Problem.

Mold and mildew are commonly found on the exterior wall surfaces of corner rooms in heating climate locations. An exposed corner room is likely to be significantly colder than adjoining rooms, so that it has a higher relative humidity (RH) than other rooms at the same water vapor pressure. If mold and mildew growth are found in a corner room, then relative humidity next to the room surfaces is above 70%. However, is the RH above 70% at the surfaces because the room is too cold or because there is too much moisture present (high water vapor pressure)?

The amount of moisture in the room can be estimated by measuring both temperature and RH at the same location and at the same time. Suppose there are two cases. In the first case, assume that the RH is 30% and the temperature is 70°F in the middle of the room. The low RH at that temperature indicates that the water vapor pressure (or absolute humidity) is low. The high surface RH is probably due to room surfaces that are "too cold." Temperature is the dominating factor, and control strategies should involve increasing the temperature at cold room surfaces.

In the second case, assume that the RH is 50% and the temperature is 70°F in the middle of the room. The higher RH at that temperature indicates that the water vapor pressure is high and there is a relatively large amount of moisture in the air. The high surface RH is probably due to air that is "too moist." Humidity is the dominating factor, and control strategies should involve decreasing the moisture content of the indoor air.

Schools and Mold and Indoor Air Quality

The Agency's premier resource on this issue is the *Indoor Air Quality Tools for Schools* kit. Our schools-related resources on the web start at: www.epa.gov/iaq/schools.

The asthma companion piece for the *IAQ Tools for Schools* Action kit, is *Managing Asthma in the School Environment* - www.epa.gov/iaq/schools/managingasthma.html. This publication has a section entitled *Clean Up Mold and Moisture Control*: An excerpt follows:

Common Moisture Sources Found in Schools

Moisture problems in school buildings can be caused by a variety of conditions, including roof and plumbing leaks, condensation, and excess humidity. Some moisture problems in schools have been linked to changes in building construction practices during the past twenty to thirty years. These changes have resulted in more tightly sealed buildings that may not allow moisture to escape easily. Moisture problems in schools are also associated with delayed maintenance or insufficient maintenance, due to budget and other constraints. Temporary structures in schools, such as trailers and portable classrooms, have frequently been associated with moisture and mold problems.

Suggestions for Reducing Mold Growth in Schools

Reduce Indoor Humidity

- Vent showers and other moisture-generating sources to the outside.
- Control humidity levels and dampness by using air conditioners and de-humidifiers.
- Provide adequate ventilation to maintain indoor humidity levels between 30-60%.
- Use exhaust fans whenever cooking, dishwashing, and cleaning in food service areas.

Inspect the building for signs of mold, moisture, leaks, or spills

- Check for moldy odors.
- Look for water stains or discoloration on the ceiling, walls, floors, and window sills.
- Look around and under sinks for standing water, water stains, or mold.
- Inspect bathrooms for standing water, water stains, or mold.
- Do not let water stand in air conditioning or refrigerator drip pans.

Respond promptly when you see signs of moisture and/or mold, or when leaks or spills occur

- Clean and dry any damp or wet building materials and furnishings within 24-48 hours of occurrence to prevent mold growth.
- Fix the source of the water problem or leak to prevent mold growth.
- Clean mold off hard surfaces with water and detergent, and dry completely.
- Absorbent materials such as ceiling tiles, that are moldy, may need to be replaced.
- Check the mechanical room and roof for unsanitary conditions, leaks, or spills.

Prevent moisture condensation

- Reduce the potential for condensation on cold surfaces (i.e., windows, piping, exterior walls, roof, or floors) by adding insulation.

Floor and carpet cleaning

- Remove spots and stains immediately, using the flooring manufacturer's recommended techniques.
- Use care to prevent excess moisture or cleaning residue accumulation and ensure that cleaned areas are dried quickly.
- In areas where there is a perpetual moisture problem, do not install carpeting (i.e., by drinking fountains, by classroom sinks, or on concrete floors with leaks or frequent condensation).

Mold Publications



The publication, "[A Brief Guide to Mold, Moisture, and Your Home](#)", is available in HTML and PDF ([PDF](#), 20 pp., 278 K, [about PDF](#))

- [EPA 402-K-02-003] reprinted September 2010



Una Breve Guía para el Moho, la Humedad y su Hogar está disponible en el formato PDF ([PDF](#), 20 pp., 796 K).

- [Documento de la agencia EPA número 402-K-03-008]



The publication, "[Mold Remediation in Schools and Commercial Buildings](#)", is available in HTML and PDF ([PDF](#), 56 pp., 1.6 M)

- [EPA 402-K-01-001] reprinted September 2008

Other Resources

[WHO Guidelines for Indoor Air Quality: Dampness and Mould \(PDF\)](#) (248 pp., 2.65 M) [EXIT Disclaimer](#) World Health Organization, 2009

[EPA's Office of Research and Development](#), National Exposure Research Lab, Microbiological and Chemical Exposure Assessment Division, Microbial Exposure Research Branch: [Geographic Distribution of Environmental Relative Moldiness Index \(ERMI\) in U.S. Homes](#)

How to Order Publications

You can order Indoor Air Quality publications from EPA's **National Service Center for Environmental Publications (NSCEP)**:

U.S. Environmental Protection Agency

National Service Center for Environmental Publications (NSCEP)

Website: www.epa.gov/nscep

Phone: 1-800-490-9198

Fax: (301) 604-3408

Email: nscep@bbs-imit.com

NSCEP operates a Toll-free phone service for EPA Publication Assistance with live customer service representative assistance Monday through Friday from 9:00am-5:30pm eastern time. Voice Mail is available after operating hours. You can fax or e-mail your publication requests. For technical assistance with NSCEP web pages, write to: nscep_nepis.tech@epa.gov. Please use the **EPA Document Number** when ordering from **NSCEP**.

[Mold Basics](#)
[Mold Cleanup](#)
[Cleanup Guidelines](#)

[Hidden Mold](#)
[Mold Image Library](#)
[Introduction to Mold](#)

[Mold Course](#)
[Prevention and Control Tips](#)
[What to Wear When Cleaning Mold](#)

[Flood Cleanup](#)
[Español](#)
[Indoor Air Quality](#)

Last updated on Monday, November 19, 2012



DEPARTMENT OF HEALTH AND HUMAN SERVICES

Isiah Leggett
County Executive

Uma S. Ahluwalia
Director

September 26, 2013

Dear Parent:

As you know, Montgomery County Public Schools is engaged in a remediation effort to address the mold issues that have been identified at Rolling Terrace Elementary School (RTES). As the Public Health Officer, I wanted to provide you with information about the possible health effects and symptoms associated with mold exposure. Montgomery County Department of Health and Human Services (MCDHHS) recommends that you contact your health care provider to determine the proper action to take if you feel that your child is ill or may become ill from exposure to mold.

Health problems to look for include:

- Allergic reactions
- Flare ups of asthma
- Other respiratory complaints

Allergy symptoms like those from exposure to pollen or animal dander are the most common health problem related to mold. These symptoms may include sneezing, irritation of the nose, mouth, or throat; nasal stuffiness and runny nose; dry, scaly skin; or red, itchy, or watery eyes. These same symptoms may also be caused by pollen typically released in the fall.

Asthma is a disease where the airways tighten and swell, making breathing difficult. Children with asthma may experience shortness of breath, wheezing, or coughing. An asthma attack can be triggered by many things, including exposure to pets, pollen, or dust; exposure to cigarette or other smoke; or running and playing. Exposure to mold may trigger an asthma attack in children with known allergies or asthma.

Respiratory symptoms may occur if the child's lungs have been irritated by mold exposure. Symptoms may include progressive shortness of breath, cough or fever.

Contact your primary health care provider if your child is exhibiting any of the health problems described above. However, if your child is experiencing symptoms during the school day, they should report to the health room and follow up should occur with their primary health care provider.

RTES School Based Health Center and health room staff can answer any questions you may have or assist you in accessing health care if you do not have a primary health care provider.

Please contact your school nurse at 301-431-7603.

Sincerely,

Ulder J. Tillman, MD, MPH
Health Officer and Chief

UJT:ss

Public Health Services

MEMORANDUM OF UNDERSTANDING

Between Montgomery County, working through the
Department of Health and Human Services,
Montgomery County Public Schools, and
Maryland Department of Health and Mental Hygiene

This Memorandum of Understanding (MOU) made this 8th day of February 2012 is entered into between Montgomery County, Maryland (County), working through its Department of Health and Human Services (DHHS), Montgomery County Public Schools (MCPS), and the Maryland Department of Health and Mental Hygiene (DHMH).

I. BACKGROUND

- A. The County and MCPS have committed to maintain a system for collaborative planning, policy development, program implementation, and evaluation to ensure the health and safety, and well being of children enrolled in MCPS.
- B. Code of Maryland Regulations (COMAR) 13A.05.0505-15 defines the state requirements for meeting the health needs of children in schools. The local health and education agencies are responsible for developing and implementing processes and systems to meet COMAR requirements.
- C. DHHS is the local agency responsible for developing and implementing processes and systems for meeting the health needs of children in schools, in coordination with MCPS.
- D. DHMH is interested in strengthening current surveillance capabilities by conducting enhanced disease surveillance, using information gathered from MCPS, for detection of events of public health importance.
- E. This MOU identifies the respective roles of DHHS, MCPS, and DHMH staff in providing health-related services in MCPS facilities and establishes an ongoing interagency process for resolving issues and planning related to provision of health services in schools.
- F. This MOU will be valid for five (5) years at which time it will be reviewed and updated by the County, MCPS, and DHMH.
- G. That any and all designations regarding access to data or changes in this MOU must be submitted in writing.

II. POLICY AND PLANNING

- A. An interagency committee will meet biannually and as needed for the purpose of planning and reviewing larger interagency issues. The committee should include

representatives from the following areas and others as needed:

1. From MCPS: Department of Student Services, Department of Special Education Services, Department of Facilities Management, Department of School Safety and Security, the Office of the Chief Technology Officer, and the Office of Curriculum and Instructional Programs.
 2. From DHHS: County Health Officer/Deputy Health Officer; School Health Services (SHS) Director, Chief Technology Officer and SHS Nurse Administrator.
- B. DHHS will provide written guidelines for school administrators that explain the role and functions of the School Community Health Nurse (SCHN) and the School Health Room Aide (SHRA) and delineate processes for answering questions and responding to problems or concerns.
- C. Issues that cannot be resolved at the school level by the Principal, SCHN, and/or Nurse Administrator will be brought to the attention of the MCPS Community Superintendent and the MCPS Chief Operating Officer by the Principal and to the DHHS SHS Director through the Nurse Administrator.

II. ROLES AND RESPONSIBILITIES OF THE PARTIES

- A. The County and MCPS agree to the following roles and responsibilities:
1. SHS health policy recommendations are made by the County Health Officer and/or SHS Director, as her designee, to the Superintendent and/or his designees.
 2. MCPS and DHHS will collaborate on practices and joint procedures related to health concerns.
 3. MCPS will consult with DHHS in the development, revision and rescission of policies and regulations related to health.
 4. SHS is responsible for developing and implementing DHHS policies and procedures that are related to the scope of work of SHS staff.
 5. MCPS is responsible for the development and implementation of the health education curriculum.
- B. Medical Consultation will be provided to MCPS by the County Health Officer and/or DHHS Public Health Physician, who is assigned to SHS.
- C. Health Services
1. Basic school health services provided to students by DHHS SHS staff will include: health consultation and referral; crisis consultation and referral;

illness, injury and emergency care; medication and treatment administration; nurse case management and linkage to community health care providers; hearing and vision screening and lead screening and participation in meetings such as Educational Management Team (EMT), Collaborative Problem Solving (CPS), Individualized Education Program (IEP), 504 Plan, Student Assistance Program (SAP); and health education and promotion activities.

2. Additional school health services provided include well and sick care to the students enrolled in the School-based Health Centers; immunizations and tuberculosis screenings to international students enrolling in MCPS at the School Health Services Center; early identification, intervention and nursing case management to children served by the Montgomery County Infants and Toddlers Program, the Developmental Evaluation Services for Children Program, and by the Head Start/Prekindergarten Program.
3. DHHS SHS will serve as liaison regarding health issues among MCPS and other DHHS services.
4. DHHS SHS will inform the Department of Facilities Management and the Office of Special Education and Student Services of health issues such as, but not limited to, Methicillin-resistant Staphylococcus Aureus (MRSA) cases and pandemic illness preparations. MCPS and DHHS will collaborate to implement established protocols and guidelines.
5. SCHNs will provide training on the administration of medications, treatments, and other health information to MCPS staff in accordance with the Maryland Nurse Practice Act.
6. SCHNs will train parent volunteers, when available and with the Principal's approval, to triage students who come to the health room when SHS staff is not available.

D. Health Room Coverage

1. SCHNs (Registered Nurses) are assigned to MCPS schools to provide services in accordance with COMAR requirements. They provide direct services to students and clinical oversight to SHRAs. The SCHNs are assigned by SHS to schools at a level determined by health needs in the assigned schools and available resources.
2. A SHRA is assigned to each elementary, middle, and high school and certain special schools to provide coverage in compliance with COMAR requirements. This includes performing certain delegated nursing tasks, in accordance with the Maryland Nurse Practice Act.
3. Substitute SCHN and SHRA coverage for absent health staff is provided in accordance with SHS staffing procedures and as resources allow.

4. In accordance with the MCPS regulation on emergency first aid, principals shall designate school staff to provide health room coverage, first aid, and CPR (Cardiopulmonary Resuscitation)/Automated External Defibrillator (AED) to respond in emergency situations when SHS staff is not available. MCPS will provide CPR and first aid training for these designated staff.
5. SCHNs will train designated back-up school staff on the administration of medications and treatments to provide for health room coverage during SHS staff's lunches and absences.

E. Special Health Needs

1. The SCHN will participate with MCPS staff at Educational Management Team (EMT), CPS, IEP, or 504 Plan meetings when these meetings include discussion of significant health needs and issues.
2. MCPS staff will take the lead role in the SAP and the SCHN will participate in this activity.
3. MCPS staff and DHHS SHS staff will collaborate to provide health services to students with special health needs in both general and special education programs.
4. The SCHN will assess students' health needs, develop Individual Health Care Plans as needed, and consult with and inform school staff, on a need-to-know basis, of the special needs of students as follows in accordance with FERPA:
 - a. Information regarding students with life-threatening allergic reactions or anaphylaxis will be shared in writing with school staff as soon as possible but no later than the first two weeks of the school year and as additional students are identified throughout the school year.
 - b. Information regarding students with other serious health conditions will be shared by the SCHN with individual school staff on a need-to-know basis, in writing and in a sealed envelope marked "Confidential."
 - c. Information regarding accommodations needed for health reasons will be shared by the SCHN with individual school staff and the school's 504 Coordinator verbally or in writing in a sealed envelope marked "Confidential."
 - d. All school staff will be informed of general signs and symptoms warranting referral of students to the health room for assessment.
5. The plan for students with special health needs to participate in school-related activities will be determined on a case-by-case basis collaboratively by MCPS and DHHS.

6. In the event of a dispute by a parent or student with the school system regarding health services, the SCHN and/or Principal will notify the SHS Nurse Administrator or Nurse Manager who will advise the SHS Director. SHS administration will designate appropriate health staff to participate in IEP, 504 Plan, or other meetings; due process hearings; and/or legal proceedings to advise and support MCPS as needed. MCPS staff will take steps to have appropriate SHS staff subpoenaed.

F. School Health Records and Forms

1. SHS staff will utilize the MCPS student health record, which includes the MCPS/Maryland State Department of Education forms SRS-5 (Health Screenings, Examinations and Evaluations), SRS-5a (Additional Comments on Students' Health), SRS-6 (Health Inventory Form), MCPS 525-17 (Dental Health Record Card), and the DHMH 896 (Maryland Immunization Certificate).
2. DHHS school health pregnancy case management and School-based Health Center records and forms are designed and revised by DHHS.

F. Procurement for Supplies and Equipment

1. Principals are responsible for providing supplies and equipment for health rooms in their school. SHS staff will inform principals of needed supplies/equipment annually and as needed.
2. SHS management will review the MCPS procurement bid list annually and as needed and will advise as to what items and supplies should be stocked for health room use or discontinued. Hand sanitizers and disinfectants for MRSA prevention (on the MCPS bid list) will be used in schools.

H. Immunization Compliance

1. MCPS and SHS will work jointly to ensure that all students are in compliance with the State of Maryland's required immunizations as specified in the chart, Minimum Vaccine Requirements for Children Enrolled in Preschool Programs and in schools, from the DHMH.
2. The DHHS School Health Services Center will provide required and recommended immunizations for international students enrolling in MCPS via the International Students Admissions Office. Other Montgomery County students also may obtain immunizations at this site or at the County's other immunization clinics.

I. Information Technology

1. Designated points of contact in MCPS and DHHS will be identified and will act as liaisons between the organizations to address project-related items.
2. DHHS and MCPS, in collaboration with the Montgomery County Department of Technology Services (DTS), will maintain the communications connectivity between the MCPS Office of the Chief Technology Officer and the Montgomery County Data Center.
3. DHHS will provide all personal computer (PC) hardware used by DHHS staff at MCPS locations.
4. DHHS and DTS agree to jointly support the PC hardware used by DHHS staff at MCPS locations. This includes initial set-up, required software, and troubleshooting PC-related problems.
5. MCPS will provide DTS and DHHS with technical assistance on an as-needed basis to rapidly restore network connections that could be affected by changes made by MCPS to their network configuration.
6. MCPS, DTS, and DHHS will continuously collaborate and coordinate to ensure that proper security is maintained between MCPS and other County systems.
7. MCPS will provide all required student data needed by DHHS SHS to support the provision of health room services for MCPS students.
8. MCPS and DHHS will collaborate to address technical issues to address modifications that may be necessary in the development of technical solutions.

J. Safety and Environmental Health

1. The MCPS Department of Facilities Management, DHHS SHS and the County Health Officer will collaborate to provide a safe, healthy environment in all schools and to resolve unsafe and unhealthy conditions. The MCPS Department of Facilities Management will lead investigations of all safety and environmental health concerns, consulting with DHHS and the County's Department of Environmental Protection as necessary.
2. MCPS schools will provide daily student absentee data to DHHS health staff who will enter it into the Children's Health Alert Network (CHAN). Aggregate reports of absentee data will be shared with MCPS.
3. DHMH shall have secure access to the CHAN data to collect information for

the sole purpose of disease surveillance and control and case/outbreak investigation activities. The access granted to DHMH is authorized by Section 18-904(b) of the Health General Article and COMAR Regulation 10.06.01.06 (B)(4) which require a health care provider, school or child care facility personnel to make available to DHMH or the health officer, all records and information necessary for an epidemiological response or investigation.

4. DHHS and DHMH will (1) maintain the confidentiality of the school system's data and information by using techniques such as including user accounts and passwords, a layered firewall architecture, anti-virus software, encryption, and intrusion detection technologies; and (2) allow access to the data only as specific in this MOU or as required under applicable federal or state law.
5. In accordance with applicable law, DHHS and DHMH shall protect and preserve the confidentiality of the identity of the school system and all data and individually identifiable health information submitted by the school system and limit access of confidential data to those health department employees who are authorized to receive such information in order to conduct disease surveillance, investigation, and control activities. DHHS and DHMH shall inform those employees that under the Federal Student Records Law (FERPA) they may not re-disclose student health and educational information and may only use the information for the purpose for which such information was obtained for use by DHHS and/or DHMH, or be subject to penalties under federal law.

K. Media and Communications

The MCPS Office of the Superintendent of Schools, Department of Communications, and the Montgomery County Office of the County Health Officer, Montgomery County Information Office, and SHS will confer with one another on health issues of high priority, high visibility, and/or medical emergency and develop a plan of action.

L. Facilities

1. MCPS will endeavor to provide a health room facility in each school that meets COMAR School Health Standards-Health Facilities 13A.05.05.10 requirements for health suites and will be responsible for providing the health room furnishings and equipment.
2. MCPS will submit plans for new facilities and renovations that affect health room suites to SHS management staff for review and approval.

M. Health Education and Health Promotion

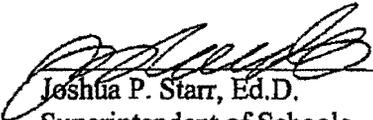
1. MCPS Health Education and Safe and Drug-Free Schools staff and SHS and

DHHS Health Promotion and Substance Abuse Prevention staff will continue to collaborate to provide prevention and education programs to students, staff, and community members in schools and in the community. DHHS and Safe and Drug-Free Schools will continue to offer programs to the community both separately and collaboratively.

2. MCPS will continue to provide health education instruction to students at every grade level, Pre-K-8, and a one semester graduation required course and electives at the high school level. DHHS will continue to collaborate with MCPS and provide information and input on the design and maintenance of the health education program and will assist in the delivery of the program as requested and as time and resources permit.

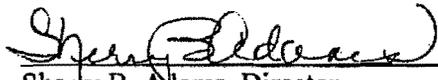
Memorandum of Understanding Signatures follow.

Montgomery County Public Schools

By: 
Joshua P. Starr, Ed.D.
Superintendent of Schools

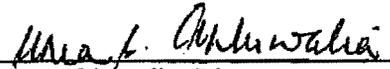
Date: 2.9.2012

Maryland Department of Health and
Mental Hygiene

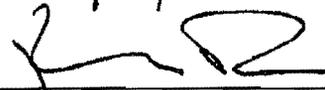
By: 
Sherry B. Adams, Director
Director, Office of Preparedness
and Response

Date: 2/21/2012

Montgomery County, Department of Health
and Human Services

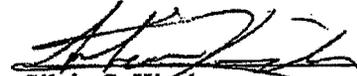
By: 
Uma Ahluwalia, Director

Date: 2/13/2012

By: 
Kathleen Boucher, Assistant Chief
Administrative Officer

Date: 2/13/12

Approved as to Form and Legality

By: 
Silvia C. Kinch
Associate County Attorney

Date: 2/13/2012