Ready to Learn & Accelerate School Reopening Plan

"One Family! Building on the Collective Strengths of Everyone within our Learning Community!"

Receiver

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Dr. Carol D. Birks

Pandemic School Reopening Task Force

Dr. Carol D. Birks, Superintendent

Ronald Simonson, Pandemic, School Safety and Security Coordinator

Dr. Joanne Barnett, Digital Learning Consultant

Dr. Lakiyah Chambers, Director of Human Resources

Dr. Matthew Flannery, Project Coordinator

Dr. Marchelle Foreman, Secondary Supervisor of Special Education

Dariah Jackson, Special Education Teacher/Vice President of the Chester Upland Education Association (CUEA)

Anthony Johnson, Board President

Joyce Lee, Certified School Nurse

Dr. Byron McCook, Interim Director of Technology

Karen Miah, Community Representative

Dr. Christine Murrin, Director of Student Services

Marvin Newton, Director of Facilities and Grounds

Dr. Jala Olds-Pearson, Assistant Superintendent of Curriculum, Instruction and Professional Development

Carlena Parker, Principal, Main Street Elementary School

John Shelton, Dean of Students/President of the Chester Upland Education Association (CUEA)

Health & Safety Team

Dr. Lakiyah Chambers, Director of Human Resources

Dr. Matthew Flannery, Project Coordinator

Ms. Joyce Lee, Stetser School Nurse

Dr. Christine Murrin, Director of Student Services

Mr. Ronald Simonson, Pandemic Coordinator, School Safety and Security Coordinator

Mission Statement

The Chester Upland School District is committed to providing all students the opportunity to achieve excellence in the four A's: Academics, Athletics, the Arts, and Activities.

Vision Statement

The vision of the Chester Upland School District is for every student to graduate from high school ready for college and/or a career in spite of any and all challenges. Shared values every student and adult feels cared for, valued, and supported every minute of every day... Every student completes middle school ready for high school...

C.O.R.E.

As a District we are focusing on our C.O.R.E. foundation that keeps students at the center of their learning and focuses on the instructional core. The instructional core correlates to the relationship between students, teachers, and content.

C ***Children First:*** The well-being and continuous learning of every child will drive decisions.

O ***One Chester Upland:*** With dedicated community of partners, parents, students and staff, we will excel, united as One Chester Upland.

R ***Reimagining:*** Through a mode of continuous improvement, we will apply four important levers for change, *collaboration, capacity building, deepening knowledge of pedagogy,* and *focusing direction* to improve outcomes for all.

E ***Equity, Excellence, and Emotional Intelligence:*** We will ensure equitable access to a quality education that includes emotional intelligence and leads to excellence across all opportunities and services.

Letter from the Superintendent

Dear Learning Community:

We are excited to welcome back our students and families who have selected the hybrid learning model and our teachers and support staff to in person learning! We recognize that the COVID-19 pandemic that has descended on us has changed how we learn, teach, and engage as a community of learners.

I commend our faculty and staff for the incredible job you have done to support our students' learning and the investment you have made in your professional growth and development thus far this year. Thank you for your patience, resilience, service and flexibility as we continue to work collaboratively to support the learning and teaching taking place within our District during this current health crisis.

We are very excited to launch our *Ready to Learn & Accelerate: School Reopening Plan* for students, families, faculty and staff to safely return to our schools. Our *Ready to Learn & Accelerate: School Reopening Plan* was developed by our District's Pandemic School Reopening Task Force and Health and Safety Team. This document serves as a comprehensive roadmap intended to provide information and protocols for our collective learning community to help mitigate the spread of COVID-19 and to safely reopen our schools.

For the past eleven months, The District's leadership has been in frequent communication with public health experts and other leaders from across the county and state to ensure that we incorporate best practices relating to health and safety established by the Centers for Disease Control and Prevention (CDC), the Pennsylvania Department of Education, and the Chester County Health Department to influence our reopening plan. These scientifically researched based practices will serve as the guidance, procedures and practices that we will adopt to influence our decision making, to continue to create a learning environment that fosters academic and social-emotional safety and equity for all learners. As a District, we are inculcating the tenets of continuous improvement and continuous learning , therefore protocols within this guide will be updated periodically.

As a District, we are examining and strengthening our standards and procedures to address our daily school operations, including school safety measures, student transportation, facilities usage, and meal services. Before we invite all grade levels back for in- person school, we will conduct an additional community forum, facilitate intensive professional learning for certified and non-certified staff, and share new health updates with everyone.

As part of our planning, we have distributed personal protective equipment, developed guidance documents and have prepared our facilities for our new way of working together. Furthermore, every school has extensive safety measures in place to protect the health and well-being of all members of our Learning Community, including:

- Implemented pre-screening requirements for students and staff
- Purchased personal protective equipment (PPE) for staff and students to support mandatory mask wearing and facial covering
- Arranged new classroom setups to promote social distancing
- Placed plexiglass partitions in offices and classrooms
- Installed touchless hand sanitizer stations
- Posted safety signage throughout the District
- Enhanced cleaning protocols using EPA-approved cleaning products
- COVID-19 Tracker by building/school

We have also established a partnership with the Children's Hospital of Philadelphia to pilot a District-wide BinaxNOW COVID-19 Testing-Program, as another intervention to help keep us all safe. Additional information regarding the launch of this program will be shared as it becomes available.

It is paramount that all families, students, faculty and staff adhere to the guidance in this document and the revisions that will be made based on updates from medical experts so that we provide our students with the academic and social emotional learning that is essential for them to be successful in college, career and life beyond high school. More detailed information regarding these policies and procedures is located in the District's *Phased School Reopening Health and Safety Plan.* I am honored to serve you.

Best,

Carol D. Birks

Dr. Carol D. Birks
Superintendent

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Introduction, Context and Stakeholders

Since the beginning of the 2020-2021 school year, we have worked to find a way to best balance the health and safety of everyone in planning for the return to in person learning. The Chester Upland School District is opening schools in accordance with the guidelines issued by the Chester County Health Department and the Pennsylvania Department of Education. The Chester Upland School District is using a blended reopening to bring students and staff back to physical school buildings.

In order to comply with social distancing requirements, students will be divided into two cohorts, labeled Cohorts C and U respectively. Classes for students in Cohort C meet on Mondays and Tuesdays, while Cohort U students take classes on Thursdays and Fridays. Each cohort will spend some time learning in a virtual environment as well as in the physical building. All the Centers for Disease Control and Prevention (CDC) guidelines will be followed to the maximum extent possible when students and staff are in their respective buildings. On Wednesdays all classes are conducted virtually. Teachers will work remotely. All Essential Workers will report to work on Wednesdays and will participate in professional learning on Wednesday afternoons.

As our *Ready to Learn & Accelerate: School Reopening Plan* has evolved, the District has stayed committed to engaging students, staff, families, and community members on the various options and considerations for reopening. These various reopening options have been presented through surveys, town hall meetings and community forums. Continuous feedback has been received throughout the process and taken into consideration while the Pandemic School Reopening Task Force and the Health and Safety Team have remained current on the best practices as the evolution of this reopening plan has occurred. Throughout the process remaining focused on the educational needs of our students being met while at the same time caring for and managing employee needs related to COVID-19. This guide includes an overview of the Learning and Teaching, Talent Management & Development and Organizational Efficiencies and Effectiveness implemented to support learning. It also includes key terminology, educational options, sample schedules, checklists, technology and responses to possible or positive COVID-19 cases.

This guide will also provide data gathered from our stakeholders to enlist their perspectives on school reopening. Throughout the year, the District will continue to survey all members of our learning community and establish two-way communication with our families and community.

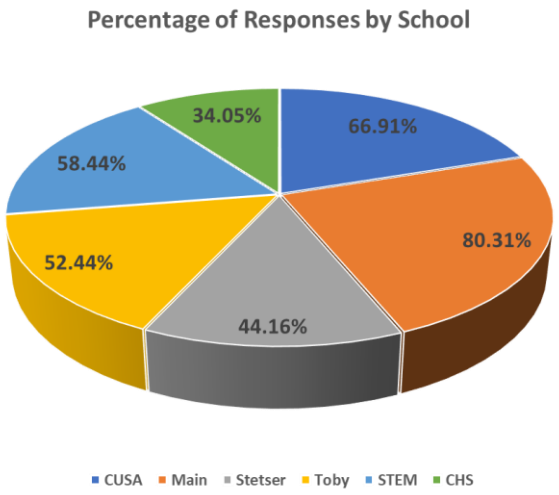
Family School Reopening Survey

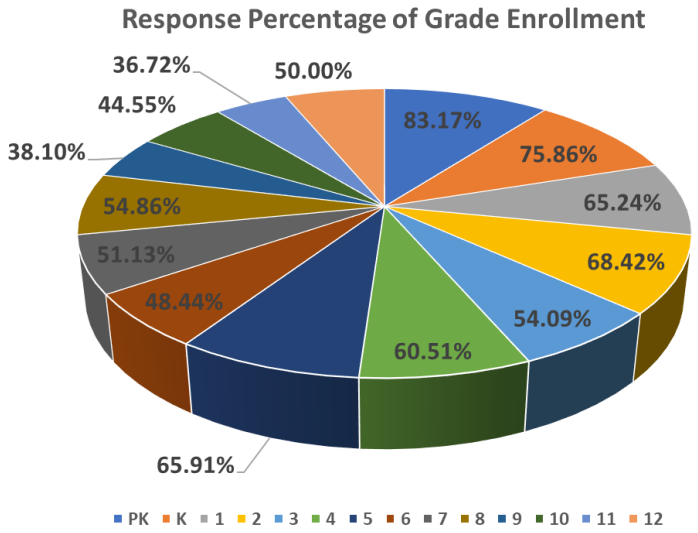
The Pandemic School Reopening Task Force developed and administrated a survey to families in English and Spanish. Links to the survey were posted on the Districts website and social media platforms. The survey was open from January 4, 2021 – January 24, 2021 during which time a total of 1,375 responses were received out of 2,635 active enrollments or 52.2% of the student population. As the data shows, with the exception of Chester High School, more than half of the parents were engaged in the decision-making process and in so doing, completed the survey.

Data collected through the survey was used to prepare for reopening by asking families which education model they would choose—hybrid, full remote, or a digital option. The survey and accompanying letter stressed the importance that each family answer all questions for each child in the household attending Chester Upland School District so the District could best prepare to meet your child's learning experience for the remainder of the 2020-2021 academic year. In addition to choosing an education model, families we also asked which school each child in the home attends, their grade(s), whether any have IEPs or receive ELL services as well as if the student(s) would require transportation provided by the District or if the parent would provide transportation, and if the student(s) need District provided internet. The survey concluded with an open-ended question to gain perspective of families as to what needed to be changed in the way their children are currently learning.

Number of Family Surveys Received by School

CUSA	273
Main	261
Stetser	121
Toby	172
STEM	263
CHS	285



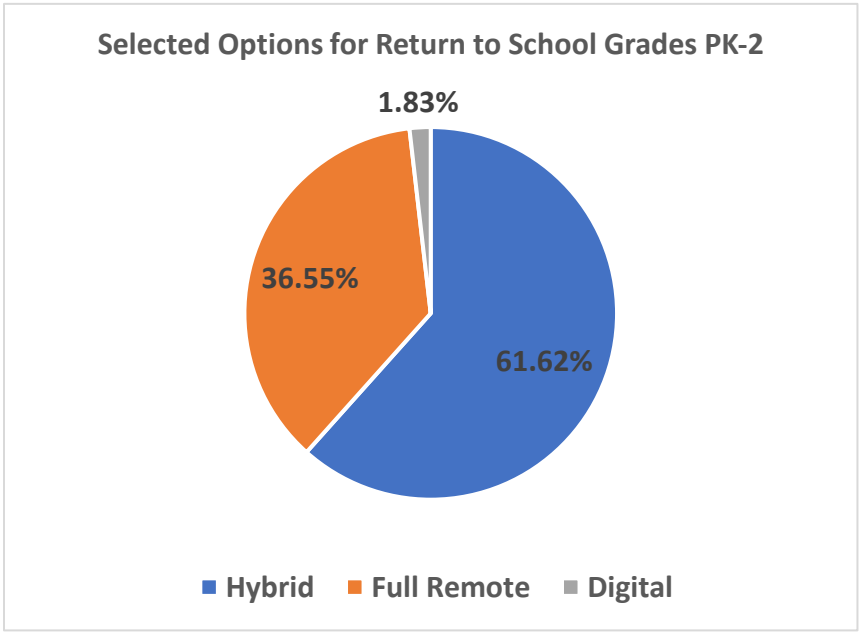


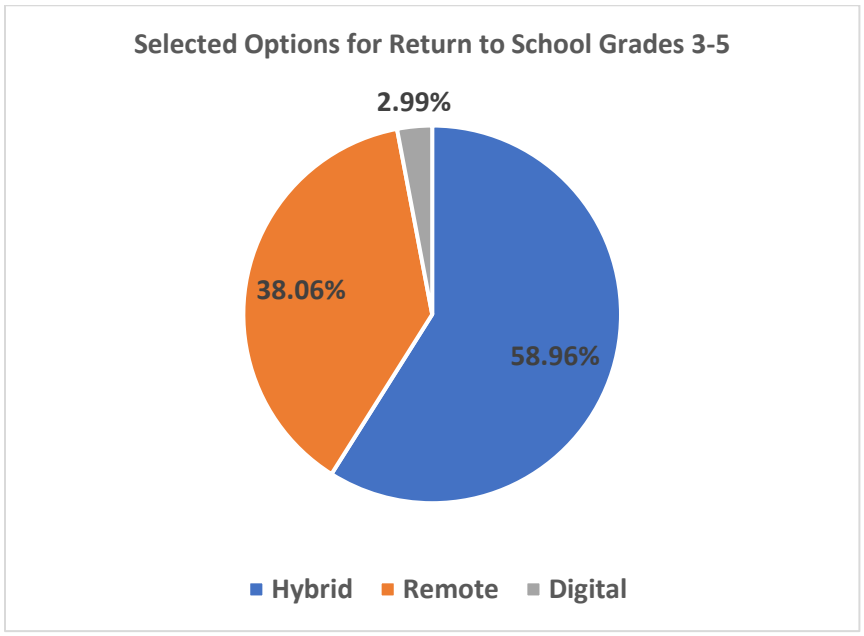
The survey shows that elementary parents were far more responsive to the survey request than others – 83% of enrolled PK students have a response compared to 38% of enrolled 9th grade students.

Instruction Model Choices available for families to select in the survey included a **Hybrid Model** in which students will attend classes two to three days per week in person and the other days receive instruction at home via Zoom from their teachers; or, **Full Remote Learning**, during which time students will remain home and receive instruction from their current teachers while teachers and some classmates are involved in learning in person; or, **Chester Upland School District's *Design Thinking Digital Academy*** which is designed for students enrolled in grades 6-12 only which offers a hybrid and remote learning options focused on a personalized projects-based learning experience in which teachers can adjust the content and pacing to meet the specific needs of the students.

Hybrid	**236**
Full Remote	**140**
Digital	**7**

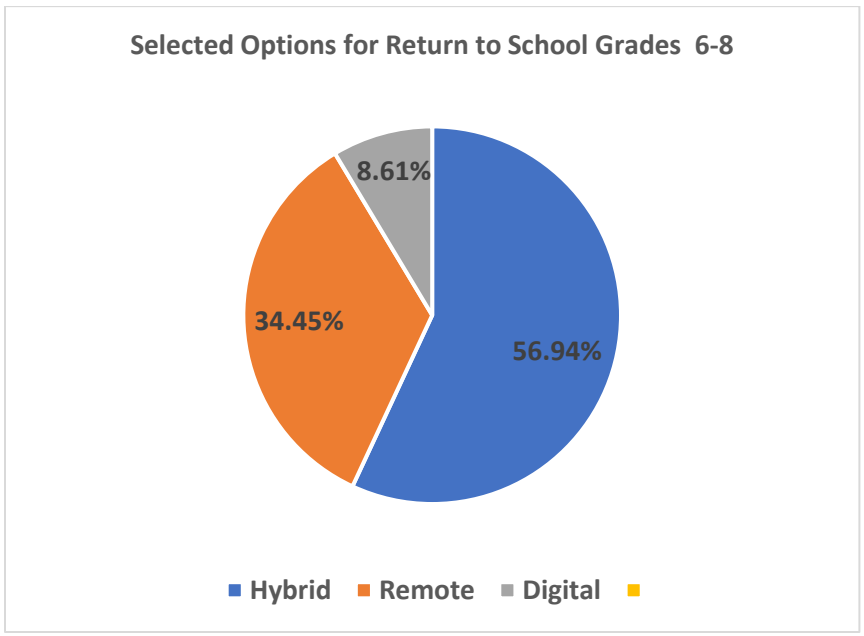
Total PK-2 Responses = 383





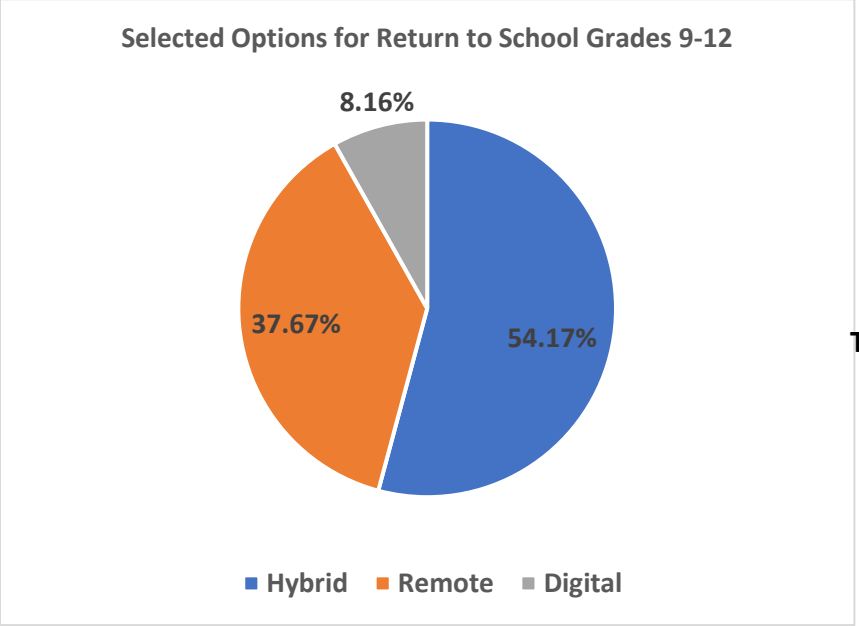
Hybrid	158
Remote	102
Digital	8

Total 3-5 Responses = 268



Hybrid	119
Remote	72
Digital	18

Total 6-8 Responses = 209



Hybrid	279
Remote	194
Digital	42

Total 9-12 Responses = 515

Faculty and Staff Reopening Survey

The Pandemic School Reopening Task Force developed and administrated a Faculty/Staff Return to Work Survey. Links to the survey were posted on the District website and sent directly via District email to all faculty and staff. The survey was conducted January 7, 2021 to January 22, 2021. A total of 296 responses were received out of 354 active employees or 83.6%.
Based on the data collected from the survey, faculty and staff outlined a number of themes:

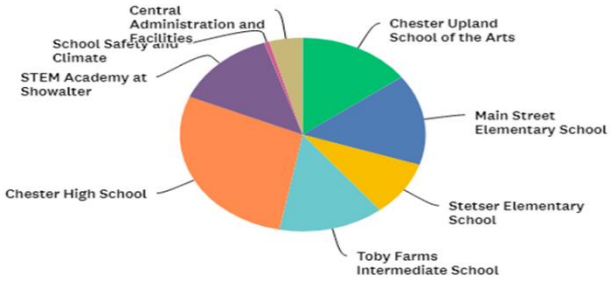
- Access to more digital resources and training
- Face-to-face instruction needed for remote learning via Zoom meetings
- Increased accountability for students for their classwork, attendance and overall participation
- Regularly scheduled meetings for classes and office hours
- Challenging for students and staff to wear masks all day
- Many staff members are older and have underlying health conditions that put them at a higher risk for experiencing severe complications if they become infected or exposed to the coronavirus
- Concerns about the ability to adequately clean and disinfect classrooms, common areas, and high touch points throughout the day, to keep students and staff safe
- Vaccination of all staff/teachers

These concerns have played a key role in our reopening plan and have been addressed through the following ongoing actions: They are the following: The installation of automatic temperature Check stations in every school and the District's Administrative Office, Hand Sanitation stations provided throughout the District buildings, Cleaning Protocols have been established and implemented, personal protective equipment is available in all schools/buildings. Masks are required for all, including students, staff faculty and guests, ventilation and building set-up is continuously monitored, tracking of all visitors, playground safety, establishing COVID-19 flow chart of *Decision Making Guidance* as well as COVID-19 email addresses for all schools in the District, and a *COVID-19 Website Tracker* by building/school.

In addition to the efforts listed above, Chester Upland School District has also worked to inform all of the Delaware County COVID-19 Call Center, an overview on *Ask - Ask – Look* has been implemented, establishing a partnership with Children's Hospital of Philadelphia for BinaxNOW Testing. As for efforts in the area of instruction, technology upgrades/updates have been made across the District as well as in individual buildings and room, the Hybrid learning model remains and support for all teacher surround that model continues through professional development and training, and then there is our continued efforts in the area of engaging students and families with School counseling and advising in an effort sustain whole child engagement and support.

Please select your school/location.

Answered: 296 Skipped: 0

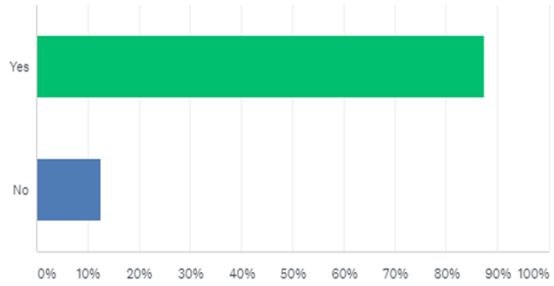


ANSWER CHOICES	RESPONSES	
Chester Upland School of the Arts	14.86%	44
Main Street Elementary School	15.20%	45
Stetser Elementary School	9.12%	27
Toby Farms Intermediate School	13.85%	41
Chester High School	28.38%	84
STEM Academy at Showalter	13.51%	40
School Safety and Climate	0.68%	2
Central Administration and Facilities	4.39%	13
TOTAL		296

Snapshots from the Faculty and Staff Reopening Survey have been captured below.

Safety measures have been established for each school building/facility over the past few months. As such, when your school building/facility reopens in spring 2021, do you plan to return to work?

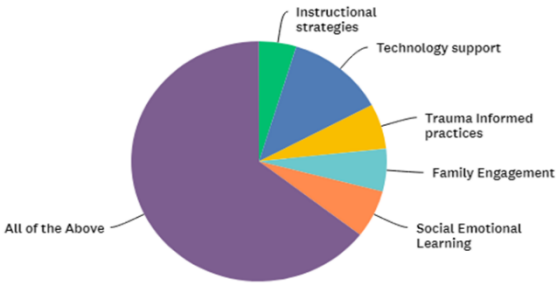
Answered: 296 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	87.50%	259
No	12.50%	37
TOTAL		296

When in-person learning resumes in spring 2021, what type of professional learning will you need to deliver effective instruction?

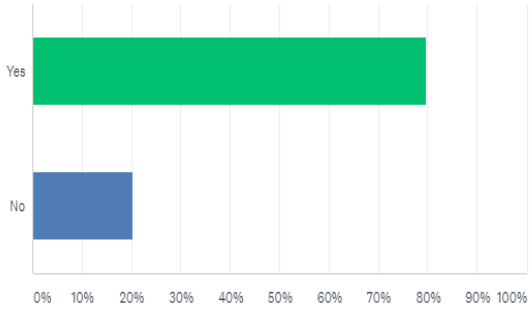
Answered: 296 Skipped: 0



ANSWER CHOICES	RESPONSES	
Instructional strategies	4.73%	14
Technology support	12.50%	37
Trauma Informed practices	6.08%	18
Family Engagement	5.74%	17
Social Emotional Learning	6.42%	19
All of the Above	64.53%	191
TOTAL		296

Will you be willing to take a COVID-19 test, if testing becomes available within a school or district office?

Answered: 296 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	79.73%	236
No	20.27%	60
TOTAL		296

Reopening Plan

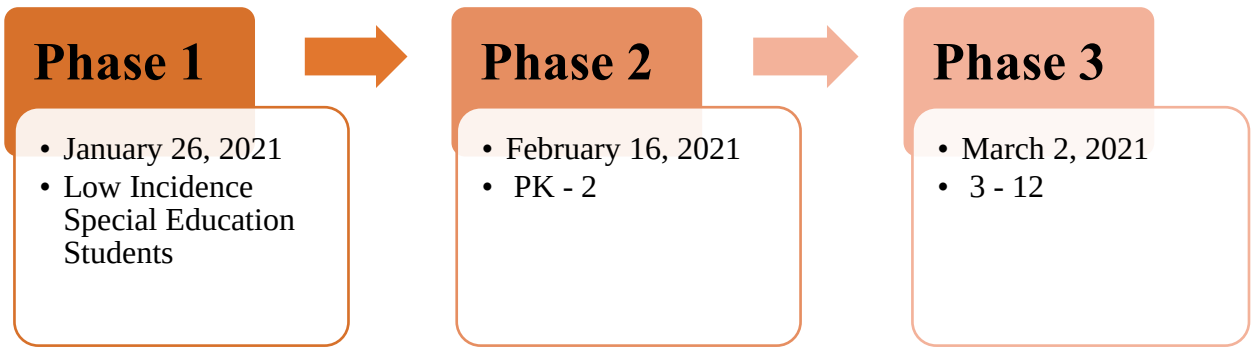
The Chester Upland School District created a *Health and Safety Plan* to serve as our guide for all programs and services to reopen safely.

The development of this plan was created through multiple work groups. Work groups consisted of a Pandemic School Reopening Task Force that was comprised of the District's administrators, staff, and health professionals. The Pandemic School Reopening Task Force guided the development of the global strategies that are applicable to all programs and services within the organization. These team members will be key stakeholders to implement the plan. Additional work groups were formed to guide Chester Upland School District's reopening by assisting the Pandemic School Reopening Task Force as it seeks to minimize risks to public health, addresses impact on student learning and well-being, recognizes the importance of the local public school to the community, and seeks to optimize operational readiness; ensures that the issues of health, safety, and educational equity always come first while guiding schools; and provides role-aligned insight and expertise to inform Reopening priorities and next steps. In addition, Chester Upland School District's will be conducting surveys of our parents/guardians and faculty/staff.

The strategies in this plan were derived from the work outlined above. The Pandemic School Reopening Task Force will be the overseers of the finalized *Health and Safety Plan*. The Pandemic School Reopening Task Force goals are to: 1) Review the final Health and Safety Plan; 2) Troubleshoot issues as they arise during implementation; 3) Revise the Health and Safety Plan as needed; and 4) Monitor the implementation of the plan. At the time of the development of this plan, the Pandemic School Reopening Task Force reviewed guidelines from the Delaware County Intermediate Unit (DCIU), Chester County Health Department, Bucks County Department of Health, SickKids Recommendations for School Reopening, Pennsylvania Department of Education (PDE) Guidance, the World Health Organization (WHO), and the Centers for Disease Control and Prevention (CDC) to address requirement areas as per the direction of the Pennsylvania Department of Education

Phased Reopening Outline

In an effort to ensure that Chester Upland School District adequately plans and meets all state and federal guidelines and protocols as it relates to health and safety for in person learning, Chester Upland School District began with a phased reopening starting with some special student populations resuming on January 26, 2021. The remaining students will continue to learn remotely until early February. The early grades and middle and high school students will have the choice of hybrid, full remote or digital options commencing February 16, 2021 and March 2, 2021.



Learning and Teaching

Models—Three Options for Learning

Chester Upland School District families were offered the option of choosing any of the following learning models—Hybrid, Full Remote Learning, or Digital Academy. Once an option is selected, it cannot be changed until the end of the third quarter.

Option One: **Hybrid Model** (Students will attend classes two to three days per week in person and the other days receive instruction at home via Zoom from their teachers.)

Option Two: **Full Remote Learning** (Students will remain home and receive instruction from their current teachers while teachers and some classmates are involved in learning in person.)

Option Three: **Chester Upland School District's *Design Thinking Digital Academy*** - This program is designed for students enrolled in grades 6-12 only. Students will receive teacher directed instruction virtually via an online curriculum. The distinction between the Science Technology Engineering and Math (STEM) Digital Academy and the hybrid and remote learning options is that it will provide a personalized projects-based learning experience in which teachers can adjust the content and pacing to meet the specific needs of the students. Students will engage in design thinking, problem solving, logical reasoning and critical thinking as the major drivers of the virtual instructional delivery model.

Design Thinking Digital Academy

The mission of the Chester Upland School District's *Design Thinking Digital Academy* is to provide a fun and engaging high-quality online instructional academic program that leverages curriculum and resources that prepare students for college, career, and life beyond high school. Design thinking, inquiry, problem-solving, logical reasoning, and critical thinking are the major drivers of this virtual instructional delivery model.

The *Design Thinking Digital Academy* focuses on a personalized approach to learning. Teachers will be able to adjust the course content and pacing to meet the academic needs of each student. The educational program is designed to support the whole child through programs that foster students' social-emotional development, provide mentoring, and offer service learning and workforce development educational opportunities. In additional to the standard curriculum, the *Design Thinking Digital Academy* will provide unique course offerings, including digital media, animation, coding, gaming, financial literacy, robotics, and engineering to ignite student learning and interest in technology and entrepreneurship.

Design Thinking Digital Academy students will remain enrolled as Chester Upland School District's students and have access to athletics, student support services, extra-curricular activities, and after-school programming that are available throughout the school year. The District will adhere to local and statewide guidance as it relates to digital learning. High school seniors who graduate from this program will receive a diploma from the Chester Upland School District. Students will be equipped with a Chromebook, free Wi-Fi access, and other incentives for maintaining good attendance and academic record.

Technology

Chester Upland School District realizes that access to reliable technology can be a challenge to education, thus in response not only have all Chester Upland School District's students received updated devices, but so have all Chester Upland School District's staff. The District has provided over 2,700 devices to assist with our learning community's access to technology. The District has also provided all families with internet access. All classrooms have been equipped with promethean boards, cameras and microphones to enhance the learning experiences for virtual and in-person learning. Laptop carrying cases and headphones have also been purchased for all students. Students are encouraged to bring district issued technology devices to school.

The District is in the process of upgrading its technology infrastructure to best meet the needs of students and staff by creating a Data Center, purchasing a new phone system and creating a new website. This will help to address the District-wide wi-fi challenges we have been faced.

Daily Schedule Samples

In an effort to meet the needs of diverse learners, Chester Upland School District has established schedules based on grade levels. The following are examples of sample schedules for each grade level.

Prekindergarten Sample Hybrid Schedule 2020-2021					
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
8:45 a.m. – 9:00 a.m.	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9:00 a.m. – 9:30 a.m.	Morning Meeting	Morning Meeting	Assignments recorded, assessments or self-paced assignments (Asynchronous)	Morning Meeting	Morning Meeting
9:45 a.m. – 10:15 a.m.	ELA (Synchronous)	ELA (Synchronous)	ELA (Synchronous)	ELA (Synchronous)	ELA (Synchronous)
10:15 a.m.- 10:45 a.m.	Math (Synchronous)	Math (Synchronous)	Math (Synchronous)	Math (Synchronous)	Math (Synchronous)
11:00 a.m.- 11:30 a.m.	Break/ Assignments	Break/ Assignments	Break/ Assignments	Break/ Assignments	Break/ Assignments
11:30 a.m. – 12:00 p.m.	Science/ Social Studies (Synchronous)	Science/ Social Studies (Synchronous)	Assignments recorded, assessments or self-paced assignments (Asynchronous)	Science/ Social Studies (Synchronous)	Science/ Social Studies (Synchronous)
12:00 p.m. – 2:00 p.m.	Lunch/ Recess/Rest	Lunch/ Recess/Rest	Lunch/ Recess/Rest	Lunch/ Recess/Rest	Lunch/ Recess/Rest
2:00 p.m. – 3:30pm	Individualized conferences or Centers	Individualized conferences or Centers	Assignments recorded, assessments or self-paced assignments (Asynchronous)	Individualized conferences or Centers	Individualized conferences or Centers

Grades K – 5/6 Sample Hybrid Schedule 2020-2021					
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
8:45 a.m. 9:00 a.m.	Morning Meeting	Morning Meeting	Morning Meeting	Morning Meeting	Morning Meeting
9:00 a.m. 9:30 a.m.	Fundations/ Imagine Learning Reading	Fundations/ Imagine Learning Reading	Fundations/ Imagine Learning Reading	Fundations/ Imagine Learning Reading	Fundations/ Imagine Learning Reading
9:30 a.m. 11:00 a.m.	ELA (Synchronous) Skill based lesson and small group	ELA (Synchronous) Skill based lesson and small group	(Asynchronous) Assignments recorded, assessments or self-paced assignments, individual support	ELA (Synchronous) Skill based lesson and small group	ELA (Synchronous) Skill based lesson and small group
11:00 a.m.- 11:30 a.m.	Math (Synchronous) Skill based lesson and small group	Math (Synchronous) Skill based lesson and small group	(Asynchronous) Assignments recorded, assessments or self-paced assignments, individual support	Math (Synchronous) Skill based lesson and small group	Math (Synchronous) Skill based lesson and small group
11:30 a.m. - 12:00 p.m.	Asynchronous (Imagine Math) Choice Board Assignments/ Independent Work	Asynchronous (Imagine Math) Choice Board Assignments/ Independent Work	(Asynchronous) Assignments recorded, assessments or self-paced assignments, Choice Board Assignments/ Independent Work	Asynchronous (Imagine Math) Choice Board Assignments/ Independent Work	Asynchronous (Imagine Math) Choice Board Assignments/ Independent Work

Grades K – 5/6 Sample Hybrid Schedule 2020-2021, Continued					
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
12:00 p.m. – 12:30 p.m.	Lunch	Lunch	Lunch	Lunch	Lunch
12:30 p.m. – 1:15 p.m.	Interactive Science/ Social Studies (Synchronous)	Interactive Science/ Social Studies (Synchronous)	(Asynchronous) Assignments recorded, assessments or self-paced assignments	Interactive Science/ Social Studies (Synchronous)	Interactive Science/ Social Studies (Synchronous)
1:15 p.m. – 3:00 p.m.	Individualized conferences or small group instruction math or reading (Asynchronous)	Individualized conferences or small group instruction math or reading (Asynchronous)	(Asynchronous) Assignments recorded, assessments or self-paced assignments	Individualized conferences or small group instruction math or reading (Asynchronous)	Individualized conferences or small group instruction math or reading (Asynchronous)
3:00 p.m. – 3:30 p.m.	Independent reading (Asynchronous)	Independent reading (Asynchronous)	(Asynchronous) Assignments recorded, assessments or self-paced assignments,	Independent reading (Asynchronous)	Independent reading (Asynchronous)
3:30 p.m. - 3:45 p.m.	Homeroom	Homeroom	(Asynchronous) Assignments recorded, assessments or self-paced assignments,	Homeroom	Homeroom

- Times may vary slightly as individual classroom/homeroom teachers have a specific class-based schedule with may or may not include different lunch and specialist schedules.

Middle/High School Sample Hybrid Schedule 2020-2021								
	A		**B**		**C**		**D**	**Blended Friday**
1	**Name of class** Room # 7:30 a.m. – 8:30 a.m. (60 min)	4	**Name of class** Room # 7:30 a.m.– 8:30 a.m. (60 min)	3	**Name of class** Room # 7:30 a.m. – 8:30 a.m. (60 min)	2	**Name of class** Room # 7:30 a.m. – 8:30 a.m. (60 min)	**World Language** 7:30 a.m. – 8:30 a.m. (60 min)
2	**Name of class** Room # 8:40 a.m. – 9:35 a.m. (55 min)	1	**Name of class** Room # 8:40 a.m. – 9:35 a.m. (55 min)	4	**Name of class** Room # 8:40 a.m.– 9:35 a.m. (55 min)	3	**Name of class** Room # 8:40 a.m. – 9:35 a.m. 55 min)	**Social Studies** 8:30 a.m. – 9:30 a.m. (60 min)
3	**Name of class** Room # 9:45 a.m.– 10:40 a.m. (55 min)	2	**Name of class** Room # 9:45 a.m.– 10:40 a.m. (55 min)	1	**Name of class** Room # 9:45 a.m. – 10:40 a.m. (55 min)	4	**Name of class** Room # 9:45 a.m. – 10:40 a.m. (55 min)	**Advisory** 9:30 a.m. – 10:00 a.m. (30 min)
5 L U N C H	**Name of class** Room # **A:** 10:50 a.m. – 11:20 a.m. (30 min) **B:** 11:25 a.m. – 11:55 a.m. (30 min) **C:** 12:00 p.m. – 12:30 p.m. (30 min)	8 L U N C H	**Name of class** Room # **A:** 10:50 a.m. – 11:20 a.m. (30 min) **B:** 11:25 a.m. – 11:55 a.m. (30 min) **C:** 12:00 p.m. – 12:30 p.m. (30 min)	7 L U N C H	**Name of class** Room # **A:** 10:50 a.m. – 11:20 a.m. (30 min) **B:** 11:25 a.m.- 11:55 a.m. (30 min) **C:** 12:00 p.m. – 12:30 p.m. (30 min)	6 L U N C H	**Name of class** Room # **A:** 10:50 a.m. – 11:20 a.m. (30 min) **B:** 11:25 a.m. – 11:55 a.m. (30 min) **C:** 12:00 p.m. – 12:30 p.m. (30 min)	**Math** 10:00 a.m. – 11:00 a.m. (60 min) **Lunch** 11:00 a.m.- 11:30 a.m. (30 min) **Unified Arts & Special Education** 11:30 a.m. – 12:30 p.m. (60 min)

Middle/High School Sample Hybrid Schedule 2020-2021, Continued								
6	**Name of class** Room # 12:40 p.m. – 1:35 p.m. (55 min)	5	**Name of class** Room # 12:40 p.m. – 1:35 p.m. (55 min)	8	**Name of class** Room # 12:40 p.m. – 1:35 p.m. (55 min)	7	**Name of class** Room # 12:40 p.m. – 1:35 p.m. (55 min)	**Science** 12:30 p.m. – 1:30 p.m. (60 min)
7	**Name of class** Room # 1:45 p.m. – 2:40 p.m. (55 min)	6	**Name of class** Room # 1:45 p.m. – 2:40 p.m. (55 min)	5	**Name of class** Room # 1:45 pm. – 2:40 p.m. (55 min)	8	**Name of class** Room # 1:45 p.m. – 2:40 p.m. (55 min)	**English** 1:30 p.m. – 2:30 p.m. (60 min)

- All classes are via Zoom. Individual course rosters and syllabus will have synchronous and asynchronous sessions will have time within their schedule.

Throughout the schedules the terms **Synchronous** and **Asynchronous** will be used to describe different types of instruction. We have included a definition of each here. **Synchronous** instruction means that the teacher is teaching live to a group of students. While we may record the videos for families and students to access later, synchronous learning occurs when teacher and students are working together at the same time. In other words, the instruction by the teacher and the learning by the student are in-sync.

Asynchronous is a general term used to describe forms of education, instruction, and learning that do not occur in the same place or at the same time. In a virtual learning model, this is when the student is working independently of the teacher. This may be in the form of pre-recorded webinars, discussion boards, assignments provided in Google Classroom, paper and pencil assignment, videos to watch, or personalized learning through a program designed to meet students at their instructional level. In other words, the instruction by the teacher and the learning by the student do not occur at the same time.

Attendance

The Chester Upland School District has developed *Decision Making Guidance* to support our hybrid and full in-person learning environments. Our school attendance policies shall not penalize students for staying home ill due to COVID-19 and COVID-19-like symptoms.

School nurses will use the *Decision Making Guidance* for sending students home during the scheduled school day due to COVID-19 related symptoms as well as recommendations for 10 days of isolation due to positive COVID-19 test results and 14 days of quarantine due to close contact with someone who has tested positive. This medical guidance is based on the expertise from various medical teams and the Chester County Health Department.

Parents are asked not to send students to school or students will be sent home or placed in isolation if they exhibit signs/symptoms of COVID-19 such as: • Fever of 99.5 degrees Fahrenheit or higher • Cough (with new onset or worsening cough in the case of asthma) • Shortness of breath • Loss of sense of taste or smell • Sore throat • Nasal Congestion • Nausea • Vomiting • Diarrhea • Muscle aches • Fatigue • Headache.

- All Students who test positive for COVID-19 will complete isolation at home for 10 days and transition to a virtual learning environment and may return after 10 days when symptoms improve and they are fever-free for 24 hours without fever reducing medication.
- All students who have close contact and have been exposed with someone who tested positive for COVID-19 will complete a 14-day quarantine at home and transition to a virtual learning environment and may return after 14 days. If symptoms develop parents should contact medical provider and follow-up with their instructions and update the school nurse.
- Students who develop a fever or become ill at school will not be permitted to ride on the school bus and must be picked-up. The student will be transitioned to a virtual leaning environment during the 14 day quarantine period. Students sent home from school cannot return to school until they have been cleared by their health care provider or complete the 14 day quarantine period. This information should be submitted to the school nurse for approval to return to school.

Arrival, Dismissal, & Transitioning

Chester Upland School District will follow the following arrival, dismissal and transitioning protocols.

- Ensure that staff and students maintain at least 6 feet of distance as they move throughout the school.
- Reduce the number of people inside of classrooms to 10, including students and staff.
- Do not use communal spaces, such as the auditorium and cafeteria.
- Students and staff are highly encouraged to self-screen at home.
- Check staff and student temperatures upon arrival at each school. Nurses, certified nursing assistants or a member of the security staff will check temperatures at the door.
- Ensure daily health screenings are being completed by staff and students.
- Create flexible schedules that will limit the number of transitions during the day.
- Add visuals for traffic throughout buildings. Establish travel directions in hallways and communal spaces with signs to limit gatherings and promote social distancing during transitions (e.g., everyone uses one side of the hallway when walking down the hallway and everyone uses the other side of the hallway when walking up the hallway).
- Use staggered release times for transitioning between classes. Teachers and school climate staff are required to provide support during transitions in order to safely maintain order in the hallways.
- In most cases, pick-ups and drop-offs will occurring outside of the school building. Parents should ensure that anyone escorting their child to school is wearing a face covering when picking up and dropping off their children. Students should all have on a face covering when being dropped off for school.

Recess

According to the The American Academy of Pediatrics, recess is a crucial and necessary component of a child's development. They further maintain that recess has academic, social emotional and physical benefits. Chester Upland School District will implement these guidelines for recess:

- Masks must be worn by students and staff at all times.
- Only one classroom outside at recess at a time.
- Six feet of social distancing during recess will be reinforced.
- Students and staff will wash their hands or use hand-sanitizer before and after being on the playground.
- Playground equipment use is prohibited.

Uniforms

The Board of School Directors Uniform Policy

The Board of School Directors the authority to impose limitations on students' dress in school. The Board of School Directors shall require all students enrolled in district schools to wear standard dress or uniforms. Students may be required to wear certain types of clothing while participating in physical education classes, technical education, extracurricular activities, or other situations where special attire may be required to ensure the health or safety of the student.

Uniform is defined as a mode of dress for both male and female students which range from apparel that is similar in color and style to apparel that is identical in color or style.

Delegation of Responsibility

The building principal or designee shall be responsible to monitor student dress and grooming, and to enforce Board policy and school rules governing student dress and grooming.

Girls	Boys
Shirts • Solid color sweaters • Solid color polo shirts • Solid color polo shirts with the school emblem **Pants** • Solid color khaki style pants **Skirts** • Solid color khaki style skirts **Shoes** • Sneakers • Shoes • Boots	**Shirts** • Solid color sweaters • Solid color polo shirts • Solid color polo shirts with the school emblem **Pants** • Solid color khaki style pants **Shoes** • Sneakers • Shoes • Boots

Prohibited Uniform Attire

- Jeans
- T-shirts
- Cut-up/distressed pants
- Sweatsuits
- Shirts exposing the stomach
- Flip-flops/sandals or open toe shoes
- Slides or slippers
- Scarfs, bandannas or hats
- Hoodies

Daily Expectations

- It is a requirement that masks are worn daily as an essential safety measure and as a part of school uniforms.
- Uniforms are worn daily (principals will determine the color of uniforms for their buildings).
- Uniforms and masks are to be clean, neat and tidy.

Talent Management and Development

Professional Learning Plan

In an effort to best meet the instructional and social emotional needs of all learners, teachers, administrators and support staff will engage in professional learning that will equip them with the skills and knowledge in teaching in an online learning format and how to foster students' affective developmental growth and development.

The professional learning for faculty and staff will focusing on moving beyond not just promoting positive pro-social behaviors but to meeting students' unmet needs including attachment, achievement, autonomy and altruism.

Effective Instruction and SEL in a Combination Hybrid/Remote Class

Purpose: The purpose of the professional learning is to provide teachers and support staff with the skills and knowledge to identify and utilize effective instruction and social and emotional learning (SEL) strategies in designing, delivering and assessing learning and teaching in a combination hybrid/remote class.

Objectives: By the end of the of professional learning the participants should be able to:

1. Utilize technology (camera, Promethean Board, lap top, Zoom, Google Classroom, etc.) to create a classroom where students are connected and engaged regardless of their physical locale (in-person or remote) and modality of learning (synchronous or asynchronous)
2. Develop a First Week Transition Plan to share with students and parents (expectations, norms, communication, technology)
3. Develop and implement a classroom management plan for managing and delivering synchronous and asynchronous instruction in a class where students are simultaneously in-person and remote
4. Identify and utilize strategies for creating a connected community of learners and ensuring SEL in a combination hybrid/remote synchronous/asynchronous class
5. Identify and implement instructional methods and strategies for effective learning and teaching in a combination hybrid/remote class
6. Analyze and utilize methods of assessment of student work in-person, remote, synchronous and asynchronous

Format/Approach:

- These professional learning sessions will utilize a Professional Learning Community format with deliverables after each session. In order to maximize time assigned for professional learning each meeting will be comprised of the following components:
    1. Video that will provide an overview of the topic and implementation in practice (teachers will watch the video prior to the professional learning)
    2. Readings (that will reinforce the concepts covered in the video; the readings will be completed prior to professional learning)

3. Professional Learning Community Groups (PLC) – (reflection questions; application; lesson study; demonstrations from teachers)

4. Deliverables – (Teachers will demonstrate the implementation their learning in practice and identify what they still need/want to know about the topic.)

- Each school will divide teachers/teaching assistants into PLC groups for sharing, discussion and posting. Each PLC will constitute a class in Google Classroom. Videos, PLC activities and reflection questions will be posted in Google classroom.

Non certified staff members will receive additional professional learning to gain greater understanding of Urban Trauma, the principles of the Collaborative for Academic, Social, and Emotional Learning (CASEL).

Professional Development for Climate Managers, Conflict Resolution Educators, School Police Officer, and School Safety Officers

Climate Managers Training

- *Return to School During COVID-19: Helping Children and Families Manage Stress and Build Resilience* presented by Collaborative or Academic, Social, and Emotional Learning (CASEL). In this webinar, Dr. Bruce Perry of The Child Trauma Academy shares information from clinical work and research about developmental trauma and the cognitive, developmental, and relational problems that can arise as a result. Dr. Perry also discusses how the stress and vulnerability resulting from the COVID-19 pandemic can impact a student's ability to focus and learn.

- *Understanding and Preventing Youth Bullying & Peer Victimization during the Pandemic* presented by CASEL. In this webinar, the presenters discussed what bullying and peer victimization looks like during the pandemic, who is most at-risk for victimization during the pandemic, and how we can use Social and Emotional Learning during the pandemic to reduce isolation and victimization.

Conflict Resolution Educators and School Police Officer Training

- *Without Walls* webinar presented by Dr. Akbar. During this webinar, Dr. Akbar will discuss how to dismantle systemic racism and how to engage in trauma-informed racial equity work in an unpredictable environment.

- *Understanding and Preventing Youth Bullying & Peer Victimization during the Pandemic* presented by CASEL. In this webinar, the presenters discussed what bullying and peer victimization looks like during the pandemic, who is most at-risk for victimization during the pandemic, and how we can use Social and Emotional Learning during the pandemic to reduce isolation and victimization.

- *A (Re)introduction to Social and Emotional Learning: CASEL's Definition and Framework* presented by CASEL. Shares an updated definition and framework for SEL, including enhanced descriptions of the five core social and emotional competencies, key

Conflict Resolution Educators and School Police Officer Training, Continued

settings school-family-community partnerships, and our theory of action for effective implementation.

- *Permission to Feel for Kids: How Adults can Support Children Managing Emotions During Challenging Times* featuring Dr. Marc Brackett presented by CASEL. Shares a four-step process to support adults in (1) being culturally responsive and emotionally intelligent role models for children and (2) helping children build a repertoire of healthy emotion regulation strategies to support their well-being and academic success.
- *Building Equitable Learning Environments in Crisis Mode* presented by CASEL. Explores how to create self-affirming, culturally responsive learning environments with equity at their core, especially during these challenging times.
- *Strategies for Being Your Best 'SEL'f* featuring Dr. Marc Brackett presented by CASEL. Explores how we can all be our best possible selves during this stressful time.
- *Authentic Student Leadership in a Time of Crisis: A Conversation with Chicago High Schoolers* presented by CASEL. Hear from two high school students that are strengthening peer connections through a student-driven podcast.
- *Distance Learning Across the Education Sector: Social & Emotional Supports for Private, Charter, & Public Schools* presented by CASEL. Private, charter, and public schools are embracing strategies to strengthen connectedness and engagement during remote learning.
- *Owning your Power to Raise Kids who Challenge Racism* presented by CASEL. Heart-to-heart conversation around the pain and struggle of being a parent at this time and the work that is required of us to mitigate racism.
- *Brainstorm: How We Can Best Support the Power and Purpose of the Teenage Brain* presented by CASEL. Neuropsychiatrist Dr. Dan Siegel busts myths on the teenage brain to help adults remain close with their teens and allow them to thrive.
- *Let's Listen to Our Young People: What Support Do They Need?* presented by CASEL. Hear directly from students on what they want and need at this time.
- *Building Resilience to Support Ourselves, Others, and Our Students* presented by CASEL. Experience guided self-care and mindfulness exercises.
- *Permission to Feel for Adults: Healthy Emotion Regulation During Uncertain and Stressful Times featuring Dr. Marc Brackett* presented by CASEL. Shares research-

Conflict Resolution Educators and School Police Officer Training, Continued

based strategies to support your own well-being, healthy decision making, relationship quality, and performance during these challenging times.

- *SEL as a Lever for Equity and Social Justice featuring Rob Jagers and Melissa Schlinger* presented by CASEL. Introduction to a 5-part webinar series on equity and racial injustice through the lens of SEL.
- *SEL as a Lever for Equity – Part One: Cultivating and Communicating Commitment* presented by CASEL. First in a five-part webinar series on equity and racial injustice through the lens of SEL.
- *SEL as a Lever for Equity – Part Two: Adult SEL to Support Antiracist Practices* presented by CASEL. Second in a five-part webinar series on equity and racial injustice through the lens of SEL.
- *SEL as a Lever for Equity – Part Three: Elevating Student Voice and Vision* presented by CASEL. Third in a five-part webinar series on equity and racial injustice through the lens of SEL.
- *SEL as a Lever for Equity – Part Four: Authentic Partnerships with Families and Communities* presented by CASEL. Fourth in a five-part webinar series on equity and racial injustice through the lens of SEL.
- *SEL as a Lever for Equity – Part Five: Policy & Data Practices that Dismantle Inequities* presented by CASEL. Last in a five-part webinar series on equity and racial injustice through the lens of SEL.
- *Starting an Unprecedented School Year with SEL to Reunite, Renew, and Thrive* presented by CASEL. Leaders discuss how they plan to restart the year with SEL, with a focus on the four SEL Critical Practices outlined in the new Reunite, Renew, and Thrive: SEL Roadmap for Reopening Schools.
- *The Urgency of Educational Equity Now: A Conversation with John King and Karen Pittman* presented by CASEL. Reflections on existing inequities in education that have been exposed and exacerbated by the pandemic.
- *Leveraging SEL to Reopen and Renew Your School Community During COVID-19* presented by CASEL. School principals discuss SEL strategies to re-engage students, support adults, and rebuild relationships.

Conflict Resolution Educators and School Police Officer Training, Continued

- *Leading for Equity in Challenging Times: Our Role as Leaders to Catalyze Change for Our Collective Well-being* featuring Kathleen Osta, Victor Cary, and Hugh Vasquez presented by CASEL. Explore the role of leaders in catalyzing healing, social emotional wellness, and change.
- *Leading with Emotional Intelligence in Uncertain Times* presented by Dr. Marc Brackett. As the COVID-19 outbreak transforms our education system, emotionally intelligent leadership from administrators and school boards becomes more and more critical.
- *SEL Exchange Webinar Series: From Theory to Practice to Systemic Change* presented by Dr. Marc Brackett. Dr. Marc Brackett discusses the components to creating systemic change with SEL, including developing positive mindsets about emotions, cultivating key SEL skills, creating healthy learning environments, and more.
- *Permission to Feel – Unlocking the Power of Emotions* presented by Dr. Marc Brackett. Learn to transform the way you think about emotions in the classroom. In this webinar, Dr. Marc Brackett will share his groundbreaking research and show how educators who understand the power and science of emotions can better support students.
- *Mindsets & Movements: Healing Self & Society* presented by Roberto Rivera. Roberto Rivera discusses a transformational Social Emotional Learning model that includes and goes beyond cultivation of the Five Core Competencies of Self-Awareness, Self-Management, Social Awareness, Relationship Skills, and Responsible Decision-Making. It redefines rigor to include young people taking what they learn in class and connecting it what is happening in their community, while strengthening their cultural and ethnic identity. It creates a place for healing that also stimulates critical thought for social action. Students realize that what they are learning is not just for individual betterment. It connects them with the members of their community at large and empowers them to begin to change the social fabric of their reality.

School Safety Officers Training

- *Trauma-Informed Care for Schools Before, During, and After Possible Emergency Events*. This webinar is presented by the U.S. Department of Education's Office of Safe and Supportive Schools and its Readiness and Emergency Management for Schools Technical Assistance Center. In this webinar, the presenters provide an overview of trauma and retraumatization, discuss manifestations of trauma in students, explore a trauma-informed approach, and review considerations for preparedness planning and how schools can address trauma in their emergency operations plans.

School Safety Officers Training, Continued

- *Understanding and Preventing Youth Bullying & Peer Victimization during the Pandemic* presented by CASEL. In this webinar, the presenters discussed what bullying and peer victimization looks like during the pandemic, who is most at-risk for victimization during the pandemic, and how we can use Social and Emotional Learning during the pandemic to reduce isolation and victimization.
- *A (Re)introduction to Social and Emotional Learning: CASEL's Definition and Framework* presented by CASEL. Shares an updated definition and framework for SEL, including enhanced descriptions of the five core social and emotional competencies, key settings school-family-community partnerships, and our theory of action for effective implementation.
- *Permission to Feel for Adults: Healthy Emotion Regulation During Uncertain and Stressful Times featuring Dr. Marc Brackett* presented by CASEL. Shares research-based strategies to support your own well-being, healthy decision making, relationship quality, and performance during these challenging times.
- *Building Equitable Learning Environments in Crisis Mode* presented by CASEL. Explores how to create self-affirming, culturally responsive learning environments with equity at their core, especially during these challenging times.
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School Safety Officers Training, Continued

- *Mindsets & Movements: Healing Self & Society* presented by Roberto Rivera. Roberto Rivera discusses a transformational Social Emotional Learning model that includes and goes beyond cultivation of the Five Core Competencies of Self-Awareness, Self-Management, Social Awareness, Relationship Skills, and Responsible Decision-Making. It redefines rigor to include young people taking what they learn in class and connecting it what is happening in their community, while strengthening their cultural and ethnic identity. It creates a place for healing that also stimulates critical thought for social action. Students realize that what they are learning is not just for individual betterment. It connects them with the members of their community at large and empowers them to begin to change the social fabric of their reality.

Chester Upland School District Employee Temporary Remote Guidance

The Chester Upland School District encourages all Administrators and Supervisors to think creatively about how to support employees in caring for their health, reducing risk of exposure to COVID-19, and recognizing a myriad of staff that are in need of childcare as a result of the closure of childcare facilities and schools given the current health situation.

These Temporary Work Guidelines must be used in all instances where the Superintendent has determined that work may temporarily be performed from home or an alternate off-site location as a means of social distancing ("Remote Work"). Remote Work is not intended to be a replacement for childcare, employee illness or illness of an employee family member, or other personal matters. Leave for those matters should be handled through the same laws, policies and procedures applicable to work other than Remote Work.

These guidelines must be issued by the employee's Superintendent. Human Resources acknowledged by the remote working employee, in conjunction with the Superintendent have the right to end the Temporary Remote Work at any time. Having successfully engaged in temporary telecommuting pursuant to these guidelines does not set a past practice or future precedent nor in any way establish a requirement for the Superintendent to agree to any future remote work.

1. Remote Work Authorization.

Purpose: The purpose of these guidelines is to establish the terms and conditions for an employee being temporarily allowed to perform work at home (or at some other alternate work site) in order to ensure appropriate social distancing, accommodation for a COVID-19-related issue (with appropriate documentation submitted to the Human Resources Department), or some other matter related to the current health situation.

Date: The remote work authorization begins on November 16, 2020 and will remain in effect unless altered or terminated at any time as described below.

Temporary Measure: By acknowledging these guidelines below, the Employee understands that these guidelines permit the Employee to engage in Remote Work and is a temporary measure only. The Employee understands that the authorization to perform Remote Work will be reviewed continuously during the period in which the Chester Upland School District is expected to encourage social distancing or provide a workplace accommodation as a measure intended to minimize the spread of the current health situation. Accordingly, subject to honoring lunch times, planning periods, and the number of classes taught as outlined in the Collective Bargaining Agreement, the Chester Upland School District may alter the Employee's work schedule or end this Temporary Remote Work authorization at any time at its sole discretion. It is the expectation that upon approval by the Superintendent to return to work in a hybrid or traditional model, all staff will return to work with the exception of those who are granted approval for a reasonable accommodation through the ADA interactive process and those who are on approved leaves of absence. The Chester Upland School District will attempt to give reasonable notice to Employees of their obligation to return to work.

2. Conditions of Temporary Remote Work Authorization.

Schedule: The Employee's Remote Work schedule will be determined by the Employee's principal or supervisor will be consistent with the Collective Bargaining Agreement. However, accommodations may be required to address a remote learning environment.

Location: The Employer will need to approve the remote work location being utilized by the Employee.

Phone: The Employee's regular Remote Work phone number which the employee can be reached at during the work schedule will be provided by the district.

Conditions: While working remotely, Employee will:

Remain accessible at all times during the Remote Work schedule as listed in II (A), notifying the Supervisor anytime the Employee may not be available during the identified scheduled workday.

Communicate directly with the supervisor a minimum of once per week, and more frequently as required by the supervisor, to discuss status and open issues.

Be available for video/teleconferences, phone calls, during the scheduled workday on an as needed basis.

Be available to physically attend scheduled work meetings as requested or required by the Supervisor. It is understood that such meetings may be in-person and scheduled at school buildings or other locations. Reasonable notice will be provided of such meetings to the Employee.

Request Supervisor approval in advance for working on items that would require extra pay for employees.

Request Supervisor approval for sick or personal leave in the same manner as when working at Employee's regular work location.

Respect that Employee's duties, obligations, responsibilities, and conditions of employment with the Chester Upland School District remain unchanged except those obligations and responsibilities specifically addressed in these guidelines.

Evaluation of Remote Work performance will include regular interaction by phone, video conferencing, observations and/or email between the employee and the manager, and regularly scheduled meetings to discuss work progress and problems. The frequency of such communication will be established between the Employee and the Supervisor.

Employees who work from home will be expected to demonstrate the same level of professionalism and the same commitment to job responsibilities, and the organization's strategic priorities as required of employees that are not performing Remote Work.

Evaluation of Remote Work performance will be consistent with that received by employees working at designated work locations in both content and frequency.

Changes/Cessation of Remote work guidelines: Both parties acknowledge that these guidelines may be evaluated on an ongoing basis to ensure that Employee's work quality, efficiency, and productivity are not compromised by the Remote Work authorization described herein. The Employee acknowledges that if Supervisory staff determine that the temporary Remote Work authorization described in these guidelines is not working effectively or as envisioned, Supervisory staff may at any time adjust or end this authorization. Supervisory staff will strive to provide at least twenty-four hours' advance notice of any changes to these guidelines.

3. <u>Safety, Equipment, Confidentiality, Security and Tax Consequences.</u>

Employee agrees to maintain a safe and secure work environment and to report work related injuries to Employee's supervisor and the Human Resources Department at the earliest reasonable opportunity.

The Employee is responsible for providing appropriate space and internet connectivity for the Remote Work and understands that the employee shall not be reimbursed by the Chester Upland School District for these expenses. Remote Work may increase an employee's home utility costs. Chester Upland School District assumes no responsibility for any operating costs associated with an employee using his or her home for Remote Work, including home maintenance, insurance, internet access and/or utilities.

Employees performing Remote Work will adhere to all Chester Upland School District policies and procedures, including but not limited to Chester Upland School District Policy 816, Acceptable Use of Communication and Information Systems.

Employees performing Remote Work will be responsible for ensuring a high-speed internet connection is available in the residence at the employee's expense. (4Mbps download and 2Mbps upload)

The Chester Upland School District will provide a computer for the employee to perform expected work functions.

All other equipment used for Remote Work except as described in III (E) is the responsibility of the employee.

Employee shall protect Chester Upland School District owned equipment, records, and materials from unauthorized or accidental access, use, modification, destruction, or disclosure. The precautions described in these guidelines apply regardless of the storage media on which information is maintained, the locations where the information is stored, the systems used to process the information, or the process by which the information is stored.

Employee shall report to Employee's supervisor any incidents of loss, damage, or unauthorized access at the earliest reasonable opportunity.

Employee understands that all equipment, records, and materials provided by the Chester Upland School District shall remain the property of the Chester Upland School District.

Employee shall return Chester Upland School District owned equipment, records, and materials within seventy-two hours of termination of this agreement. Under all other circumstances, and within twenty-four hours of written notice, Employee must return Chester Upland School District owned equipment for inspection, repair, replacement, or repossession.

The Remote Work area must be quiet and free of distractions, visual and auditory, so that the Employee can successfully deliver virtual education to students.

Employees engaging in Remote Work are required to be professionally dressed for all video events/meetings.

An employee performing Remote Work shall continue to adhere to the Chester Upland School District absence reporting procedures.

By confirming receipt of this document, I hereby affirm that I have read and agree to adhere to these Temporary Remote Work Guidelines.

Organizational Efficiencies and Effectiveness

Health & Safety

COVID-19 Case Management & Communication

For purposes of this document, a COVID-19 symptoms and/or illness could include any of the following symptoms: fever, cough, shortness of breath, diarrhea, chills, repeated shaking with chills, muscle pain, headache, sore throat, new loss of taste or smell. Thus, Chester Upland School District has distinguished those symptoms into two categories—High-Risk and Low-Risk Symptoms (*see* Appendix, page 64-66). Furthermore, Chester Upland School District's Decision Map defines Close Contact as, *being directly exposed during the infectious period to secretions (e.g., being coughed on) from a person with COVID-19, living in the same household or caring for a person with COVID-19, or being within 6 feet of a person with COVID for at least 15 minutes (within a 24-hour period) regardless of wearing a face covering.* Parents are highly encouraged to self-screen their children for symptoms of COVID-19 prior to sending them to school. Parents should not send children to school if they are not feeling well.

Staff, students, and families should stay home if:

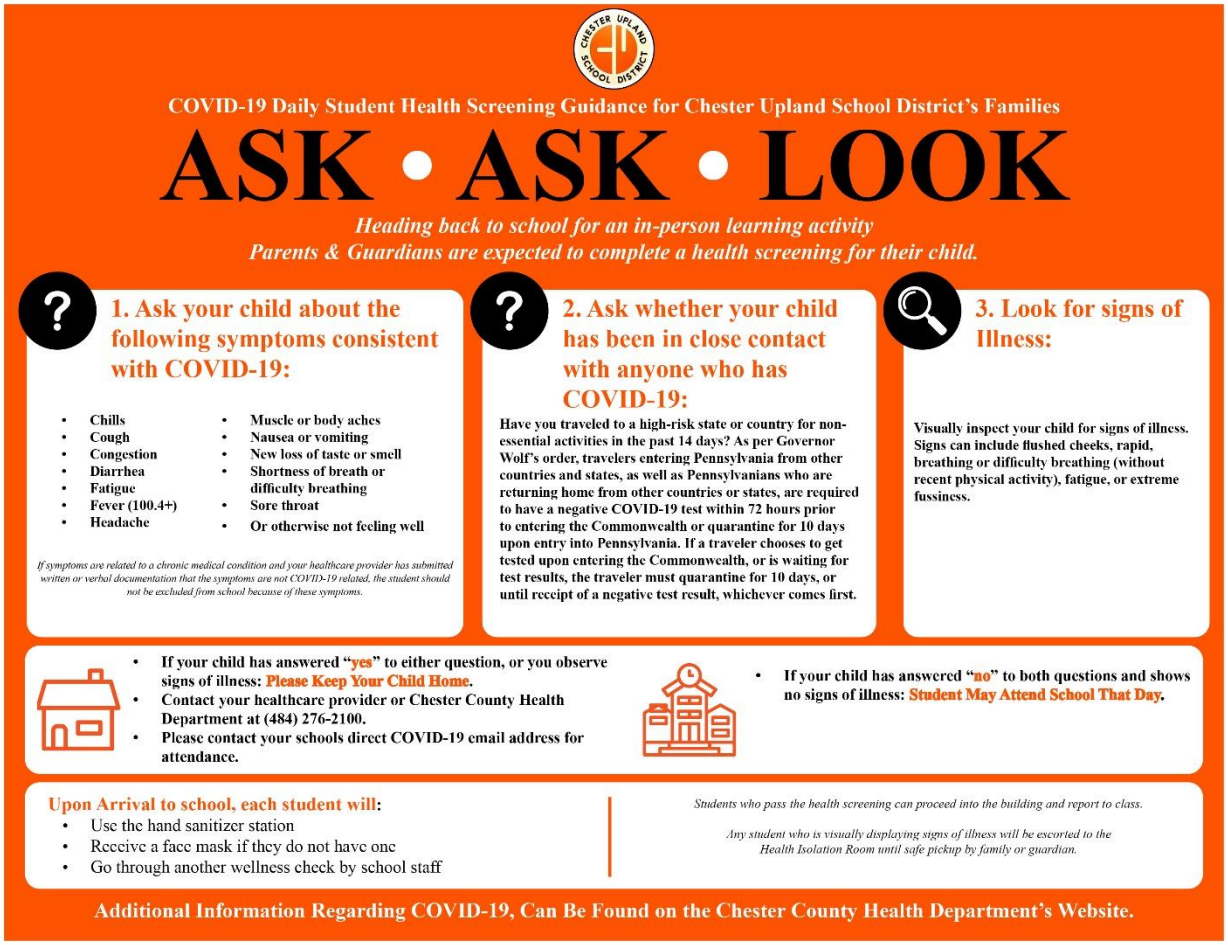
- They suspect they have symptoms of a COVID-19 like illness;
- Have been diagnosed with COVID-19;
- Are awaiting test results; or,
- Have been exposed to someone with symptoms or a confirmed or suspected case.

They should not return until it is appropriate as per guidance outlined by the Centers for Disease Control and Prevention (CDC), or The Pennsylvania Department of Health.

Staff and contractors will be required to take their own temperature before reporting to work and to stay home if temperature is above 99.5°F or if experiencing other symptoms as outlined by the Chester County Health Department. School Nurses, certified nursing assistants, medical assistants, school safety officers, and/or designees will conduct daily temperature checks on all individuals prior to entering the schools.

Staff and students will be sent home if they become ill at work/school. School nurse will encourage staff and students to get tested if known exposure and continue to monitor for symptoms. School Nurses will remind staff and students to be aware of symptoms listed on the Centers for Disease Control and Prevention (CDC) website as part of daily announcements.

The below visual image is a quick reference guide to assist families when determining when to send children to school, keep them home and when to consult a healthcare provider when they are not feeling well.



Based on the aforementioned, the Chester Upland School District Health & Safety Team has established a strict internal protocol for the review of possible COVID-19 cases and COVID-19 positive case management. The steps the Health & Safety Team follows are listed below:

Health & Safety Team COVID-19 Case Management Protocols	
Action Steps	**Completed by:**
Completion of Self-Assessment Daily Screening at home—indicating symptoms or close contact with COVID-19 positive individual(s). Temperature checks taken at kiosk—building entrance.	All Chester Upland School District's Staff
District/School Administrators, COVID-19 Risk Management Manager, and Human Resources are made aware of **staff/student** symptoms or close contact with COVID-19 positive individual(s). Completion of the Chester Upland School District's Health Screening which sends a notification to the District Health & Safety Team.	School Administrators, Staff Supervisors, and Human Resources
School Health Professionals (Nurses) track **student** illness or close contact with COVID-19 positive individual(s).	School Health Professional (Nurses)
Health and Safety Nurse connects with school administrators to gather further information and advises on next steps.	Health and Safety Nurse, District Health & Safety Team, and School Administrators
Assemble COVID-19 School Level Response Team. School-Level Response Team follows direction from the District Health & Safety Team.	School Administrator, School Health Professional (Nurse)
District Health & Safety Team notified of potential or confirmed case and consults with Chester County Health Department.	District Health & Safety Team, CCHD Director
Begin Contact Tracing and assemble a list of close contacts (less than six feet for 15 minutes or longer). The COVID-19 Risk Management Manager and school nurse work with school administrators to review schedules and determine all students, teachers, staff, or partners who would be considered "close contacts." Direct notification of all close contacts (students and staff) of possible contact with COVID-19 positive case and to stay home and self-quarantine for 14 days. Evaluation of level and severity of potential spread, and determination of whether school should be closed temporarily.	COVID-19 Risk Management Manager, school nurse and school administrators. Continued consultation with Chester County Health Department

Health & Safety Team COVID-19 Case Management Protocols	
District Leadership works with the District's Health and Safety Team to create letter regarding cases, students and staff advised to quarantine, and school closure (if needed).	District Health & Safety Team and Superintendent
Communication to the school community regarding positive case. Following district-level collaboration, Principal notifies families, staff, and partners via email and phone call. Principal (or designee) posts the letter on the school website and social media profiles. COVID-19 dashboard is updated.	District Health & Safety Team, School Principal
Notification to the Receiver, Board of Education Members, Copy of Communication to School Community along with COVID-19 Case Tracker.	District's Health & Safety Team, Receiver/Board Security, and Superintendent
School Cleaning: In coordination with the release of communications to the school community, the District Health and Safety Team advises Chief Operating Officer and Director of Facilities to schedule enhanced cleaning protocols. Additional cleaning support and resources will be made available as needed to accomplish protocol.	Health & Safety Team, Chief Operating Officer and Facilities Department
School Buses: In coordination with the release of communications to the school community, Transportation Coordinator notifies transportation providers of positive case and identifies bus to remove from service and schedule deep cleaning. Transportation services are contacted for non-Chester resident students.	District Health & Safety Team, Transportation Coordinator
Staff Virtual Town Hall Meeting: Principal will schedule a staff virtual meeting, the morning after communication is released to the school community to address questions and concerns.	Principal, District Health & Safety Team
District Leadership works with District Health and Safety Team to create follow-up letter to schools to confirm that a school will either reopen after a temporary closure, or extend the closure, as needed. Following district-level collaboration, Principal notifies families, staff and partners with an emailed copy of the letter and a summary robo-call via School Messenger. Principal (or designee) also posts a copy of the letter to families on the school website.	Superintendent, District Health & Safety Team, and School Principal

Isolation Room

Each school will have an Isolation Room where in the event a student or staff member is already at school and is identified as having probable or positive COVID-19 symptoms they may wait, to reduce the risk of infecting others. In the case of a student, the nurse will be called to come get the student from the classroom.

The student will be directed to always keep their mask on. Student's parent or guardian will be called for prompt pick up of the student. A staff member will stay with student until parent arrives. Student may read a book or work on their tablet/work assignment while waiting for parent or guardian. Upon the parent or guardian's arrival, they will be advised to contact the student's primary care provider and follow the instruction from the medical professional.

Parents or guardians will also be advised that if student receives a COVID-19 test and receives a positive test result, the District must be notified immediately through the COVID-19 email addresses provided on the following page. Parent or guardian takes student home. The Isolation Room will be closed off with windows open (if possible). Custodial staff will be contacted immediately to disinfect the room as per protocol (*see* Appendix). Administration as well as the Chester County Health Department should be made aware of incident immediately, as per protocol.

Quarantine Room

Each school building will also have a Quarantine Room where in the event a student or staff member is notified that they were in close contact (*see* Appendix for definition) with someone who tests positive for COVID-19 they may wait, to reduce the risk of infecting others. In the case of a student, the nurse will be called to escort the student from the classroom. The student will be directed to always to wear their mask or face covering. Student's parent or guardian will be called for prompt pick up of the student. A staff member will stay with student until parent arrives. Student may read a book or work on their tablet/work assignment while waiting for parent. Upon the parent or guardian's arrival, they will be advised to contact the student's primary care provider and follow primary care provider's instruction.

Parents or guardians will also be advised that if student receives a COVID-19 test and receives a positive test result, the District must be notified immediately through the COVID-19 email addresses provided below. Parent or guardian takes student home. Isolation Room will be closed off with windows open (if possible). Custodial staff will be contacted immediately to disinfect the room as per protocol (*see* Appendix). Administration as well as the Chester County Health Department should be made aware of incident immediately, as per protocol.

The School Nurse will make the determination regarding isolation and/or quarantine based on the situation presented (symptoms or close contact) and will ensure that the student or staff member who is sick has a mask on and is at least 6 feet from others, if feasible. The parent/guardian of a student who is sick and sent home will be given a letter explaining the symptoms their child is experiencing and guidelines of when to return to school. Furthermore, if a student or staff member tests positive for COVID-19, the School Nurse will advise them to follow the Centers for Disease Control and Prevention (CDC) recommendations for when to return to school/work. Students and staff members who have tested positive for COVID-19 may return per CDC guidelines.

All students in isolation and quarantine will be immediately transitioned to virtual learning. These students are expected to attend all scheduled zoom sessions and complete all assignments. Student attendance will be based upon participation and completion of assignments.

It is important for parents to complete all COVID-19 related communication through the COVID-19 email addresses below:

CUSA-Covid19@chesteruplandsd.org

STEM-Covid19@chesteruplandsd.org

Stetser-Covid19@chesteruplandsd.org

MainStreet-Covid19@chesteruplandsd.org

TobyFarms-Covid19@chesteruplandsd.org

ChesterHigh-Covid19@chesteruplandsd.org

Staff Members

Staff members who are currently at work and present with probable or positive COVID-19 symptoms, are required to immediately leave school or district offices. They should continue to wear their mask and implement social distancing guidelines to reduce the risk of infecting others. The staff member is required to contact their immediate supervisor and the COVID-19 Risk Management Manger within 30 minutes of leaving school premises.

If an adult member of our Learning Community is notified that they were in close contact with someone who tested positive for COVID-19, or they themselves receive notification that they have tested positive for COVID-19, they are required to leave the school or district offices immediately, continue to wear their mask and practice social distancing to prevent form infecting others. This staff member is required to contact their immediate supervisor and the COVID-19 Risk Management Manger within 30 minutes of leaving school premises.

Face Coverings

All staff, students, parents, and visitors are required to wear a mask or face covering when inside any District building. Staff will be provided reusable face coverings that they may wear when they are in District Offices or schools. Bandanas and gaiters are prohibited. Each school site will also receive supplies of surgical and ear loop masks to be stored and given to students and staff who do not have a mask, or forgot to bring one to school.

1. Staff
   a. All staff are required to wear face coverings all day, every day (face masks and/or face shields).
   b. School Safety Officers and Climate Managers are required to wear a face shield on their person at all times, so they can put the face shield on prior to engaging in close contact with students in the event of a physical altercation/fight.

2. Students
   a. All Pre-K-12 students will be required to wear a face covering every day.
   b. Students may be allowed to remove their face covering when:
      i. Students are eating or drinking when spaced at least 6 feet apart

3. Special circumstances:
   a. Individuals who are communicating or seeking to communicate with someone who is hearing impaired or who has another disability, where the ability to see the mouth is essential to communication, are not required to wear a mask; however, individuals should consider using another type of face covering such as a plastic face shield.
   b. Any student who cannot wear a mask or face shield due to a medical condition, including those with respiratory issues that impede breathing, a mental health condition, or disability, and students who would be unable to remove a mask without assistance are not required to wear face coverings. Families are required to provide the appropriate medical documentation that supports that the student's health condition or exceptionality prevents them from adhering from the masking guidance.

c. Children two years and older are required to wear a face covering unless they have a medical or mental health condition or disability, documented in accordance with Section 504 of the Rehabilitation Act or IDEA, that preludes the wearing of a face covering in school. Accommodations for such students should be made in partnership with the student's health care provider, school nurse, and IEP/504 team.

d. Staff and students may not wear masks that have any writing on them unless it is the District's name or school's name. Masks or other Personal Protective Equipment (PPE) which contain any of the following types of messages are unacceptable and if worn or discovered on schoolgrounds may subject the wearer/owner to discipline:

e. Obscenities or profanities,

f. References to drugs, tobacco, alcohol, weapons, violence, sex, gangs, ethnic prejudice, or other attributes of a sensitive or legally protected nature,

g. Threats to the safety or welfare of others.

4. General information:

h. In addition to following guidance around regular hand washing, hand sanitizing, daily cleaning and disinfecting of high-touch surfaces, and encouraging social distancing, the District will procure and distribute PPE for students and staff to use when in school buildings.

i. This PPE equipment will include:

   i. disposable and reusable masks and reusable face shields,
   ii. gloves for specific specialized staff groups, and
   iii. surgical masks, face shields, and disposable gloves will be provided for employees engaging in symptom screening.

Handwashing

The District has procedures in place for hygiene routines that will be implemented throughout the school day. Best practice encourages hand washing prior to meals and snacks, after meals and snack, transition back to class from being outside, after using the bathroom, after blowing nose, coughing, or sneezing.

Procedures are in place for students to use hand sanitizer as they enter the school building, before using classroom materials, and before all transitions. The District will provide each instructional staff member with a supply of disinfectant wipes and make portable hand sanitizer dispensers available directly inside each classroom and throughout each school building.

Daily reminders for students, as well as staff, will be given via morning school announcements to remind both to wash hands frequently, to keep one's hands away from one's face, to use hand sanitizer when soap and water are not available, social distancing and other safety practices. Reminders to wash hands will be reinforced through appropriate signage throughout the building.

Health Screenings

Parents and guardians are highly encouraged to self-screen their children for symptoms of COVID-19 prior to sending their child to school. Parents should not send children to school if they are not feeling well. School nurses, certified nursing assistants (CNAs), school safety officers, and/or designees will conduct daily temperature checks on all individuals prior to entering the schools.

Staff, visitors, or contractors will be required to self-screen for symptoms of COVID-19 and complete health screening prior to reporting to work or a school building. In order to maintain a healthy school environment, visitors must make an appointment in advance, complete a health screening and undergo a temperature check upon arrival at any school. Visitors must all sign the Visitors Acknowledgement of Conduction Screening, Obligation to Report Symptoms form (*see* Appendix). Of course, just like students, staff and contractors are instructed to stay home if they are not feeling well. Staff and students will be sent home if they become ill at work/school. School nurse will encourage staff and students to be tested if known exposure and continue to monitor for symptoms.

Personal Protective Equipment (PPE) & Supplies

The following personal protective equipment (PPE) and supplies have been purchased by the District and will be made available to students, teachers, staff, and visitors:

Children, youth, and adult face masks	Isolation gowns
Children, youth, and adult face shields	N-95 masks
Clear face masks	Plexiglass barriers / sneeze guards
Cots	Plexiglass barriers - trifold
Disinfectant sprays	Sanitizing flex wipes
Hand sanitizer	Temperature Scanners
Gloves (S, M, L, XL)	75% alcohol wipes

Social Distancing

In Chester Upland School District classrooms, desks and seating arrangements will be situated with increased distances between each other.

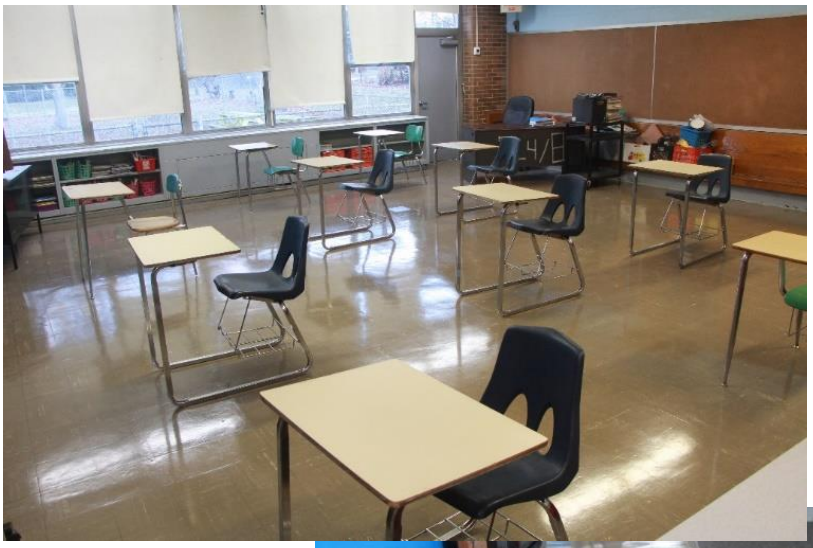
The Chester Upland School District will try to space desks and seating arrangements 6 feet apart, and when not feasible, try for at least 3 feet apart. Desks will face in the same direction, which minimizes face-to-face contact. There will be no more than 10 individuals in a classroom (including students and staff). Important note, due to the age of some of our students and the nature of some of the special needs' population, maintaining this distance may not be likely. We will increase space between students as much as possible and arrange seating during table work with increased spacing. Barriers or face shields will be utilized to protect teachers. Personal Care Assistants and One-on-One staffing will maintain 3 feet of physical distancing if possible, but recognize this might not be possible due to the nature of behavior support plans, medical plans or other specially designed instruction in students' Individualized Education Plans.

The District has used tape and/or signage to mark 6 feet of social distancing in common areas as well as individual classrooms. Where appropriate in buildings and classrooms markings have been added on floors with appropriate materials to support spacing. Posting of signs to support messaging of social distancing has also been done as another reminder.

Space Planning

In preparation for the return of students and staff to Chester Upland School District buildings planning focused on ways to adhere to health and safety standards in regards to classroom as well as at the building level. All classrooms, desks and seating arrangements will be situated with increased distances between each other. The Chester Upland School District will try to space desks and seating arrangements 6 feet apart, and when not feasible, try for at least 3 feet apart. Desks will face in the same direction, which minimizes face-to-face contact.

There will be no more than 10 individuals in a classroom (including students and staff). Consistent six-foot social distancing may not be feasible for very young children, as they generally lack the spatial awareness to understand such distancing mandates and the self-regulation that would enable them to consistently maintain such distance. Plexiglass has been installed on teachers' desks and trifold sneeze guards are being used on students' desks. Of course, masks must be worn at all times by students and staff except when eating or drinking.



Disinfecting Protocols

All Chester Upland School District buildings will be deep cleaned and disinfected prior to any staff member or students returning to the buildings. All cleaning, sanitizing, and disinfecting materials are effective against COVID-19. Custodial staff will work to frequently clean common areas, classrooms, offices and bathrooms. Hard surfaces habitually used by students and staff will be cleaned utilizing an increased cleaning rotation. Chester Upland School District custodial staff will provide the following services to help prevent the spread of COVID-19:

- Spray and Wipe: Application of disinfectant using spray bottle & microfiber cloths.
- Restrooms cleaned more frequently based on schedule developed by Facilities Department and additional cleaning when deemed appropriate by building principals.
- Soap dispensers and towels holders filled according to restroom cleanings.
- Common touch points spray/wipe frequently as per checklist.
- Breakfast and lunch in classrooms teachers and teacher assistants to assist with proper trash disposal.
- Pre-K toys & play equipment disinfected throughout the day and each night.
- Water fountains shut off and bagged.
- Classroom doors remain open.
- Outer bathroom doors to multi-stall bathrooms remain open when not in use.
- Students leave desktops clear at the end of day.
- Hand sanitizer placed in or directly outside all rooms.
- Signage throughout the school reminding everyone to physically distance & hand wash.
- Staff to utilize disinfectant wipes to periodically wipe surfaces and equipment.
- Large area sanitation will take place using “backpack sprayers” to apply disinfecting product.

Chester Upland School District custodians in all six schools will work in conjunction with outside cleaning agencies when necessary to make sure all services are sanitized on a consistent basis and deep-cleaned when necessary. ServiceMaster assists with cleaning and disinfecting classrooms, restrooms, offices, walls, steps, stairwell railings, lockers, doors/doorknobs, desktops, hard surface furniture, cafeteria tables and furniture, nurses’ stations, gym bleachers, and library shelves. Cleaning Products which will be used:

BioProtect 500
FLEXWIPES
Disinfectant Wipes
Envirotab
Screen Clean
Sanit Hand Sanitizer
SparSan Q
Lite’n Foamy
Cranberry Ice
Glass and Hard Surface Cleaner
Sanimaster 7
Spray N’ Go

Ventilation

Chester Upland School District is following the guidance from the Centers for Disease Control and Prevention (CDC) on ventilation. Access to ventilation and fresh air is important. Due to the increase in individuals in the building at one time, ventilation and fresh air exchange rates must be adjusted to meet the recommended thresholds of the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE). The monitoring of the building ventilation systems is top priority to properly operate during daily walkthroughs (*see* Appendix).

Transportation

The following strategies have been implemented to safely transport students to and from school based on the Centers for Disease Control and Prevention (CDC) guidance.

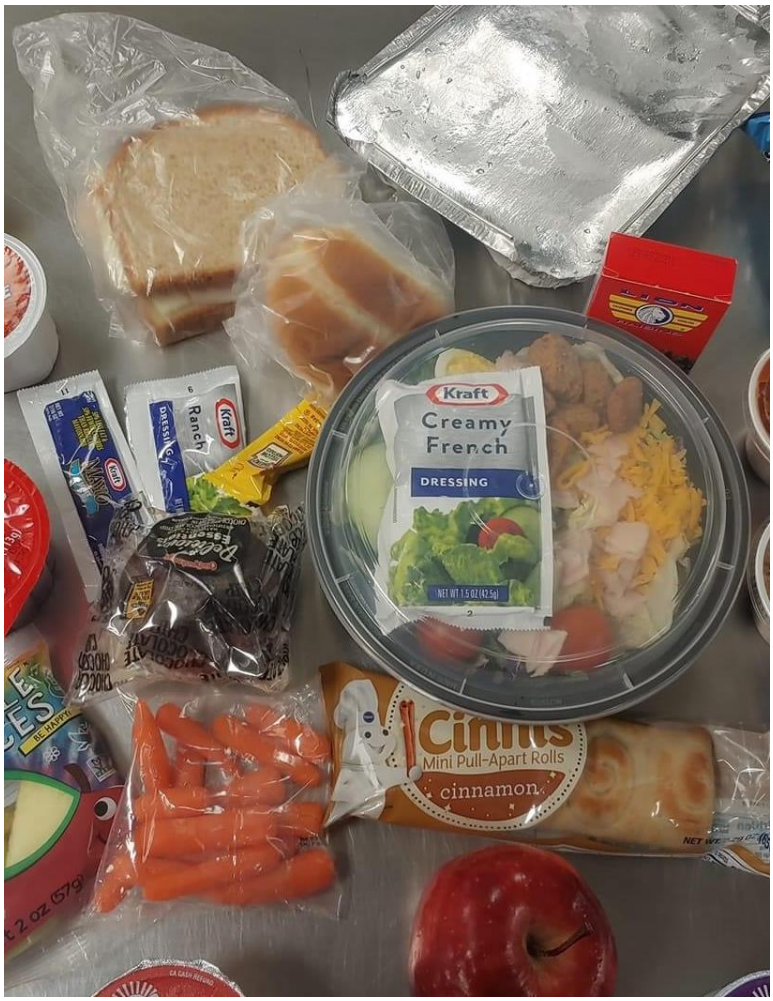
All drivers, students and other school personnel must always use a face mask while riding the bus. Face coverings will be required for all students entering buses (basic masks will be provided for those who do not have them). All students must sanitize hands as they enter buses. All Parents or Families must pre-screen students before bringing or sending students to their bus stop. Anyone with a known fever or other COVID-19-like symptoms should remain home. Bus riders should practice social distancing while waiting for and boarding the bus. Students should depart the bus one at a time to maintain social distancing. Students should not stand and congregate in the aisle once the bus has stopped.

Seating will start from the rear rows as students enter the bus when loading. Students and families should expect the process of boarding and exiting the buses to take longer as we encourage proper social distancing. There will be absolutely no food or drinks on the bus. Weather permitting, windows should be DOWN. No air conditioning or heat should be used while windows are up. Parents are asked to review these expectations with their students and we ask that they reinforce with their children the importance of social distancing and these procedures. Drivers will do the same.

Buses, including seats and high-contact surfaces, will be cleaned according to the Centers for Disease Control and Prevention (CDC) guidelines between runs. An intensive cleaning and disinfection will be performed at the end of each day.

Meal Service and Food Distribution

Whether students are at home learning virtually or learning in the school building, our goal is to ensure students receive adequate nutrition. Without access to adequate nutrition, food insecurity and hunger can play a significant role in a child's ability to learn and have long-lasting effects on their overall health. Thus, Chester Upland School District has implemented a Grab and Go breakfast and lunch program. Students will eat in their classrooms, not in the cafeteria. This change has been made in order to continue to limit the use of communal spaces such as cafeterias and auditorium. Upon arriving at school, students will receive a Grab and Go breakfast, which they will eat in their classroom. Students will take ownership of their area and be expected to assist in keeping it free and clear of trash. Trash receptacles will be placed in each classroom, and trash will be collected after each meal in the classroom.



Students are required to wipe down their desks/tables afterwards. Grab and Go lunches will be delivered to classrooms. Buffet style or self-serve meals will be avoided. No snacks are allowed to be shared for classroom activities or events. Sharing of food and utensils is strictly prohibited. Of course, students and staff are required to wash hands or use hand sanitizer before and after eating.

While students are learning virtually, meals will be distributed every Wednesday. Pick up locations include Toby Farms Intermediate School and Stetser Elementary School (front door entrances) from 10:00 a.m. to 12:00 p.m., as well as Chester High School (mail lobby entrance) 10:00 a.m. to 5:00 p.m. Chester Upland School District will continue to work to provide healthy food options for all students.

Nurse's Office Visits

As we prepare for the reopening of schools, we realize that the nurse's roles and responsibilities will be very different from previous years. Beyond their standard roles, our school nurses will also be responsible for monitoring the symptom monitoring reports from parents, triaging staff and students who present with COVID-19 and consulting with various medical teams such as the Chester County Health Department (CCHD). These additional demands require us to reassess how minor medical complaints can be handled. For this reason the following guidelines and recommendations have been developed. The guidelines are only reflective of minor needs and have not changed our protocols related to more extensive and intensive needs.

Please refer to the Symptom Monitoring Checklist Protocol for students who present with possible COVID-19 Symptoms.

Due to COVID precautions, staff will be asked to refrain from sending students with minor medical complaints to the nurses office until the below interventions have been attempted. Please refer to the Symptom Monitoring Checklist Protocol for students who present with possible COVID-19 Symptoms.

1. ***These minor medical complaints should be handled in the classroom and include, but are not limited to:***

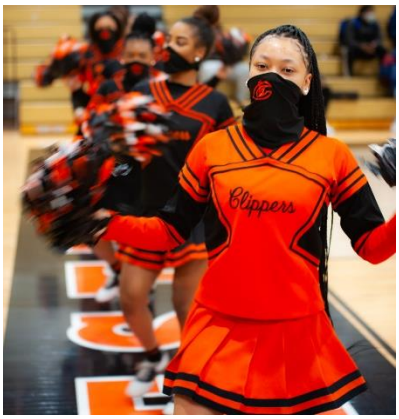
a. **Paper cuts, small abrasions, picked scabs, blisters, splinter:** Wash hands with soap and water; apply band aid if needed.
b. **Bug bite/minor rash/poison ivy:** if no allergy history and not spread over large area of skin, apply cool paper towel to area to help prevent scratching
c. **Menstrual cramps:** short walk, bathroom rest 20-30 min
d. **Sore throat, runny nose cough:** Blow nose and drink of water
e. **Bumps/Bruises/Minor burns:** cool paper towel
f. **Old Injuries from previous day or weekend:** No nurse's visit is needed
g. **Anxiety/Stress/Psychosocial Issues:** If complaint is **not affecting breathing or medical health,** redirection, or refer to guidance counseling, prevention specialist, psychologist, or other applicable services for collaborative response.
h. **Minor headaches and or/fatigue:** Allow water, recheck symptoms after 20 minutes; unless symptoms are presenting with other common COVID-19 symptoms-see CCHD Symptom Monitoring checklist.
i. **Mild stomach ache /and or nausea:** Allow to use the restroom, drink water, and rest; recheck symptoms after 20 minutes; unless symptoms are presenting with other common COVID-19 symptoms- see CCHD Symptom Monitoring checklist.
j. **Nurse's Office Bathroom** is only to be used for those being treated by the nurse. All others must use the regular hallway facilities.

As there may be other students in the Nurse's office, it is **imperative that staff call** the Nurse's Office prior to sending any students. This will allow for social distancing and quarantine needs.

As previously indicated, this protocol does not alter situations that include other medical needs. Student with specific medical needs may require an in-person evaluation. Please keep the student in place and contact the nurse to determine the next steps if the student has the following symptoms:

1. Disorientation and or/altered level of consciousness
2. Shortness of breath/respiratory distress
3. Possible spinal injury: DO NOT MOVE OR ALTER POSITION
4. Follow medical orders, IEP, 504, or IHP accommodations detailed for applicable students with seizure disorder diabetes.
5. If the nurse cannot be reached and it is an emergency, activate building emergency response plan. Activate "911" and notify/call the Main Office of the arrival of EMS.

Athletics



Chester Clippers Athletics Conditioning/

Workout Plan (Master)

Note: Players must complete a daily screening questionnaire (2 hours) before practice and participate in temperature checks at the beginning of each practice. Athletic Director, Head Coach and designated assistant coach will administer temperature checks. **Persons with a high temperature will not be allowed in the building.**

Winter Sports Start Date- January 11, 2021 **(Tryout/workout date)**

Winter Sports Physical Date- January 14, 2021

NOTE: Players without physicals will not be permitted to participate in winter sports.

Boys/Girls Basketball Competition Days

Winter Sports games are played on Tuesdays and Thursdays. **Note: Some Saturdays have been scheduled for games (see schedule).** Practices will take place on Mondays, Wednesdays, and Saturdays. **NOTE: Saturday practice times are TBD.**

Boys Basketball- Coach Taylor

JV practice 3:30 p.m. - 5:00 p.m. (Monday, Wednesday, and Saturday)

- All participants are required to wear a mask- (sideline players, players on the court, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer
- Players and staff must practice physical distancing (6 ft) if not on the court.
- Restroom usage (restrooms immediately outside of the gym) no more than 2 at a time.
- No personal items are to be left after practice.
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

****Note: There will be a 15-minute transition period to sanitize and disinfect used area. Coaches must adhere to the time schedule.**

Varsity practice 5:15 p.m. - 7:30 p.m. (Monday, Wednesday, and Saturday)

- All participants are required to wear a mask- (sideline players, players on the court, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer

- Players and staff must practice physical distancing (6 ft) if not on the court.
- Restroom usage (restrooms immediately outside of the gym) no more than 2 at a time.
- No personal items are to be left after practice
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

Girls Basketball- Coach Burney

Note: Girls will practice and condition in STEM Academy Gymnasium

Girls Varsity practice 3:00 p.m. - 5:00 p.m. (Monday & Wednesday)

- All participants are required to wear a mask- (sideline players, players on the court, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer
- Players and staff must practice physical distancing (6 ft) if not on the court.
- Restroom usage (restrooms immediately outside of the gym) no more than 2 at a time.
- No personal items are to be left after practice
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

Indoor Track-Coach Jamie/ Coach Allen

(Monday, Tuesday & Thursday 4:00 p.m. – 6:00 p.m.)

Note: Track will condition on the 4th floor of Chester High School.

- All participants are required to wear a mask- (sideline players, players on the court, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer
- Players and staff must practice physical distancing (6 ft) apart.
- Restroom usage (restrooms immediately outside cafeteria on the 3rd floor of CHS) no more than 2 at a time.
- No personal items are to be left after practice
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

Cheerleaders- Coach Miah/ Coach Valerie (**Monday & Wednesday)**

Note: Cheerleaders will condition on the 2nd floor of CHS.

Cheerleaders (4:00 p.m. - 6:00 p.m.)

- All participants are required to wear a mask- (sideline players, players on the court, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer
- Players and staff must practice physical distancing (6 ft) apart.
- Restroom usage (use restrooms immediately outside of Camelot Department on 2nd floor) no more than 2 at a time.
- No personal items are to be left after practice
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

Football-Coach Bell/ Coach Terry (4:00 p.m. - 6:30 p.m.) Weight room (only) **(Monday, Tuesday, Wednesday, and Thursday).**

- All participants are required to wear a mask- (players, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer
- Players and staff must practice physical distancing (6 ft) during workouts.
- Restroom usage (restrooms in locker room) no more than 2 at a time.
- No personal items are to be left after practice
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

Baseball-Coach Waters (4:00 p.m. - 5:30 p.m.) Weight room (only) **(Monday & Wednesday)**

- All participants are required to wear a mask- (players, coaches, and trainers).
- All participants must have personal water containers.
- Sanitize wipes are recommended as well as hand sanitizer
- Players and staff must practice physical distancing (6 ft) during workouts.
- Restroom usage (restrooms in locker room) no more than 2 at a time.
- No personal items are to be left after practice
- All participants are to sanitize their areas after use.
- Custodial staff will disinfect area after use.

Note: Sanitizer will be provided by maintenance and custodial staff.

**** Football/Baseball are volunteer workouts.**

PIAA Update regarding days needed prior to competition (see graph below)

# of Days – Preseason Practices Completed as of 1.4.20	# of Practice Days Needed Before Competition	# of Practice Days Needed Before Competition for schools who utilize Off Campus / Private Facilities
0	10	5
1	9	
2	8	
3	7	
4	6	
5	5	
6 or greater	4	

Note: The COVID-19 pandemic has presented athletics across the world with a variety of challenges. The COVID-19 virus is a highly contagious illness that primarily attacks the upper respiratory system. The virus that causes COVID-19 can infect people of all ages. While it is not possible to eliminate all risk of furthering the spread of COVID-19, the current science suggests there are many steps schools can take to reduce the risks to students, coaches, and their families.

NOTE: Due to COVID-19, spectators are not allowed to attend sporting events at this time. All games will be viewable via livestream by CMP RADIO.

The following PIAA practices have been implemented for winter sports to proceed:

- Face covering will be worn at all times (all personnel)
- Suspend handshakes prior to and following the pregame conference
- Place team benches opposite the spectator seating
- Limit contact between players when substituting
- Sanitize the scorer's table before the game, at half time, and afterwards
- Place officials table away from the sideline to allow for additional space for substitution
- Limit seats at the table to essential personnel (e.g., home team scorer and timer)

Health and Safety Screening (Google Document)

- **Health screening survey must be completed and submitted prior to competition. https://docs.google.com/forms/d/e/1FAIpQLSeaMjgOr16Vdvv2s6vahZ_m7kiaUYKQrkQZARksoSjeDB7bWg/viewform**

Equipment and Accessories

- Game ball will be sanitized prior to game and only used for gameplay.
- Game ball will be sanitized during timeouts and between quarters.
- Warmup balls will be provided during pregame.

Hydration/Personal Items

- All persons must have their own water bottles.
- Water Cooler will be available for personal container refilling.
- Personal water bottles without lid removal function, will not be refilled.
- Sharing of Personal items (e.g., towel, water containers) will not be permitted.

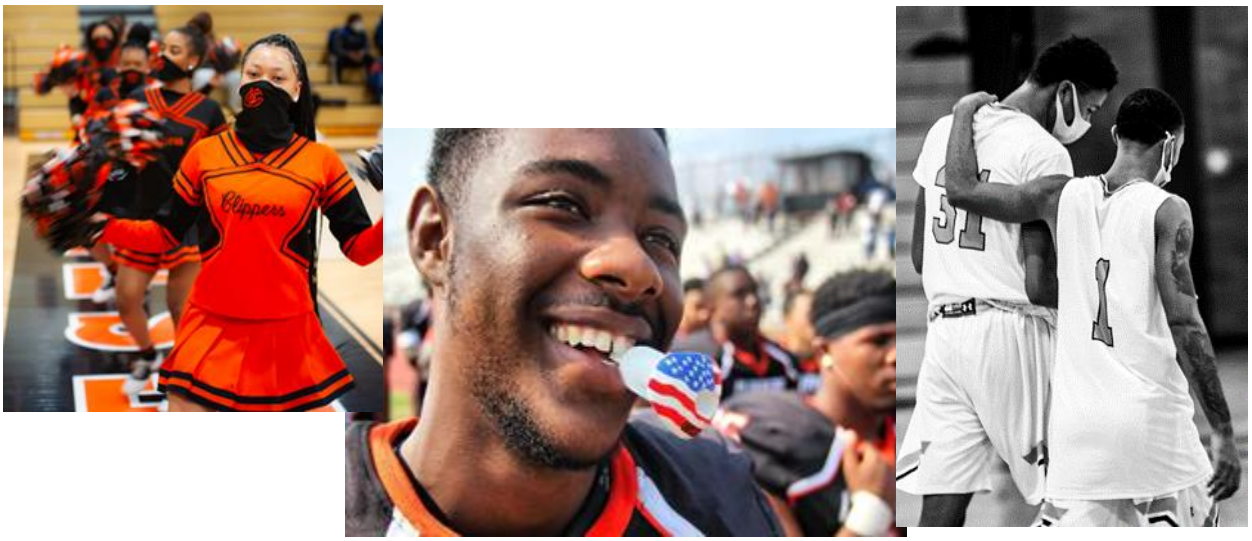
Locker Rooms/Restrooms

- Locker room usage will not be permitted.
- Players must come dressed and ready to play
- Restrooms will be accessible (no more than 2 at a time)

Symptoms/Contract Tracing

- Any person exhibiting symptoms will be isolated immediately
- Personal contact from health and safety screening survey must be informed and player must be picked up and seen by doctor.
- School Nurse will be notified as soon as possible
- Player must undergo 14-day quarantine
- Player will not be allowed to return until evaluated and cleared by doctor.

Note: Visiting team Athletic Directors/Head Coach will be provided a copy of this document.



Afterschool Programming

The District will continue to offer all after school programs virtually until further notice. The following are the activities that are available to students and families:

Toby Farms
Homework Assistance
Middle School SEW
Cosmetology (6th-8th)
Cooking
Entrepreneurship/Business Development (6th-12th)
Chess
Mentoring
Drumming
Virtual Reality Exploration (4th-8th)
Robotics 7th-12th
Coding
Art

Stetser
Homework Assistance
Elementary SEW
Cooking
Chess
Mentoring
Drumming
Virtual Reality Exploration (4th-8th)
Robotics 7th-12th
Art

Chester Upland School of the Arts
Homework Assistance
Elementary SEW
Cooking
Chess
Mentoring
Drumming
Virtual Reality Exploration (4th-8th)
Robotics 7th-12th
Art

Main Street
Homework Assistance
Elementary SEW
Cooking
Chess
Mentoring
Drumming
Virtual Reality Exploration (4th-8th)
Art

STEM
Homework Assistance
Robotics
Entrepreneurship
SAT Prep
Art
Hi-Q
Data Analytics
Credit Recovery
Cooking
Cosmetology
Middle School SEW
High School SEW
College/Career Readiness
Chester Change Agents
CEF
Homework Tutoring CEF
PACE Chess
Music Technology
Musicopia

Chester High School
Homework Assistance
Entrepreneurship
Credit Recovery
Cooking
High School SEW/Mentoring
College/Career Readiness
Chester Change Agents
CEF
Homework Tutoring CEF
PACE Chess
Music Technology

Appendix

COVID-19 Decision Making Guidance—High Risk/Low Risk Symptoms and Definition of Close Contact

HIGH RISK SYMPTONS

- Fever temperature greater than or equal to 99.5 degrees Fahrenheit
- Cough (with new onset or worsening cough in the case of asthma)
- Shortness of breathing
- Loss of sense of taste or smell

LOW RISK SYMPTOMS

- Sore throat
- Nasal congestion
- Nausea
- Vomiting
- Diarrhea
- Muscle aches
- Fatigue
- Headache

COVID-19 Decision MAP

Definition Close Contact

Being directly exposed during the infectious period to secretions (e.g. being coughed on) from a person with COVID, living in the same household or caring for a person with COVID, or being within 6 feet of a person with COVID for at least 15 minutes (within a 24 hour period) regardless of wearing a face covering.

COVID-19 Decision Making Guidance—Students

Student Reports COVID-19 symptoms during the day

Students/Parents will complete self - assessment and temperature checks at home. Students will use temperature kiosk at building entrance.

Student exhibits high risk symptoms.

Student is placed in isolation room and parent is contacted to pick up student.

Parent contacts their primary care provider.

Student receives an alternate diagnosis or negative test. Follow the medical providers instructions and district illness exclusion guidelines on when to return to school. If positive test, follow "Student Tests Positive" protocol in next column.

Student exhibits low risk symptoms.

Student will be evaluated by the nurse and will rest in the quarantine room. If symptoms improve, student will return to class. If symptoms do not improve students will be sent home.

Student will follow the attendance guidelines for when to return to school. If symptoms do not improve, parents should consult medical provider.

Students tests positive for COVID-19 with or without symptoms

Parent notifies district by emailing information to school's COVID-19 email address.

Student should wear a mask and self-isolate for 10 days following positive test result or onset of symptoms. Following the 10 days the student may return to school when symptoms improve and fever-free for 24 hours without fever-reducing medication.

During isolation at home, student will transition to virtual learning. Student will be counted present or absent based upon participation/work at-home learning.

School nurse will contact family weekly during the isolation period to check in and answer any questions.

Student/Parent reports that someone in the household has been exposed to someone who tested positive for COVID-19

If family member at home is not symptomatic, but just 'exposed,' student may come to school (no need to quarantine or notify any staff or students).

If family member starts to develop COVID-19 symptoms, contact your medical provider.

Parent should follow the instructions from the medical provider. Student may continue to go to school but should monitor for symptoms and report to the school's COVID-19 email address if symptoms develop.

Student/ Parent reports that someone in the household has tested positive for COVID-19

Parent notifies district by emailing information to school's COVID-19 email address.

Student should quarantine for 14 days from date of last exposure. Student should wear a mask and monitor for symptoms. If symptoms develop, contact your medical provider and follow their instructions.

During quarantine at home, student will transition to virtual learning. Student will be counted present or absent based upon participation/work at-home learning.

School nurse will contact family weekly during the quarantine period to check in and answer and questions.

Someone has close contact with someone during the infectious period with someone who tested positive for COVID-19

If positive case was at school, school staff identifies close contacts (students or staff) who were within 6 feet of student for a cumulative of 15 minutes, within a 24 hour period, with or without a facial covering, two days prior to the day that the student tested positive or exhibited symptoms. All close contacts will be sent home with a letter from the school nurse.

Student should quarantine for 14 days from date of last exposure. Student should wear a mask and monitor for symptoms. If symptoms develop, contact your medical provider and follow their instructions.

During quarantine at home, student will transition to virtual learning. Student will be counted present or absent based upon participation/work at-home learning.

COVID-19 Decision Making Guidance—Employees

Employee Daily COVID-19 Screening

Completes daily screening at building entrance.

Failed screening.

Employee should not go to work today, must contact supervisor, HR, and consult a medical provider.

Employee received an alternative diagnosis or negative test.

Provide negative diagnosis to covid19@chesteruplandsd.org.

If positive test, follow "Employee Tests Positive" protocol in next column.

Successful screening.

Employee goes to work. If employee develops symptoms, they should go home immediately and contact their supervisor, HR and COVID-19 Risk Management Manager immediately.

If symptoms do not improve, employee should consult with a medical provider.

Employee tests positive for COVID-19 with or without symptoms

Employee notifies supervisor, HR and COVID-19 Risk Management Manager and emails information to covid19@chesteruplandsd.org.

Employee should wear a mask and self-isolate for 10 days following positive test result or onset of symptoms. Following the 10 days the employee may return to work when symptoms improve and fever-free for 24 hours without fever-reducing medication.

Employee will use paid time off during quarantine.

HR will provide guidance on available leave options if needed and return to work date.

Employee reports that someone in their household has been exposed to someone who is COVID-19 positive

If family member at home is not symptomatic, but just 'exposed' employee may come to work (no need to quarantine or notify any staff or students).

If family member starts to develop COVID-19 symptoms, contact your medical provider.

Employee should follow the instructions from their medical provider. Employee may continue to go to work but should monitor for symptoms and report to the school if symptoms develop.

Employee reports that someone at home has tested positive for COVID-19

Employee notifies supervisor, HR and COVID-19 Risk Management Manager and emails information to covid19@chesteruplandsd.org.

Employee should quarantine for 14 days from date of last exposure. Employee should wear a mask and monitor for symptoms. If symptoms develop, contact your medical provider and follow their instructions.

Employee will use paid time off during quarantine.

HR will provide guidance on available leave options if needed and return to work date.

Employee has close contact with someone during the infectious period with someone who has tested positive for COVID-19

If positive case was at work, COVID-19 designee staff will identify close contacts (student or staff) who were within 6 feet of employee for a cumulative of 15 minutes with or without a facial covering, two days prior to the day that the employee tested positive or exhibited symptoms. All close contacts will be sent home.

Employee should quarantine for 14 days from date of last exposure. Employee should wear a mask and monitor for symptoms. If symptoms develop, contact your medical provider and follow their instructions.

Employee will use paid time off during quarantine.

HR will provide guidance on available leave options if needed and return to work date.

COVID-19: Deep Cleaning & Disinfection Protocol for Common Touch Point Surfaces

This checklist is to be used to deep clean and disinfect all common touch point surfaces, or for an entire facility.

CHECKLIST INSTRUCTIONS:

1. Cleaning staff are required to initial the appropriate box for areas that they have sanitized.
2. Checklists must be copied and filed on-site then submitted by Building Managers to Supervisors weekly.
3. Supervisors are required to approve each form by printing and initialing the top right of each form.
4. Supervisors will provide a copy of each form to Environmental Health & Safety Trainer & Coordinator (E.H.S.). The E.H.S will then file electronic and hard copies.
5. See sample of completed form (Fig. 1)

CLEANING STEPS:

1. Apply eye protection and gloves
2. Clean and wipe surface
3. Disinfect with backpack sprayer utilizing" ready to use"
4. Hillyard Q.T Plus 24 Arsenal" or Re-Juv-Nal solution.
5. Allow product to remain on surface for 10 minutes
6. of contact time
7. Dispose of Supplies in Designated Container

SCHOOL NAME: _____ **WEEK ENDING:** _____ **SUPERVISOR:** _____

GYM	MONDAY			TUESDAY			WEDNESDAY			THURSDAY			FRIDAY			SATURDAY			SUNDAY		
	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Switches/Plates	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Bleachers	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
All Athletic Equipment	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
All Locker Room Areas	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Mats	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Apparatus	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
KITCHEN/CAFETERIA	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Appliances / Utensils	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Sinks/ Faucets	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Counters	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Switches/Plates	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Tables / Prep Tables	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Seats	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
LIBRARY	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Computers/ Mouse	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Counters	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Switches/Plates	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Tables	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Seats	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
AUDITORIUM	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Seats	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Microphone / Podium	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.
Handles	J.M	J.M	D.F.	P.L.	P.L.	D.F.	J.M	J.M	D.F.	J.M	J.M	M.G.	J.M	J.M	D.F.	E.S.	E.S.	D.F.	J.M	J.M	D.F.

COVID-19: Deep Cleaning & Disinfection Protocols, Continued

SCHOOL NAME _____ WEEK ENDING _____ SUPERVISOR INITIAL _____

BUILDING MANAGER SIGNATURE _____

ASSISTANT BUILDING MANAGER SIGNATURE _____

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
GYM	End of Day	End of Day	Deep Cleaning	End of Day	End of Day	As Needed	As Needed
Switches/Plates							
Bleachers							
All Athletic Equipment							
All Locker Room Areas							
Mats							
Apparatus							
KITCHEN / CAFE	End of Day	End of Day	Deep Cleaning	End of Day	End of Day	As Needed	As Needed
Appliances / Utensils							
Sinks/ Faucets							
Counters							
Switches/Plates							
Tables / Prep Tables							
Seats							
LIBRARY	End of Day	End of Day	Deep Cleaning	End of Day	End of Day	As Needed	As Needed
Computers/ Mouse							
Counters							
Switches/Plates							
Tables							
Seats							
AUDITORIUM	End of Day	End of Day	Deep Cleaning	End of Day	End of Day	As Needed	As Needed
Seats							
Microphone / Podium							
Handles							
Switches/ Plates							

COVID-19: Deep Cleaning & Disinfection Protocols, Continued

SCHOOL NAME _____ **WEEK ENDING** _____ **SUPERVISOR INITIAL** _____

BUILDING MANAGER SIGNATURE _____

ASSISTANT BUILDING MANAGER SIGNATURE _____

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
CLASSROOMS	End of Day	End of Day	Deep Cleaning	End of Day	End of Day	As Needed	As Needed
Door Handles, Pull/Push Plates							
Chair Hand Rests/Rails							
Tabletops, Desktops & Edges							
Light Switches							
Stair and Mezzanine Railings							
Handicapped Chair Lifts and Rails							
File & Storage Cabinet Handles							
Equipment Buttons/Handles							
Phones and Handles							
Computer, Keyboard, Mouse							
Handles, Buttons, Panels							
All Seats							
Countertops							
Faucets & Sinks							
Doors and Door Windows							
Towel Dispensers							
Trash Can Lids							
TEACHER'S LOUNGE	End of Day	End of Day	Deep Cleaning	End of Day	End of Day	As Needed	As Needed
Appliances/Utensils							
Counters							
Switches/Plates							
Tables/Counters							
Seats							
Vending Machines							

COVID-19: Deep Cleaning & Disinfection Protocols, Continued

SCHOOL NAME _____ WEEK ENDING _____ SUPERVISOR INITIAL _____

	MONDAY			TUESDAY			WEDNESDAY			THURSDAY			FRIDAY			SATURDAY			SUNDAY		
RESTROOMS	Early	Mid	EOD	Early	Mid	EOD	Deep Cleaning			Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Sanitary Dispensers																					
Sinks & Faucets																					
Handles & Knobs																					
Toilets & Urinals																					
Trash Cans																					
Towel Dispensers																					
Hand Dryers																					
HALLWAYS	Early	Mid	EOD	Early	Mid	EOD	Deep Cleaning			Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Elevators																					
Wall Panel/Buttons																					
Control Panel/Buttons																					
Lockers																					
Water Fountains																					
ALL Handles/Plates																					
Sanitizing Dispensers																					
Vending & Dispensers																					
Railings																					
Security Desks																					
NURSE'S OFFICE	Early	Mid	EOD	Early	Mid	EOD	Deep Cleaning			Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD	Early	Mid	EOD
Cots																					
Chairs																					
Doors																					
Restroom Area																					

Visitors Acknowledgement of Conduction Screening, Obligation to Report Symptoms

In an effort to ensure the safest environment possible for our employees, visitors, volunteers, and partners during the COVID-19 public health emergency:

I understand and acknowledge that the Chester Upland School District may conduct non-invasive health screening, including answering health-related yes or no questions and any other non-contact monitoring that may be recommended by the U.S. Centers for Disease Control and Prevention (CDC), to ensure the health, and welfare, and safety of employees and visitors, and monitor enforcement of policies and protocols. I consent to non-invasive monitoring recommended by the CDC and Chester Upland School District at any time Chester Upland School District may choose during the COVID-19 public health emergency to help Chester Upland School District evaluate the risk that my presence poses to others in the workplace as a result of the COVID-19 pandemic.

I can expect Chester Upland School District will protect the privacy and security of my personal information, in accordance with applicable federal and state laws, including but not limited to the Americans with Disabilities Act ("ADA") the Health Insurance Portability and Accountability Act of 1996 ("HIPPA), the Family Medical Leave Act, ("FMLA"), and state and local laws governing the privacy and/or security of personal information. I also understand and herby acknowledge that during a public health crisis, should Chester Upland School District need to disclose any COVID-19-related health information to public health agencies, such information will be disclosed pursuant to applicable CDC guidance and any other applicable federal, state or local public health reporting requirements. It shall be limited to the minimum information necessary to comply with the reporting requirements.

Also, I hereby acknowledge that should I become aware of a positive COVID-19 test or knows COVID-19 exposure of myself either at work or away from work, I will promptly notify Chester Upland School District and proactively engage in a conversation that could include identifying my known contacts at work who may have been exposed.

Visitors Acknowledgement of Conduction Screening, Obligation to Report Symptoms, Continued

COVID-19 Responsibility Precautionary Requirements

While on school or district property, I am required to wear a disposable or cloth mask that covers my mouth and nose. (A face mask is considered to be cloth or disposable. Bandanas, neck gaiters, and masks with valves are not permitted.)

http://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html

Occupational Safety and Health Administration, OSHA, General Practices

Frequently wash your hands with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol. Avoid touching your eyes, nose, or mouth with unwashed hands. Avoid close contact with people who are sick. Stay home if sick.

Maintain at least six feet of distance between yourself and others.

http://www.osha.gov/SLTC/covid-19/controlprevention.html

_____	_____	_____
Signature	Print Name	Date

Air Quality Reports

Environmental Control Systems, Inc.

Environmental Engineers and Management Consultants

October 7, 2020

Mr. Paul Thompson
Director of Operations
Chester County Intermediate Unit
455 Boot Road
Downingtown, PA 19335

Re: CUSD -CUSA Indoor Air Quality Investigation

Dear Mr. Thompson,

In the capacity as the Chester County Intermediate Unit's (CCIU) environmental risk engineer, we offer you the following narrative.

On October 2, 2020, Environmental Control Systems, Inc. (ECS) conducted an airborne mold exposure assessment in the Chester Upland School of the Arts (CUSA). Cooresponding sampling cassette numbers are as follows:

1. CUSA

a) Outdoor Control - Sample Cassette # 31298693
b) Outdoor Control - Sample Cassette # 31186867
c) Room 311 – Sample Cassette # 31063834
d) Room 302 – Sample Cassette # 31298683
e) Room 205 – Sample Cassette # 31063831
f) Room 112 – Sample Cassette # 31298661
g) Room 101 – Sample Cassette # 31298663

Separate temperature, relative humidity and dew points were measured in additional rooms not having their breathing space testing:

a. Cafeteria
b. Room 203
c. Room 201

Air Sampling Method

If mold is suspected, but not visibly detected after a thorough inspection, then microbial air sampling conducted in accordance with guidance documents can be useful. ECS elected to use Air-O-Cell™ sampling cassettes as the screening device for this cursory event. The Air-O-Cell™ Air Sampling cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. Air enters the cassette, the particles become impacted on the sampling substrate, and the air leaves through the exit orifice. The airflow and patented cassette housing is designed in such a way that the particles are distributed and deposited equally on a special glass slide contained in the cassette housing called the "trace".

Air Sampling Laboratory Report

Attached you will find the laboratory report of the samples taken on October 2, 2020. Sample locations and corresponding sample numbers are listed above. The "Control" sample is referred to and becomes the "Background" sample to which all other samples acquired on this date are compared.

Regulatory Guidance

The most common fungi are ubiquitous within our environment and we are constantly exposed to them both in the air and on many surfaces. Current filtration systems are designed to prevent a majority of these high outdoor counts from getting inside, however, the EPA states that "There is no practical way to eliminate all mold and mold spores in the indoor environment and spores can be found almost anywhere and can grow on virtually any substance, providing moisture is present". Constituents travel indoors inside through normal everyday actions such as through open doors/windows, and attaching itself to clothing, shoes, and bags. Constituents that get inside require moisture to grow mold on any organic surface (i.e.: wood, paper, plastic & carpet) so the most effective course is to limit the potential for microbial growth indoors by reducing the causes of persistent dampness. Mold growth does not require the presence of standing water; it can occur when high relative humidity or the hygroscopic properties (the tendency to absorb and retain moisture) of building surfaces allow sufficient moisture to accumulate.

Currently, there are no EPA, CDC or OSHA regulations or standards for airborne mold contaminants, therefore, there are no quantitative health-based guidelines, values, or thresholds for acceptable, tolerable, or normal concentrations for airborne fungi spores. The most commonly cited indoor air quality standards and generally accepted practices supporting acceptable indoor air quality are those established by the American Society of Heating and Air Conditioning Engineers (ASHRAE), and the American Industrial Hygiene Association (AIHA).

- ASHRAE Standards 55 & 62 provide guidelines addressing optimum achievable "thermal comfort" for occupants of buildings and system requirements which are expected to result in indoor air quality “acceptable” to human occupants.

  (ANSI/ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy establishes the ranges of indoor environmental conditions to achieve acceptable thermal comfort for occupants of buildings and ANSI/ASHRAE Standards 62.1 and 62.2 are the recognized standards for ventilation system design and acceptable IAQ).

  Since there are individual differences in preferences for thermal comfort, it may not be possible to achieve an acceptable comfort level for all occupants. That being said, ASHRAE guidelines recommend 68ºF to 74ºF in the winter and 75ºF to 80ºF in the summer. as well as a relative humidity (RH) range of 30% to 60%.
  In addition, the required minimum ventilation rate in cubic feet per minute (CFM) per person in an educational classroom is suggested to have 15 CFM per person (students ages 5-8); and 13 CFM per person (students age 9+) **ASHRAE 62.1-2016 recommends that relative humidity in occupied spaces be controlled to less than 65% to reduce the likelihood of conditions leading to microbial growth.

- The AIHA Position Statement (Recognition, Evaluation, & Control of Indoor Mold) states that sampling for airborne mold spores can indicate whether the mix of indoor constituents is “typical” of the outdoor mix or, conversely, “atypical” or unusual at the time of airborne sampling. The AIHA suggests a useful method for interpreting microbiological results is to compare the kinds and levels of organisms detected in different environments. Usual comparisons include indoors versus outdoors, or complaint areas versus non-complaint areas. Specifically, in buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors, coupled with the absence of the same kind of fungi outdoors, may indicate a moisture problem and degraded air quality. Generally speaking, indoor mold types should be similar to, and airborne concentrations should be no greater than, those found outdoors and in non-complaint areas

Guidelines for Interpretation of Results

Since there are no standards which establish acceptable, tolerable, or normal concentrations for airborne fungi spores, ECS adheres to the following professional standards as sources of guidance:

- The National Allergy Bureau (NAB™) a section of the American Academy of Allergy, Asthma and Immunology's (AAAAI™) considers 'mold counts in outdoor air of 0-6499 spores per cubic meter of air as low, to 6500 to 12,999 spores per cubic meter of air as moderate, to 13,000 to 49,999 spores per cubic meter of air as high, and above 50,000 as very high'.

- The AIHA suggest that indoor mold types should be similar to and airborne concentrations should be no greater than those found outdoors and in non-complaint areas.

- ASHRAE Standards 62.1 and 62.2 (Ventilation for Acceptable IAQ) defines "Acceptable Indoor Air Quality" as "air in which there are no known contaminants at harmful concentrations as determined by cognizant authorities and with which a substantial majority (80% or more) of the people exposed do not express dissatisfaction".

- The EPA defines "Good Air Quality" as a result of: Introduction and distribution of adequate ventilation, Control of airborne contaminants, & maintenance of acceptable temperature and relative humidity.
- World Health Organization (WHO) Guidelines for Indoor Air Quality

- Environmental Protection Agency – Indoor Air Quality Best Practices

Findings/Recommendations

1. Outdoor temperature, RH, & Dew Point obtained during the sampling event was 57ºF with 80% RH, & Dew Point 51ºF

2. Indoor temperature, RH & Dew Point obtained during this sampling event:

    A. Cafeteria - 70ºF with 49% RH & Dew Point 49.9ºF. Surface temperatures were greater than the dew point.
    B. Room 311 - 70ºF with 50% RH & Dew Point 50.5ºF. Surface temperatures were greater than the dew point.
    C. Room 302 - 70ºF with 51% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    D. Room 205 - 73ºF with 45% RH & Dew Point 50.4ºF. Surface temperatures were greater than the dew point.
    E. Room 203 - 73ºF with 46% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    F. Room 201 - 73ºF with 46% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    G. Room 112 - 72ºF with 44% RH & Dew Point 48.9ºF. Surface temperatures were greater than the dew point.
    H. Room 101 - 72ºF with 48% RH & Dew Point 51.2ºF. Surface temperatures were greater than the dew point.

3. EPA states that *"mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors."*

    a. At the time of this investigation, there was no condensation observed on any horizontal or vertical surfaces as all surface temperatures were higher than the dew point temperature of the space.

    b. No visible mold was observed during this assessment.

    c. The EPA suggests that in order to maintain "good air quality", the following procedures should be followed: introduction and distribution of adequate ventilation, control of airborne contaminants, and maintenance of acceptable temperature and relative humidity.

Acceptable indoor air quality (IAQ) is typically not achieved by addressing any one specific building product, system, or procedure. Rather, it is the result of careful attention to each of the following fundamental elements:

- Contaminant Source Control
- Proper Ventilation
- Humidity Management
- Adequate Filtration

Careful attention to each of the above followed by proper operation and maintenance of your HVAC system can significantly reduce the risk of indoor air quality related problems.

4. Analytical data shows that total fungi in this space was lower than the outdoor airborne control samples obtained and that the types of mold in both the indoor and outdoor samples were "typical". This falls within the scope of guidelines we follow when qualifying data.

    a. Microorganisms get indoors through the heating, ventilation, and air conditioning system (HVAC), doors, windows, potted plants (soil), crack in the walls, potable drinking water system, or are brought into the building on shoes and clothes of people coming into the building. As a general rule, total indoor airborne spore concentrations in a typical clean HVAC supplied building should be less or equal to the total outside concentrations.

Conclusion

Based on the sampling data received during the October 2, 2020 airborne mold exposure assessment, the total airborne fungal constituents identified within the area sampled were below those found in the outdoor air.

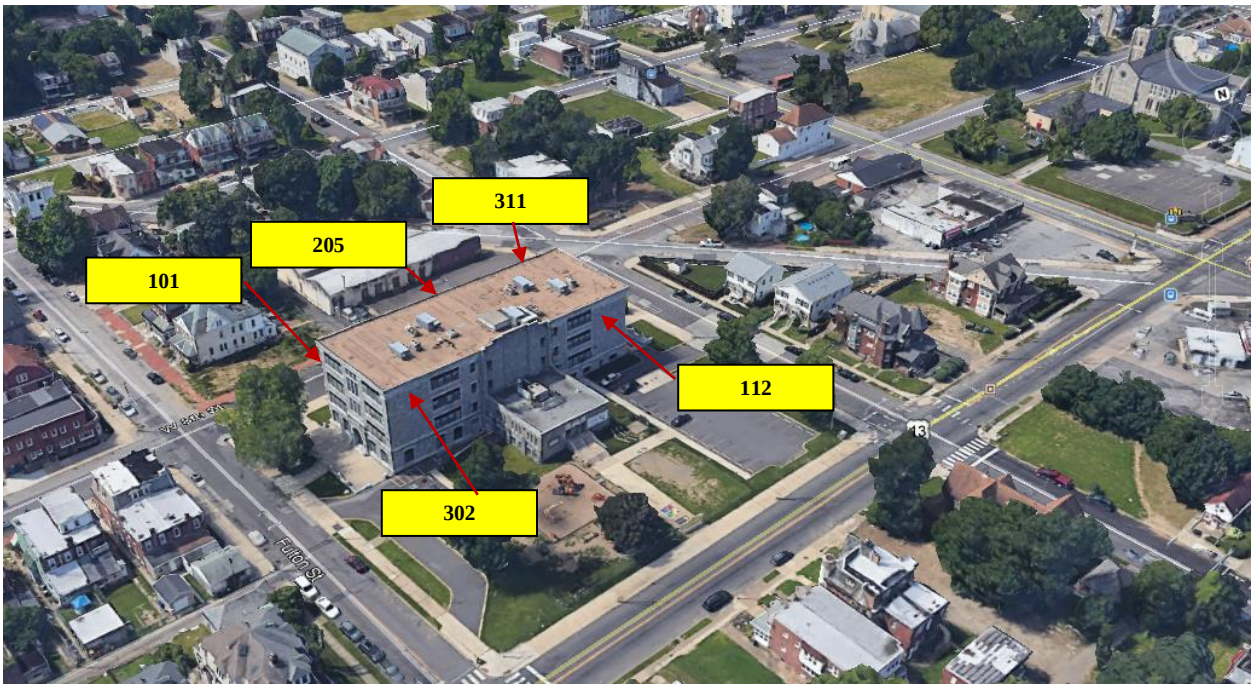
Therefore, considering the specific definitions, standards and guidelines as documented by NAB, AIHA, ASHRAE, WHO, & EPA, it is the opinion of Environmental Control Systems, Inc. that the breathing zones sampled should be considered "acceptable" to persons within these occupied spaces.

Mr. Thompson, should you have any further questions, please feel free to contact us.

Respectfully Submitted,

Wayne R. Pistoia, MSE, NSPE
Operations Director

Attachment A: -
Photos



Attachment B: -
Recommendations & Guidelines for Acceptable Thermal Comfort & Moisture Control

- A practical guide to indoor air quality (IAQ) cannot overlook temperature and humidity, because thermal comfort concerns underlie many complaints about "poor air quality." Furthermore, temperature and humidity are among the many factors that affect indoor contaminant levels. Thermal comfort is determined by the room's temperature, humidity and air speed. There are many additional factors such as activity level, clothing, age, gender and health status that affect the comfort of the occupant(s). Thermal discomfort is also a common complaint of building occupants. There are individual differences in preferences for thermal comfort, so it may not be possible to achieve an acceptable comfort level for all occupants. The normal levels of relative humidity and temperature for indoor air will also vary widely from region (climate) to region (climate).

  Individuals can also vary widely as to what they find acceptable. Since thermal comfort is subjective to the individual, indoor air quality is not regulated. However, the EPA, CDC, and OSHA follow recommended guidelines published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) who provide guidelines intended to satisfy the majority of building occupants wearing a normal amount of clothing while working at a desk. Guidelines are listed above.

- ASHRAE Standard 62.1-2016, "Ventilation for Acceptable Indoor Air Quality", plus ASHRAE BOD approved addenda requires that relative humidity levels be designed to be limited to 65% or less for mechanical systems with dehumidification capability. For other mechanical system types or where spaces are not served by mechanical systems, Standard 62.1 has no humidity limitations. ASHRAE Standard 55-2013, "Thermal Environmental Conditions for Human Occupancy", plus ASHRAE BOD approved addenda relates reported human comfort to temperature and humidity levels, and establishes a range of temperatures and humidity levels that are considered comfortable by 80% or more of the test subjects. The Standard requires that systems designed to control humidity must be able to maintain a dew point temperature of 16.8°C (62.2°F). There are no established lower humidity limits for thermal comfort; consequently, Standard 55 does not specify a minimum humidity level. However, non-thermal comfort factors, such as skin drying, irritation of mucus membranes, dryness of the eyes, and static electricity generation, may place limits on the acceptability of very low humidity environments

- Moisture problems can have many causes, including water intrusion (leaks), condensation, and uncontrolled high humidity. Therefore, it is important to prevent moisture problems in buildings. Modest wetting and drying in buildings and in ventilation systems is normal and generally poses little risk for occupant health. Similarly, very brief episodes of wetting are not usually a problem provided that steps are

taken to rapidly dry all materials. “Dampness” is the presence of unwanted and excessive moisture in buildings. This can lead to the growth of mold, fungi, environmental bacteria.

- The dew point is defined as “the temperature at which air becomes saturated with water vapor; the temperature at which air has a relative humidity (RH) of 100 percent.”
    - In order to reduce the moisture level in air during periods of high outdoor humidity:
        1. Exterior air leaks should be sealed.
        2. Indoor air movement should be constant and/or increased during unoccupied periods, since HVAC system controls typically reduce or eliminate outdoor air ventilation at these times. The timing of occupied and unoccupied cycles should be adjusted such that the building is flushed by the ventilation system before occupants arrive
        3. Conditioned space temperature should be higher than the dew point to prevent indoor condensation. Condensation should not occur when the temperature of a material is above the dew point. The lower the temperature of a material, the more water vapor it will pull out of the air. Where you have cool surfaces (*i.e.*, below the dew point), you need to keep humid air to a minimum. Where you have humid air, you need to keep the neighboring surfaces above the dew point.
        4. Dew point is a predictive measure that indicates the temperature at which moisture in the air will reach 100% and condense onto a surface. It can be a useful measure for controlling moisture levels to avoid mold growth because it is usually very easy to determine the temperature of the coldest surfaces within a building. To ensure high moisture levels or condensation does not occur on those surfaces, dew point levels in the air should be controlled in the building to below temperature of the coldest surfaces in a space
        5. Areas should be dehumidified to less than 65% RH using dehumidifiers and/or reheating the area of concern during unoccupied times. Reheating is a form of simultaneously cooling and then heating to enhance dehumidification. A 1ºF change in room temperature (in either direction) can change the relative humidity by 2% (in the opposite direction).
        6. Methods of reheating include direct or indirect gas-fired heating; hot water heating; hot gas reheating for refrigeration-based units; and electric heating.

Environmental Control Systems, Inc.

Environmental Engineers and Management Consultants

October 7, 2020

Mr. Paul Thompson
Director of Operations
Chester County Intermediate Unit
455 Boot Road
Downingtown, PA 19335

Re: CUSD -Main Street ES Indoor Air Quality Investigation

Dear Mr. Thompson,

In the capacity as the Chester County Intermediate Unit's (CCIU) environmental risk engineer, we offer you the following narrative.

On October 5, 2020, Environmental Control Systems, Inc. (ECS) conducted an airborne mold exposure assessment in the Main Street Elementary School (MSES). Cooresponding sampling cassette numbers are as follows:

1. Main Street ES

a) Outdoor Control - Sample Cassette # 31298669
b) Outdoor Control - Sample Cassette # 31298688
c) Room 7 – Sample Cassette # 31298659
d) Room 2 – Sample Cassette # 31298670
e) Room 19 – Sample Cassette # 31298658
f) Room 14 – Sample Cassette # 31298667

Separate temperature, relative humidity and dew points were measured in additional rooms not having their breathing space testing:

a. Main Office
b. Room 4
c. Room 9
d. Room 16
e. Room 21

950 Sussex Boulevard, Broomall, PA 19008
Ph: 610-328-2880 • Fax: 610-328-9819
www.ecsinfo.net • ecs_pa@hotmail.com

Air Sampling Method

If mold is suspected, but not visibly detected after a thorough inspection, then microbial air sampling conducted in accordance with guidance documents can be useful. ECS elected to use Air-O-Cell™ sampling cassettes as the screening device for this cursory event. The Air-O-Cell™ Air Sampling cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. Air enters the cassette, the particles become impacted on the sampling substrate, and the air leaves through the exit orifice. The airflow and patented cassette housing is designed in such a way that the particles are distributed and deposited equally on a special glass slide contained in the cassette housing called the "trace".

Air Sampling Laboratory Report

Attached you will find the laboratory report of the samples taken on October 5, 2020. Sample locations and corresponding sample numbers are listed above. The "Control" sample is referred to and becomes the "Background" sample to which all other samples acquired on this date are compared.

Regulatory Guidance

The most common fungi are ubiquitous within our environment and we are constantly exposed to them both in the air and on many surfaces. Current filtration systems are designed to prevent a majority of these high outdoor counts from getting inside, however, the EPA states that "There is no practical way to eliminate all mold and mold spores in the indoor environment and spores can be found almost anywhere and can grow on virtually any substance, providing moisture is present". Constituents travel indoors inside through normal everyday actions such as through open doors/windows, and attaching itself to clothing, shoes, and bags. Constituents that get inside require moisture to grow mold on any organic surface (i.e.: wood, paper, plastic & carpet) so the most effective course is to limit the potential for microbial growth indoors by reducing the causes of persistent dampness. Mold growth does not require the presence of standing water; it can occur when high relative humidity or the hygroscopic properties (the tendency to absorb and retain moisture) of building surfaces allow sufficient moisture to accumulate.

Currently, there are no EPA, CDC or OSHA regulations or standards for airborne mold contaminants, therefore, there are no quantitative health-based guidelines, values, or thresholds for acceptable, tolerable, or normal concentrations for airborne fungi spores. The most commonly cited indoor air quality standards and generally accepted practices supporting acceptable indoor air quality are those established by the American Society of Heating and Air Conditioning Engineers (ASHRAE), and the American Industrial Hygiene Association (AIHA).

- ASHRAE Standards 55 & 62 provide guidelines addressing optimum achievable "thermal comfort" for occupants of buildings and system requirements which are expected to result in indoor air quality “acceptable” to human occupants.

  (ANSI/ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy establishes the ranges of indoor environmental conditions to achieve acceptable thermal comfort for occupants of buildings and ANSI/ASHRAE Standards 62.1 and 62.2 are the recognized standards for ventilation system design and acceptable IAQ).

  Since there are individual differences in preferences for thermal comfort, it may not be possible to achieve an acceptable comfort level for all occupants. That being said, ASHRAE guidelines recommend 68ºF to 74ºF in the winter and 75ºF to 80ºF in the summer. as well as a relative humidity (RH) range of 30% to 60%.
  In addition, the required minimum ventilation rate in cubic feet per minute (CFM) per person in an educational classroom is suggested to have 15 CFM per person (students ages 5-8); and 13 CFM per person (students age 9+) **ASHRAE 62.1-2016 recommends that relative humidity in occupied spaces be controlled to less than 65% to reduce the likelihood of conditions leading to microbial growth.

- The AIHA Position Statement (Recognition, Evaluation, & Control of Indoor Mold) states that sampling for airborne mold spores can indicate whether the mix of indoor constituents is “typical” of the outdoor mix or, conversely, “atypical” or unusual at the time of airborne sampling. The AIHA suggests a useful method for interpreting microbiological results is to compare the kinds and levels of organisms detected in different environments. Usual comparisons include indoors versus outdoors, or complaint areas versus non-complaint areas. Specifically, in buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors, coupled with the absence of the same kind of fungi outdoors, may indicate a moisture problem and degraded air quality. Generally speaking, indoor mold types should be similar to, and airborne concentrations should be no greater than, those found outdoors and in non-complaint areas

Guidelines for Interpretation of Results

Since there are no standards which establish acceptable, tolerable, or normal concentrations for airborne fungi spores, ECS adheres to the following professional standards as sources of guidance:

- The National Allergy Bureau (NAB™) a section of the American Academy of Allergy, Asthma and Immunology's (AAAAI™) considers 'mold counts in outdoor air of 0-6499 spores per cubic meter of air as low, to 6500 to 12,999 spores per cubic meter of air as moderate, to 13,000 to 49,999 spores per cubic meter of air as high, and above 50,000 as very high'.

- The AIHA suggest that indoor mold types should be similar to and airborne concentrations should be no greater than those found outdoors and in non-complaint areas.

- ASHRAE Standards 62.1 and 62.2 (Ventilation for Acceptable IAQ) defines "Acceptable Indoor Air Quality" as "air in which there are no known contaminants at harmful concentrations as determined by cognizant authorities and with which a substantial majority (80% or more) of the people exposed do not express dissatisfaction".

- The EPA defines "Good Air Quality" as a result of: Introduction and distribution of adequate ventilation, Control of airborne contaminants, & maintenance of acceptable temperature and relative humidity.
- World Health Organization (WHO) Guidelines for Indoor Air Quality

- Environmental Protection Agency – Indoor Air Quality Best Practices

Findings/Recommendations

1. Outdoor temperature, RH, & Dew Point obtained during the sampling event was 62ºF with 69% RH, & Dew Point 52ºF

2. Indoor temperature, RH & Dew Point obtained during this sampling event:

    A. Main Office - 70ºF with 50% RH & Dew Point 50.5ºF. Surface temperatures were greater than the dew point.
    B. Room 4 - 70ºF with 46% RH & Dew Point 48.3ºF. Surface temperatures were greater than the dew point.
    C. Room 7 - 70ºF with 47% RH & Dew Point 48.8F. Surface temperatures were greater than the dew point.
    D. Room 2 - 68ºF with 50% RH & Dew Point 48.7ºF. Surface temperatures were greater than the dew point.
    E. Room 9 - 68ºF with 50% RH & Dew Point 48.7ºF. Surface temperatures were greater than the dew point.
    F. Room 14 - 68ºF with 50% RH & Dew Point 48.7ºF. Surface temperatures were greater than the dew point.
    G. Room 16 - 68ºF with 50% RH & Dew Point 48.7ºF. Surface temperatures were greater than the dew point.
    H. Room 19 - 68ºF with 50% RH & Dew Point 48.7ºF. Surface temperatures were greater than the dew point.
    I. Room 21 - 68ºF with 50% RH & Dew Point 48.7ºF. Surface temperatures were greater than the dew point.

3. EPA states that *"mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors."*

    a. At the time of this investigation, there was no condensation observed on any horizontal or vertical surfaces as all surface temperatures were higher than the dew point temperature of the space.

    b. No visible mold was observed during this assessment.

    c. The EPA suggests that in order to maintain "good air quality", the following procedures should be followed: introduction and distribution of adequate ventilation, control of airborne contaminants, and maintenance of acceptable temperature and relative humidity.

Acceptable indoor air quality (IAQ) is typically not achieved by addressing any one specific building product, system, or procedure. Rather, it is the result of careful attention to each of the following fundamental elements:

- Contaminant Source Control
- Proper Ventilation
- Humidity Management
- Adequate Filtration

Careful attention to each of the above followed by proper operation and maintenance of your HVAC system can significantly reduce the risk of indoor air quality related problems.

4. Analytical data shows that total fungi in this space was lower than the outdoor airborne control samples obtained and that the types of mold in both the indoor and outdoor samples were "typical". This falls within the scope of guidelines we follow when qualifying data.

    a. Microorganisms get indoors through the heating, ventilation, and air conditioning system (HVAC), doors, windows, potted plants (soil), crack in the walls, potable drinking water system, or are brought into the building on shoes and clothes of people coming into the building. As a general rule, total indoor airborne spore concentrations in a typical clean HVAC supplied building should be less or equal to the total outside concentrations.

Conclusion

Based on the sampling data received during the October 5, 2020 airborne mold exposure assessment, the total airborne fungal constituents identified within the area sampled were below those found in the outdoor air.

Therefore, considering the specific definitions, standards and guidelines as documented by NAB, AIHA, ASHRAE, WHO, & EPA, it is the opinion of Environmental Control Systems, Inc. that the breathing zones sampled should be considered "acceptable" to persons within these occupied spaces.

Mr. Thompson, should you have any further questions, please feel free to contact us.

Respectfully Submitted,

Wayne R. Pistoia, MSE, NSPE
Operations Director

Attachment A: -
Photos

Attachment B: -
Recommendations & Guidelines for Acceptable Thermal Comfort & Moisture Control

- A practical guide to indoor air quality (IAQ) cannot overlook temperature and humidity, because thermal comfort concerns underlie many complaints about "poor air quality." Furthermore, temperature and humidity are among the many factors that affect indoor contaminant levels. Thermal comfort is determined by the room's temperature, humidity and air speed. There are many additional factors such as activity level, clothing, age, gender and health status that affect the comfort of the occupant(s). Thermal discomfort is also a common complaint of building occupants. There are individual differences in preferences for thermal comfort, so it may not be possible to achieve an acceptable comfort level for all occupants. The normal levels of relative humidity and temperature for indoor air will also vary widely from region (climate) to region (climate).

  Individuals can also vary widely as to what they find acceptable. Since thermal comfort is subjective to the individual, indoor air quality is not regulated. However, the EPA, CDC, and OSHA follow recommended guidelines published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) who provide guidelines intended to satisfy the majority of building occupants wearing a normal amount of clothing while working at a desk. Guidelines are listed above.

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- Moisture problems can have many causes, including water intrusion (leaks), condensation, and uncontrolled high humidity. Therefore, it is important to prevent moisture problems in buildings. Modest wetting and drying in buildings and in ventilation systems is normal and generally poses little risk for occupant health. Similarly, very brief episodes of wetting are not usually a problem provided that steps are

taken to rapidly dry all materials. “Dampness” is the presence of unwanted and excessive moisture in buildings. This can lead to the growth of mold, fungi, environmental bacteria.

- The dew point is defined as “the temperature at which air becomes saturated with water vapor; the temperature at which air has a relative humidity (RH) of 100 percent.”
    - In order to reduce the moisture level in air during periods of high outdoor humidity:

        1. Exterior air leaks should be sealed.

        2. Indoor air movement should be constant and/or increased during unoccupied periods, since HVAC system controls typically reduce or eliminate outdoor air ventilation at these times. The timing of occupied and unoccupied cycles should be adjusted such that the building is flushed by the ventilation system before occupants arrive

        3. Conditioned space temperature should be higher than the dew point to prevent indoor condensation. Condensation should not occur when the temperature of a material is above the dew point. The lower the temperature of a material, the more water vapor it will pull out of the air. Where you have cool surfaces (*i.e.*, below the dew point), you need to keep humid air to a minimum. Where you have humid air, you need to keep the neighboring surfaces above the dew point.

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        5. Areas should be dehumidified to less than 65% RH using dehumidifiers and/or reheating the area of concern during unoccupied times. Reheating is a form of simultaneously cooling and then heating to enhance dehumidification. A 1ºF change in room temperature (in either direction) can change the relative humidity by 2% (in the opposite direction).

        6. Methods of reheating include direct or indirect gas-fired heating; hot water heating; hot gas reheating for refrigeration-based units; and electric heating.

Environmental Control Systems, Inc.

Environmental Engineers and Management Consultants

October 7, 2020

Mr. Paul Thompson
Director of Operations
Chester County Intermediate Unit
455 Boot Road
Downingtown, PA 19335

Re: CUSD -Stetser ES Indoor Air Quality Investigation

Dear Mr. Thompson,

In the capacity as the Chester County Intermediate Unit's (CCIU) environmental risk engineer, we offer you the following narrative.

On October 5, 2020, Environmental Control Systems, Inc. (ECS) conducted an airborne mold exposure assessment in the Stetser Elementary School (SES). Cooresponding sampling cassette numbers are as follows:

1. Stetser ES

a) Outdoor Control - Sample Cassette # 31298704
b) Outdoor Control - Sample Cassette # 31298723
c) Room 113 – Sample Cassette # 31298700
d) Room 108 – Sample Cassette # 31298724
e) Room 106 – Sample Cassette # 31298697
f) Room 104 – Sample Cassette # 31298712
g) Room 101 – Sample Cassette # 31298719

Separate temperature, relative humidity and dew points were measured in additional rooms not having their breathing space testing:

a. Room 114
b. Room 111

950 Sussex Boulevard, Broomall, PA 19008
Ph: 610-328-2880 • Fax: 610-328-9819
www.ecsinfo.net • ecs_pa@hotmail.com

Air Sampling Method

If mold is suspected, but not visibly detected after a thorough inspection, then microbial air sampling conducted in accordance with guidance documents can be useful. ECS elected to use Air-O-Cell™ sampling cassettes as the screening device for this cursory event. The Air-O-Cell™ Air Sampling cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. Air enters the cassette, the particles become impacted on the sampling substrate, and the air leaves through the exit orifice. The airflow and patented cassette housing is designed in such a way that the particles are distributed and deposited equally on a special glass slide contained in the cassette housing called the "trace".

Air Sampling Laboratory Report

Attached you will find the laboratory report of the samples taken on October 5, 2020. Sample locations and corresponding sample numbers are listed above. The "Control" sample is referred to and becomes the "Background" sample to which all other samples acquired on this date are compared.

Regulatory Guidance

The most common fungi are ubiquitous within our environment and we are constantly exposed to them both in the air and on many surfaces. Current filtration systems are designed to prevent a majority of these high outdoor counts from getting inside, however, the EPA states that "There is no practical way to eliminate all mold and mold spores in the indoor environment and spores can be found almost anywhere and can grow on virtually any substance, providing moisture is present". Constituents travel indoors inside through normal everyday actions such as through open doors/windows, and attaching itself to clothing, shoes, and bags. Constituents that get inside require moisture to grow mold on any organic surface (i.e.: wood, paper, plastic & carpet) so the most effective course is to limit the potential for microbial growth indoors by reducing the causes of persistent dampness. Mold growth does not require the presence of standing water; it can occur when high relative humidity or the hygroscopic properties (the tendency to absorb and retain moisture) of building surfaces allow sufficient moisture to accumulate.

Currently, there are no EPA, CDC or OSHA regulations or standards for airborne mold contaminants, therefore, there are no quantitative health-based guidelines, values, or thresholds for acceptable, tolerable, or normal concentrations for airborne fungi spores. The most commonly cited indoor air quality standards and generally accepted practices supporting acceptable indoor air quality are those established by the American Society of Heating and Air Conditioning Engineers (ASHRAE), and the American Industrial Hygiene Association (AIHA).

- ASHRAE Standards 55 & 62 provide guidelines addressing optimum achievable "thermal comfort" for occupants of buildings and system requirements which are expected to result in indoor air quality “acceptable” to human occupants.

  (ANSI/ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy establishes the ranges of indoor environmental conditions to achieve acceptable thermal comfort for occupants of buildings and ANSI/ASHRAE Standards 62.1 and 62.2 are the recognized standards for ventilation system design and acceptable IAQ).

  Since there are individual differences in preferences for thermal comfort, it may not be possible to achieve an acceptable comfort level for all occupants. That being said, ASHRAE guidelines recommend 68ºF to 74ºF in the winter and 75ºF to 80ºF in the summer. as well as a relative humidity (RH) range of 30% to 60%.
  In addition, the required minimum ventilation rate in cubic feet per minute (CFM) per person in an educational classroom is suggested to have 15 CFM per person (students ages 5-8); and 13 CFM per person (students age 9+) **ASHRAE 62.1-2016 recommends that relative humidity in occupied spaces be controlled to less than 65% to reduce the likelihood of conditions leading to microbial growth.

- The AIHA Position Statement (Recognition, Evaluation, & Control of Indoor Mold) states that sampling for airborne mold spores can indicate whether the mix of indoor constituents is “typical” of the outdoor mix or, conversely, “atypical” or unusual at the time of airborne sampling. The AIHA suggests a useful method for interpreting microbiological results is to compare the kinds and levels of organisms detected in different environments. Usual comparisons include indoors versus outdoors, or complaint areas versus non-complaint areas. Specifically, in buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors, coupled with the absence of the same kind of fungi outdoors, may indicate a moisture problem and degraded air quality. Generally speaking, indoor mold types should be similar to, and airborne concentrations should be no greater than, those found outdoors and in non-complaint areas

Guidelines for Interpretation of Results

Since there are no standards which establish acceptable, tolerable, or normal concentrations for airborne fungi spores, ECS adheres to the following professional standards as sources of guidance:

- The National Allergy Bureau (NAB™) a section of the American Academy of Allergy, Asthma and Immunology's (AAAAI™) considers 'mold counts in outdoor air of 0-6499 spores per cubic meter of air as low, to 6500 to 12,999 spores per cubic meter of air as moderate, to 13,000 to 49,999 spores per cubic meter of air as high, and above 50,000 as very high'.

- The AIHA suggest that indoor mold types should be similar to and airborne concentrations should be no greater than those found outdoors and in non-complaint areas.

- ASHRAE Standards 62.1 and 62.2 (Ventilation for Acceptable IAQ) defines "Acceptable Indoor Air Quality" as "air in which there are no known contaminants at harmful concentrations as determined by cognizant authorities and with which a substantial majority (80% or more) of the people exposed do not express dissatisfaction".

- The EPA defines "Good Air Quality" as a result of: Introduction and distribution of adequate ventilation, Control of airborne contaminants, & maintenance of acceptable temperature and relative humidity.
- World Health Organization (WHO) Guidelines for Indoor Air Quality

- Environmental Protection Agency – Indoor Air Quality Best Practices

Findings/Recommendations

1. Outdoor temperature, RH, & Dew Point obtained during the sampling event was 65ºF with 61% RH, & Dew Point 51ºF

2. Indoor temperature, RH & Dew Point obtained during this sampling event:

    A. Room 114 - 72ºF with 52% RH & Dew Point 53.4ºF. Surface temperatures were greater than the dew point.
    B. Room 113 - 72ºF with 52% RH & Dew Point 53.4ºF. Surface temperatures were greater than the dew point.
    C. Room 111 - 73ºF with 46% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    D. Room 108 - 73ºF with 46% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    E. Room 106 - 73ºF with 48% RH & Dew Point 52.1ºF. Surface temperatures were greater than the dew point.
    F. Room 104 - 72ºF with 47% RH & Dew Point 50.7ºF. Surface temperatures were greater than the dew point.
    G. Room 101 - 72ºF with 50% RH & Dew Point 52.3ºF. Surface temperatures were greater than the dew point.

3. EPA states that *"mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors."*

    a. At the time of this investigation, there was no condensation observed on any horizontal or vertical surfaces as all surface temperatures were higher than the dew point temperature of the space.

    b. No visible mold was observed during this assessment.

    c. The EPA suggests that in order to maintain "good air quality", the following procedures should be followed: introduction and distribution of adequate ventilation, control of airborne contaminants, and maintenance of acceptable temperature and relative humidity.

Acceptable indoor air quality (IAQ) is typically not achieved by addressing any one specific building product, system, or procedure. Rather, it is the result of careful attention to each of the following fundamental elements:

- Contaminant Source Control
- Proper Ventilation
- Humidity Management
- Adequate Filtration

Careful attention to each of the above followed by proper operation and maintenance of your HVAC system can significantly reduce the risk of indoor air quality related problems.

4. Analytical data shows that total fungi in this space was lower than the outdoor airborne control samples obtained and that the types of mold in both the indoor and outdoor samples were "typical". This falls within the scope of guidelines we follow when qualifying data.

    a. Microorganisms get indoors through the heating, ventilation, and air conditioning system (HVAC), doors, windows, potted plants (soil), crack in the walls, potable drinking water system, or are brought into the building on shoes and clothes of people coming into the building. As a general rule, total indoor airborne spore concentrations in a typical clean HVAC supplied building should be less or equal to the total outside concentrations.

Conclusion

Based on the sampling data received during the October 5, 2020 airborne mold exposure assessment, the total airborne fungal constituents identified within the area sampled were below those found in the outdoor air.

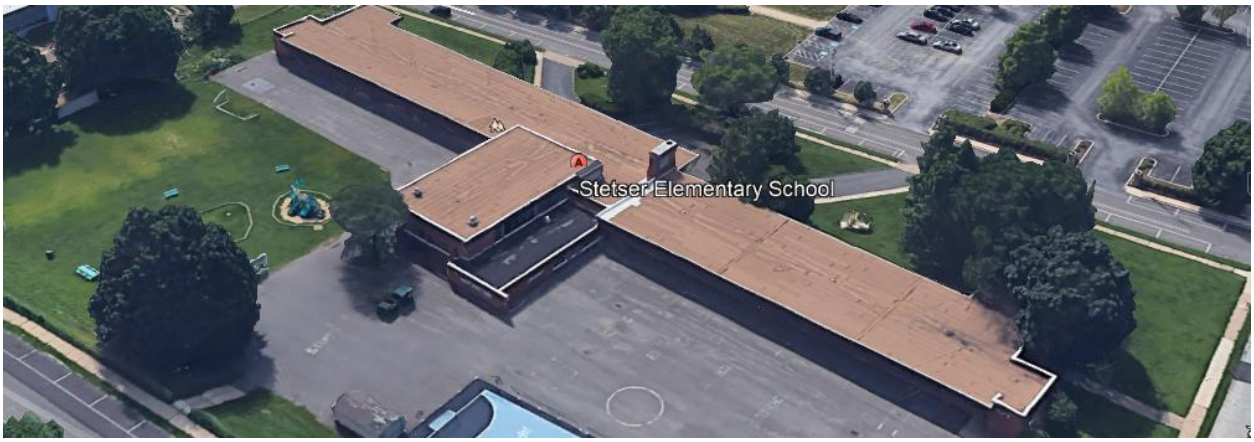
Therefore, considering the specific definitions, standards and guidelines as documented by NAB, AIHA, ASHRAE, WHO, & EPA, it is the opinion of Environmental Control Systems, Inc. that the breathing zones sampled should be considered "acceptable" to persons within these occupied spaces.

Mr. Thompson, should you have any further questions, please feel free to contact us.

Respectfully Submitted,

Wayne R. Pistoia, MSE, NSPE
Operations Director

Attachment A: -
Photos



Attachment B: -
Recommendations & Guidelines for Acceptable Thermal Comfort & Moisture Control

- A practical guide to indoor air quality (IAQ) cannot overlook temperature and humidity, because thermal comfort concerns underlie many complaints about "poor air quality." Furthermore, temperature and humidity are among the many factors that affect indoor contaminant levels. Thermal comfort is determined by the room's temperature, humidity and air speed. There are many additional factors such as activity level, clothing, age, gender and health status that affect the comfort of the occupant(s). Thermal discomfort is also a common complaint of building occupants. There are individual differences in preferences for thermal comfort, so it may not be possible to achieve an acceptable comfort level for all occupants. The normal levels of relative humidity and temperature for indoor air will also vary widely from region (climate) to region (climate).

  Individuals can also vary widely as to what they find acceptable. Since thermal comfort is subjective to the individual, indoor air quality is not regulated. However, the EPA, CDC, and OSHA follow recommended guidelines published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) who provide guidelines intended to satisfy the majority of building occupants wearing a normal amount of clothing while working at a desk. Guidelines are listed above.

- ASHRAE Standard 62.1-2016, "Ventilation for Acceptable Indoor Air Quality", plus ASHRAE BOD approved addenda requires that relative humidity levels be designed to be limited to 65% or less for mechanical systems with dehumidification capability. For other mechanical system types or where spaces are not served by mechanical systems, Standard 62.1 has no humidity limitations. ASHRAE Standard 55-2013, "Thermal Environmental Conditions for Human Occupancy", plus ASHRAE BOD approved addenda relates reported human comfort to temperature and humidity levels, and establishes a range of temperatures and humidity levels that are considered comfortable by 80% or more of the test subjects. The Standard requires that systems designed to control humidity must be able to maintain a dew point temperature of 16.8°C (62.2°F). There are no established lower humidity limits for thermal comfort; consequently, Standard 55 does not specify a minimum humidity level. However, non-thermal comfort factors, such as skin drying, irritation of mucus membranes, dryness of the eyes, and static electricity generation, may place limits on the acceptability of very low humidity environments

- Moisture problems can have many causes, including water intrusion (leaks), condensation, and uncontrolled high humidity. Therefore, it is important to prevent moisture problems in buildings. Modest wetting and drying in buildings and in ventilation systems is normal and generally poses little risk for occupant health. Similarly, very brief episodes of wetting are not usually a problem provided that steps are

taken to rapidly dry all materials. “Dampness” is the presence of unwanted and excessive moisture in buildings. This can lead to the growth of mold, fungi, environmental bacteria.

- The dew point is defined as “the temperature at which air becomes saturated with water vapor; the temperature at which air has a relative humidity (RH) of 100 percent.”
    - In order to reduce the moisture level in air during periods of high outdoor humidity:
        1. Exterior air leaks should be sealed.
        2. Indoor air movement should be constant and/or increased during unoccupied periods, since HVAC system controls typically reduce or eliminate outdoor air ventilation at these times. The timing of occupied and unoccupied cycles should be adjusted such that the building is flushed by the ventilation system before occupants arrive
        3. Conditioned space temperature should be higher than the dew point to prevent indoor condensation. Condensation should not occur when the temperature of a material is above the dew point. The lower the temperature of a material, the more water vapor it will pull out of the air. Where you have cool surfaces (*i.e.*, below the dew point), you need to keep humid air to a minimum. Where you have humid air, you need to keep the neighboring surfaces above the dew point.
        4. Dew point is a predictive measure that indicates the temperature at which moisture in the air will reach 100% and condense onto a surface. It can be a useful measure for controlling moisture levels to avoid mold growth because it is usually very easy to determine the temperature of the coldest surfaces within a building. To ensure high moisture levels or condensation does not occur on those surfaces, dew point levels in the air should be controlled in the building to below temperature of the coldest surfaces in a space
        5. Areas should be dehumidified to less than 65% RH using dehumidifiers and/or reheating the area of concern during unoccupied times. Reheating is a form of simultaneously cooling and then heating to enhance dehumidification. A 1ºF change in room temperature (in either direction) can change the relative humidity by 2% (in the opposite direction).
        6. Methods of reheating include direct or indirect gas-fired heating; hot water heating; hot gas reheating for refrigeration-based units; and electric heating.

Environmental Control Systems, Inc.

Environmental Engineers and Management Consultants

October 7, 2020

Mr. Paul Thompson
Director of Operations
Chester County Intermediate Unit
455 Boot Road
Downingtown, PA 19335

Re: CUSD -Toby Farms Intermediate School Indoor Air Quality Investigation

Dear Mr. Thompson,

In the capacity as the Chester County Intermediate Unit's (CCIU) environmental risk engineer, we offer you the following narrative.

On October 5, 2020, Environmental Control Systems, Inc. (ECS) conducted an airborne mold exposure assessment in the Toby Farms Intermediate School (TFIS). Cooresponding sampling cassette numbers are as follows:

1. Toby Farms Intermediate

a) Outdoor Control - Sample Cassette # 31063812
b) Outdoor Control - Sample Cassette # 31298694
c) Library/Music – Sample Cassette # 31298709
d) Room C-15 – Sample Cassette # 31298665
e) Room C-19 – Sample Cassette # 31298698
f) Room D-24 – Sample Cassette # 31298660
g) Room B-10 – Sample Cassette # 31298672
h) Room A-4 – Sample Cassette # 31298656

Separate temperature, relative humidity and dew points were measured in additional rooms not having their breathing space testing:

a. C-109
b. Room C-21
c. Room C-18
d. Learning Center
e. D-28

Air Sampling Method

If mold is suspected, but not visibly detected after a thorough inspection, then microbial air sampling conducted in accordance with guidance documents can be useful. ECS elected to use Air-O-Cell™ sampling cassettes as the screening device for this cursory event. The Air-O-Cell™ Air Sampling cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. Air enters the cassette, the particles become impacted on the sampling substrate, and the air leaves through the exit orifice. The airflow and patented cassette housing is designed in such a way that the particles are distributed and deposited equally on a special glass slide contained in the cassette housing called the "trace".

Air Sampling Laboratory Report

Attached you will find the laboratory report of the samples taken on October 5, 2020. Sample locations and corresponding sample numbers are listed above. The "Control" sample is referred to and becomes the "Background" sample to which all other samples acquired on this date are compared.

Regulatory Guidance

The most common fungi are ubiquitous within our environment and we are constantly exposed to them both in the air and on many surfaces. Current filtration systems are designed to prevent a majority of these high outdoor counts from getting inside, however, the EPA states that "There is no practical way to eliminate all mold and mold spores in the indoor environment and spores can be found almost anywhere and can grow on virtually any substance, providing moisture is present". Constituents travel indoors inside through normal everyday actions such as through open doors/windows, and attaching itself to clothing, shoes, and bags. Constituents that get inside require moisture to grow mold on any organic surface (i.e.: wood, paper, plastic & carpet) so the most effective course is to limit the potential for microbial growth indoors by reducing the causes of persistent dampness. Mold growth does not require the presence of standing water; it can occur when high relative humidity or the hygroscopic properties (the tendency to absorb and retain moisture) of building surfaces allow sufficient moisture to accumulate.

Currently, there are no EPA, CDC or OSHA regulations or standards for airborne mold contaminants, therefore, there are no quantitative health-based guidelines, values, or thresholds for acceptable, tolerable, or normal concentrations for airborne fungi spores. The most commonly cited indoor air quality standards and generally accepted practices supporting acceptable indoor air quality are those established by the American Society of Heating and Air Conditioning Engineers (ASHRAE), and the American Industrial Hygiene Association (AIHA).

- ASHRAE Standards 55 & 62 provide guidelines addressing optimum achievable "thermal comfort" for occupants of buildings and system requirements which are expected to result in indoor air quality “acceptable” to human occupants.

  (ANSI/ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy establishes the ranges of indoor environmental conditions to achieve acceptable thermal comfort for occupants of buildings and ANSI/ASHRAE Standards 62.1 and 62.2 are the recognized standards for ventilation system design and acceptable IAQ).

  Since there are individual differences in preferences for thermal comfort, it may not be possible to achieve an acceptable comfort level for all occupants. That being said, ASHRAE guidelines recommend 68ºF to 74ºF in the winter and 75ºF to 80ºF in the summer. as well as a relative humidity (RH) range of 30% to 60%.
  In addition, the required minimum ventilation rate in cubic feet per minute (CFM) per person in an educational classroom is suggested to have 15 CFM per person (students ages 5-8); and 13 CFM per person (students age 9+) **ASHRAE 62.1-2016 recommends that relative humidity in occupied spaces be controlled to less than 65% to reduce the likelihood of conditions leading to microbial growth.

- The AIHA Position Statement (Recognition, Evaluation, & Control of Indoor Mold) states that sampling for airborne mold spores can indicate whether the mix of indoor constituents is “typical” of the outdoor mix or, conversely, “atypical” or unusual at the time of airborne sampling. The AIHA suggests a useful method for interpreting microbiological results is to compare the kinds and levels of organisms detected in different environments. Usual comparisons include indoors versus outdoors, or complaint areas versus non-complaint areas. Specifically, in buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors, coupled with the absence of the same kind of fungi outdoors, may indicate a moisture problem and degraded air quality. Generally speaking, indoor mold types should be similar to, and airborne concentrations should be no greater than, those found outdoors and in non-complaint areas

Guidelines for Interpretation of Results

Since there are no standards which establish acceptable, tolerable, or normal concentrations for airborne fungi spores, ECS adheres to the following professional standards as sources of guidance:

- The National Allergy Bureau (NAB™) a section of the American Academy of Allergy, Asthma and Immunology's (AAAAI™) considers 'mold counts in outdoor air of 0-6499 spores per cubic meter of air as low, to 6500 to 12,999 spores per cubic meter of air as moderate, to 13,000 to 49,999 spores per cubic meter of air as high, and above 50,000 as very high'.

- The AIHA suggest that indoor mold types should be similar to and airborne concentrations should be no greater than those found outdoors and in non-complaint areas.

- ASHRAE Standards 62.1 and 62.2 (Ventilation for Acceptable IAQ) defines "Acceptable Indoor Air Quality" as "air in which there are no known contaminants at harmful concentrations as determined by cognizant authorities and with which a substantial majority (80% or more) of the people exposed do not express dissatisfaction".

- The EPA defines "Good Air Quality" as a result of: Introduction and distribution of adequate ventilation, Control of airborne contaminants, & maintenance of acceptable temperature and relative humidity.
- World Health Organization (WHO) Guidelines for Indoor Air Quality

- Environmental Protection Agency – Indoor Air Quality Best Practices

Findings/Recommendations

1. Outdoor temperature, RH, & Dew Point obtained during the sampling event was 56ºF with 85% RH, & Dew Point 52ºF

2. Indoor temperature, RH & Dew Point obtained during this sampling event:

    A. Library - 70ºF with 51% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    B. Room C-109 - 72ºF with 50% RH & Dew Point 52.3ºF. Surface temperatures were greater than the dew point.
    C. Room C-15 - 72ºF with 48% RH & Dew Point 51.2ºF. Surface temperatures were greater than the dew point.
    D. Room C-21 - 72ºF with 45% RH & Dew Point 49.5ºF. Surface temperatures were greater than the dew point.
    E. Room C-19 - 72ºF with 46% RH & Dew Point 50.1ºF. Surface temperatures were greater than the dew point.
    F. Room C-18 - 72ºF with 45% RH & Dew Point 49.5ºF. Surface temperatures were greater than the dew point.
    G. Learning Center - 72ºF with 46% RH & Dew Point 50.1ºF. Surface temperatures were greater than the dew point.
    H. Room D-28 - 72ºF with 44% RH & Dew Point 48.9ºF. Surface temperatures were greater than the dew point.
    I. Room D-24 - 72ºF with 44% RH & Dew Point 48.9ºF. Surface temperatures were greater than the dew point.
    J. Room B-10 - 79ºF with 37% RH & Dew Point 50.5ºF. Surface temperatures were greater than the dew point.
    K. Room A-4 - 73ºF with 44% RH & Dew Point 49.8ºF. Surface temperatures were greater than the dew point.

3. EPA states that *"mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors."*

    a. At the time of this investigation, there was no condensation observed on any horizontal or vertical surfaces as all surface temperatures were higher than the dew point temperature of the space.

    b. No visible mold was observed during this assessment.

    c. At the time of this inspection, there were dead decaying plants in room C-21 that need to be removed. There are also stained ceiling tiles throughout the building that need to be removed and replaced.

d. The EPA suggests that in order to maintain "good air quality", the following procedures should be followed: introduction and distribution of adequate ventilation, control of airborne contaminants, and maintenance of acceptable temperature and relative humidity.

   Acceptable indoor air quality (IAQ) is typically not achieved by addressing any one specific building product, system, or procedure. Rather, it is the result of careful attention to each of the following fundamental elements:

   - Contaminant Source Control
   - Proper Ventilation
   - Humidity Management
   - Adequate Filtration

   Careful attention to each of the above followed by proper operation and maintenance of your HVAC system can significantly reduce the risk of indoor air quality related problems.

4. Analytical data shows that total fungi in this space was lower than the outdoor airborne control samples obtained and that the types of mold in both the indoor and outdoor samples were "typical". This falls within the scope of guidelines we follow when qualifying data.

   a. Microorganisms get indoors through the heating, ventilation, and air conditioning system (HVAC), doors, windows, potted plants (soil), crack in the walls, potable drinking water system, or are brought into the building on shoes and clothes of people coming into the building. As a general rule, total indoor airborne spore concentrations in a typical clean HVAC supplied building should be less or equal to the total outside concentrations.

Conclusion

Based on the sampling data received during the October 5, 2020 airborne mold exposure assessment, the total airborne fungal constituents identified within the area sampled were below those found in the outdoor air.

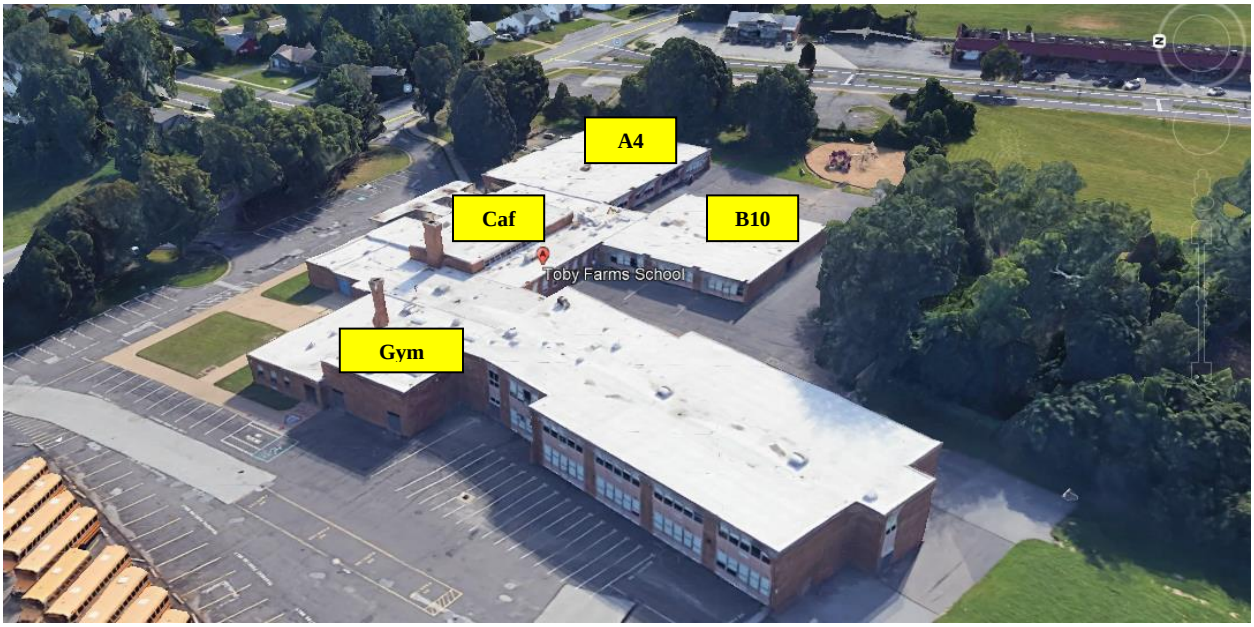
Therefore, considering the specific definitions, standards and guidelines as documented by NAB, AIHA, ASHRAE, WHO, & EPA, it is the opinion of Environmental Control Systems, Inc. that the breathing zones sampled should be considered “acceptable” to persons within these occupied spaces.

Mr. Thompson, should you have any further questions, please feel free to contact us.

Respectfully Submitted,

Wayne R. Pistoia, MSE, NSPE
Operations Director

Attachment A: -
Photos




Library/Music
Room Office

Attachment B: -
Recommendations & Guidelines for Acceptable Thermal Comfort & Moisture Control

- A practical guide to indoor air quality (IAQ) cannot overlook temperature and humidity, because thermal comfort concerns underlie many complaints about "poor air quality." Furthermore, temperature and humidity are among the many factors that affect indoor contaminant levels. Thermal comfort is determined by the room's temperature, humidity and air speed. There are many additional factors such as activity level, clothing, age, gender and health status that affect the comfort of the occupant(s). Thermal discomfort is also a common complaint of building occupants. There are individual differences in preferences for thermal comfort, so it may not be possible to achieve an acceptable comfort level for all occupants. The normal levels of relative humidity and temperature for indoor air will also vary widely from region (climate) to region (climate).

  Individuals can also vary widely as to what they find acceptable. Since thermal comfort is subjective to the individual, indoor air quality is not regulated. However, the EPA, CDC, and OSHA follow recommended guidelines published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) who provide guidelines intended to satisfy the majority of building occupants wearing a normal amount of clothing while working at a desk. Guidelines are listed above.

- ASHRAE Standard 62.1-2016, "Ventilation for Acceptable Indoor Air Quality", plus ASHRAE BOD approved addenda requires that relative humidity levels be designed to be limited to 65% or less for mechanical systems with dehumidification capability. For other mechanical system types or where spaces are not served by mechanical systems, Standard 62.1 has no humidity limitations. ASHRAE Standard 55-2013, "Thermal Environmental Conditions for Human Occupancy", plus ASHRAE BOD approved addenda relates reported human comfort to temperature and humidity levels, and establishes a range of temperatures and humidity levels that are considered comfortable by 80% or more of the test subjects. The Standard requires that systems designed to control humidity must be able to maintain a dew point temperature of 16.8°C (62.2°F). There are no established lower humidity limits for thermal comfort; consequently, Standard 55 does not specify a minimum humidity level. However, non-thermal comfort factors, such as skin drying, irritation of mucus membranes, dryness of the eyes, and static electricity generation, may place limits on the acceptability of very low humidity environments

- Moisture problems can have many causes, including water intrusion (leaks), condensation, and uncontrolled high humidity. Therefore, it is important to prevent moisture problems in buildings. Modest wetting and drying in buildings and in ventilation systems is normal and generally poses little risk for occupant health. Similarly, very brief episodes of wetting are not usually a problem provided that steps are

taken to rapidly dry all materials. “Dampness” is the presence of unwanted and excessive moisture in buildings. This can lead to the growth of mold, fungi, environmental bacteria.

- The dew point is defined as “the temperature at which air becomes saturated with water vapor; the temperature at which air has a relative humidity (RH) of 100 percent.”
    - In order to reduce the moisture level in air during periods of high outdoor humidity:
        1. Exterior air leaks should be sealed.
        2. Indoor air movement should be constant and/or increased during unoccupied periods, since HVAC system controls typically reduce or eliminate outdoor air ventilation at these times. The timing of occupied and unoccupied cycles should be adjusted such that the building is flushed by the ventilation system before occupants arrive
        3. Conditioned space temperature should be higher than the dew point to prevent indoor condensation. Condensation should not occur when the temperature of a material is above the dew point. The lower the temperature of a material, the more water vapor it will pull out of the air. Where you have cool surfaces (*i.e.*, below the dew point), you need to keep humid air to a minimum. Where you have humid air, you need to keep the neighboring surfaces above the dew point.
        4. Dew point is a predictive measure that indicates the temperature at which moisture in the air will reach 100% and condense onto a surface. It can be a useful measure for controlling moisture levels to avoid mold growth because it is usually very easy to determine the temperature of the coldest surfaces within a building. To ensure high moisture levels or condensation does not occur on those surfaces, dew point levels in the air should be controlled in the building to below temperature of the coldest surfaces in a space
        5. Areas should be dehumidified to less than 65% RH using dehumidifiers and/or reheating the area of concern during unoccupied times. Reheating is a form of simultaneously cooling and then heating to enhance dehumidification. A 1ºF change in room temperature (in either direction) can change the relative humidity by 2% (in the opposite direction).
        6. Methods of reheating include direct or indirect gas-fired heating; hot water heating; hot gas reheating for refrigeration-based units; and electric heating.

Environmental Control Systems, Inc.

Environmental Engineers and Management Consultants

October 7, 2020

Mr. Paul Thompson
Director of Operations
Chester County Intermediate Unit
455 Boot Road
Downingtown, PA 19335

Re: CUSD -STEM Academy - Indoor Air Quality Investigation

Dear Mr. Thompson,

In the capacity as the Chester County Intermediate Unit's (CCIU) environmental risk engineer, we offer you the following narrative.

On October 2, 2020, Environmental Control Systems, Inc. (ECS) conducted an airborne mold exposure assessment in the STEM Academy. Cooresponding sampling cassette numbers are as follows:

1. STEM Academy

a) Outdoor Control - Sample Cassette # 31298699
b) Outdoor Control - Sample Cassette # 31298674
c) Room 212 – Sample Cassette # 31298676
d) Room 106 – Sample Cassette # 31063830
e) Room 102 – Sample Cassette # 31063822
f) Room 204 – Sample Cassette # 31063819
g) Room 136 – Sample Cassette # 31063906

Separate temperature, relative humidity and dew points were measured in additional rooms not having their breathing space testing:

a. Room 215
b. Library
c. Auditorium

Air Sampling Method

If mold is suspected, but not visibly detected after a thorough inspection, then microbial air sampling conducted in accordance with guidance documents can be useful. ECS elected to use Air-O-Cell™ sampling cassettes as the screening device for this cursory event. The Air-O-Cell™ Air Sampling cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. Air enters the cassette, the particles become impacted on the sampling substrate, and the air leaves through the exit orifice. The airflow and patented cassette housing is designed in such a way that the particles are distributed and deposited equally on a special glass slide contained in the cassette housing called the "trace".

Air Sampling Laboratory Report

Attached you will find the laboratory report of the samples taken on October 2, 2020. Sample locations and corresponding sample numbers are listed above. The "Control" sample is referred to and becomes the "Background" sample to which all other samples acquired on this date are compared.

Regulatory Guidance

The most common fungi are ubiquitous within our environment and we are constantly exposed to them both in the air and on many surfaces. Current filtration systems are designed to prevent a majority of these high outdoor counts from getting inside, however, the EPA states that "There is no practical way to eliminate all mold and mold spores in the indoor environment and spores can be found almost anywhere and can grow on virtually any substance, providing moisture is present". Constituents travel indoors inside through normal everyday actions such as through open doors/windows, and attaching itself to clothing, shoes, and bags. Constituents that get inside require moisture to grow mold on any organic surface (i.e.: wood, paper, plastic & carpet) so the most effective course is to limit the potential for microbial growth indoors by reducing the causes of persistent dampness. Mold growth does not require the presence of standing water; it can occur when high relative humidity or the hygroscopic properties (the tendency to absorb and retain moisture) of building surfaces allow sufficient moisture to accumulate.

Currently, there are no EPA, CDC or OSHA regulations or standards for airborne mold contaminants, therefore, there are no quantitative health-based guidelines, values, or thresholds for acceptable, tolerable, or normal concentrations for airborne fungi spores. The most commonly cited indoor air quality standards and generally accepted practices supporting acceptable indoor air quality are those established by the American Society of Heating and Air Conditioning Engineers (ASHRAE), and the American Industrial Hygiene Association (AIHA).

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  Since there are individual differences in preferences for thermal comfort, it may not be possible to achieve an acceptable comfort level for all occupants. That being said, ASHRAE guidelines recommend 68ºF to 74ºF in the winter and 75ºF to 80ºF in the summer. as well as a relative humidity (RH) range of 30% to 60%.
  In addition, the required minimum ventilation rate in cubic feet per minute (CFM) per person in an educational classroom is suggested to have 15 CFM per person (students ages 5-8); and 13 CFM per person (students age 9+) **ASHRAE 62.1-2016 recommends that relative humidity in occupied spaces be controlled to less than 65% to reduce the likelihood of conditions leading to microbial growth.

- The AIHA Position Statement (Recognition, Evaluation, & Control of Indoor Mold) states that sampling for airborne mold spores can indicate whether the mix of indoor constituents is “typical” of the outdoor mix or, conversely, “atypical” or unusual at the time of airborne sampling. The AIHA suggests a useful method for interpreting microbiological results is to compare the kinds and levels of organisms detected in different environments. Usual comparisons include indoors versus outdoors, or complaint areas versus non-complaint areas. Specifically, in buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors, coupled with the absence of the same kind of fungi outdoors, may indicate a moisture problem and degraded air quality. Generally speaking, indoor mold types should be similar to, and airborne concentrations should be no greater than, those found outdoors and in non-complaint areas

Guidelines for Interpretation of Results

Since there are no standards which establish acceptable, tolerable, or normal concentrations for airborne fungi spores, ECS adheres to the following professional standards as sources of guidance:

- The National Allergy Bureau (NAB™) a section of the American Academy of Allergy, Asthma and Immunology's (AAAAI™) considers 'mold counts in outdoor air of 0-6499 spores per cubic meter of air as low, to 6500 to 12,999 spores per cubic meter of air as moderate, to 13,000 to 49,999 spores per cubic meter of air as high, and above 50,000 as very high'.

- The AIHA suggest that indoor mold types should be similar to and airborne concentrations should be no greater than those found outdoors and in non-complaint areas.

- ASHRAE Standards 62.1 and 62.2 (Ventilation for Acceptable IAQ) defines "Acceptable Indoor Air Quality" as "air in which there are no known contaminants at harmful concentrations as determined by cognizant authorities and with which a substantial majority (80% or more) of the people exposed do not express dissatisfaction".

- The EPA defines "Good Air Quality" as a result of: Introduction and distribution of adequate ventilation, Control of airborne contaminants, & maintenance of acceptable temperature and relative humidity.
- World Health Organization (WHO) Guidelines for Indoor Air Quality

- Environmental Protection Agency – Indoor Air Quality Best Practices

Findings/Recommendations

1. Outdoor temperature, RH, & Dew Point obtained during the sampling event was 57ºF with 80% RH, & Dew Point 51ºF

2. Indoor temperature, RH & Dew Point obtained during this sampling event:

    A. Room 212 - 75ºF with 54% RH & Dew Point 57.2ºF. Surface temperatures were greater than the dew point.
    B. Room 106 - 72ºF with 52% RH & Dew Point 53.4ºF. Surface temperatures were greater than the dew point.
    C. Room 102 - 72ºF with 52% RH & Dew Point 53.4ºF. Surface temperatures were greater than the dew point.
    D. Room 204 - 72ºF with 56% RH & Dew Point 55.4ºF. Surface temperatures were greater than the dew point.
    E. Room 136 - 72ºF with 49% RH & Dew Point 51.8ºF. Surface temperatures were greater than the dew point.
    F. Room 215 - 72ºF with 59% RH & Dew Point 56.9ºF. Surface temperatures were greater than the dew point.
    G. Library - 73ºF with 52% RH & Dew Point 54.3ºF. Surface temperatures were greater than the dew point.
    H. Auditorium - 73ºF with 53% RH & Dew Point 54.8ºF. Surface temperatures were greater than the dew point.

3. EPA states that *"mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors."*

    a. At the time of this investigation, there was no condensation observed on any horizontal or vertical surfaces as all surface temperatures were higher than the dew point temperature of the space.

    b. No visible mold was observed during this assessment.

    c. The EPA suggests that in order to maintain "good air quality", the following procedures should be followed: introduction and distribution of adequate ventilation, control of airborne contaminants, and maintenance of acceptable temperature and relative humidity.

Acceptable indoor air quality (IAQ) is typically not achieved by addressing any one specific building product, system, or procedure. Rather, it is the result of careful attention to each of the following fundamental elements:

- Contaminant Source Control
- Proper Ventilation
- Humidity Management
- Adequate Filtration

Careful attention to each of the above followed by proper operation and maintenance of your HVAC system can significantly reduce the risk of indoor air quality related problems.

4. Analytical data shows that total fungi in this space was lower than the outdoor airborne control samples obtained and that the types of mold in both the indoor and outdoor samples were "typical". This falls within the scope of guidelines we follow when qualifying data.

    a. Microorganisms get indoors through the heating, ventilation, and air conditioning system (HVAC), doors, windows, potted plants (soil), crack in the walls, potable drinking water system, or are brought into the building on shoes and clothes of people coming into the building. As a general rule, total indoor airborne spore concentrations in a typical clean HVAC supplied building should be less or equal to the total outside concentrations.

Conclusion

Based on the sampling data received during the October 2, 2020 airborne mold exposure assessment, the total airborne fungal constituents identified within the area sampled were below those found in the outdoor air.

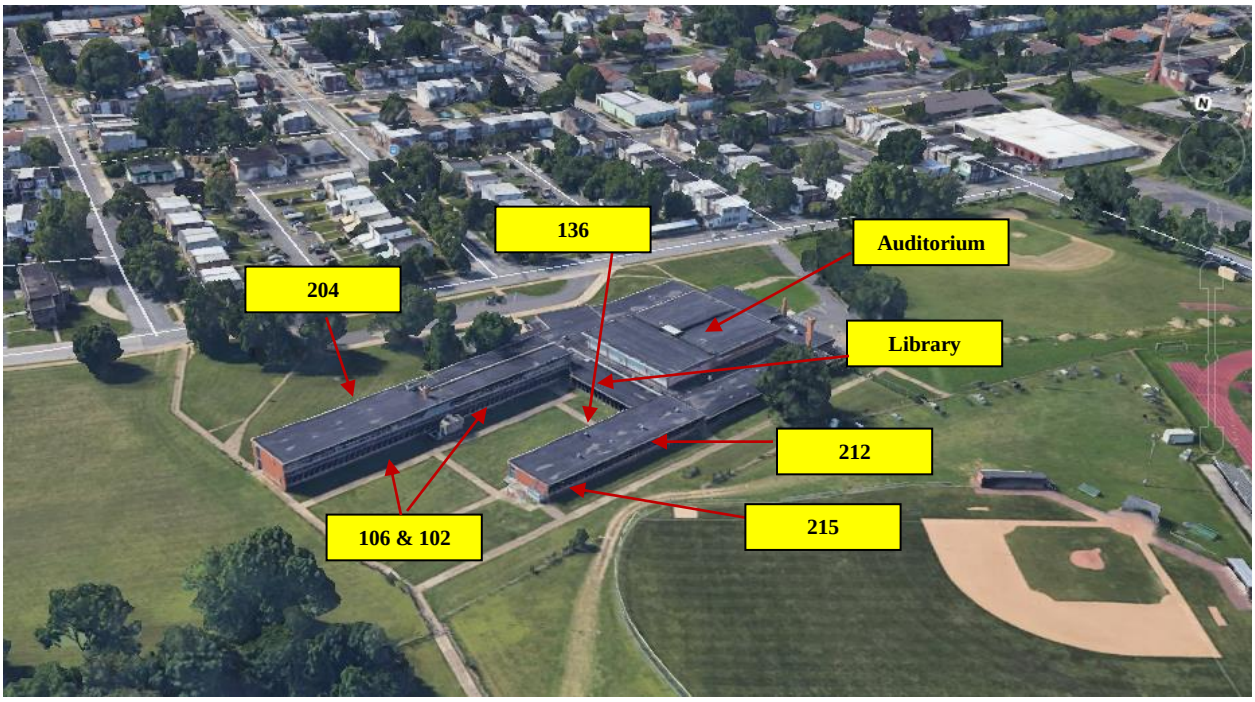
Therefore, considering the specific definitions, standards and guidelines as documented by NAB, AIHA, ASHRAE, WHO, & EPA, it is the opinion of Environmental Control Systems, Inc. that the breathing zones sampled should be considered "acceptable" to persons within these occupied spaces.

Mr. Thompson, should you have any further questions, please feel free to contact us.

Respectfully Submitted,

Wayne R. Pistoia, MSE, NSPE
Operations Director

Attachment A: -
Photos



Attachment B: -
Recommendations & Guidelines for Acceptable Thermal Comfort & Moisture Control

- A practical guide to indoor air quality (IAQ) cannot overlook temperature and humidity, because thermal comfort concerns underlie many complaints about "poor air quality." Furthermore, temperature and humidity are among the many factors that affect indoor contaminant levels. Thermal comfort is determined by the room's temperature, humidity and air speed. There are many additional factors such as activity level, clothing, age, gender and health status that affect the comfort of the occupant(s). Thermal discomfort is also a common complaint of building occupants. There are individual differences in preferences for thermal comfort, so it may not be possible to achieve an acceptable comfort level for all occupants. The normal levels of relative humidity and temperature for indoor air will also vary widely from region (climate) to region (climate).

  Individuals can also vary widely as to what they find acceptable. Since thermal comfort is subjective to the individual, indoor air quality is not regulated. However, the EPA, CDC, and OSHA follow recommended guidelines published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) who provide guidelines intended to satisfy the majority of building occupants wearing a normal amount of clothing while working at a desk. Guidelines are listed above.

- ASHRAE Standard 62.1-2016, "Ventilation for Acceptable Indoor Air Quality", plus ASHRAE BOD approved addenda requires that relative humidity levels be designed to be limited to 65% or less for mechanical systems with dehumidification capability. For other mechanical system types or where spaces are not served by mechanical systems, Standard 62.1 has no humidity limitations. ASHRAE Standard 55-2013, "Thermal Environmental Conditions for Human Occupancy", plus ASHRAE BOD approved addenda relates reported human comfort to temperature and humidity levels, and establishes a range of temperatures and humidity levels that are considered comfortable by 80% or more of the test subjects. The Standard requires that systems designed to control humidity must be able to maintain a dew point temperature of 16.8°C (62.2°F). There are no established lower humidity limits for thermal comfort; consequently, Standard 55 does not specify a minimum humidity level. However, non-thermal comfort factors, such as skin drying, irritation of mucus membranes, dryness of the eyes, and static electricity generation, may place limits on the acceptability of very low humidity environments

- Moisture problems can have many causes, including water intrusion (leaks), condensation, and uncontrolled high humidity. Therefore, it is important to prevent moisture problems in buildings. Modest wetting and drying in buildings and in ventilation systems is normal and generally poses little risk for occupant health. Similarly, very brief episodes of wetting are not usually a problem provided that steps are

taken to rapidly dry all materials. “Dampness” is the presence of unwanted and excessive moisture in buildings. This can lead to the growth of mold, fungi, environmental bacteria.

- The dew point is defined as “the temperature at which air becomes saturated with water vapor; the temperature at which air has a relative humidity (RH) of 100 percent.”
    - In order to reduce the moisture level in air during periods of high outdoor humidity:
        1. Exterior air leaks should be sealed.
        2. Indoor air movement should be constant and/or increased during unoccupied periods, since HVAC system controls typically reduce or eliminate outdoor air ventilation at these times. The timing of occupied and unoccupied cycles should be adjusted such that the building is flushed by the ventilation system before occupants arrive
        3. Conditioned space temperature should be higher than the dew point to prevent indoor condensation. Condensation should not occur when the temperature of a material is above the dew point. The lower the temperature of a material, the more water vapor it will pull out of the air. Where you have cool surfaces (*i.e.*, below the dew point), you need to keep humid air to a minimum. Where you have humid air, you need to keep the neighboring surfaces above the dew point.
        4. Dew point is a predictive measure that indicates the temperature at which moisture in the air will reach 100% and condense onto a surface. It can be a useful measure for controlling moisture levels to avoid mold growth because it is usually very easy to determine the temperature of the coldest surfaces within a building. To ensure high moisture levels or condensation does not occur on those surfaces, dew point levels in the air should be controlled in the building to below temperature of the coldest surfaces in a space
        5. Areas should be dehumidified to less than 65% RH using dehumidifiers and/or reheating the area of concern during unoccupied times. Reheating is a form of simultaneously cooling and then heating to enhance dehumidification. A 1ºF change in room temperature (in either direction) can change the relative humidity by 2% (in the opposite direction).
        6. Methods of reheating include direct or indirect gas-fired heating; hot water heating; hot gas reheating for refrigeration-based units; and electric heating.

Environmental Control Systems, Inc.

Environmental Engineers and Management Consultants

October 7, 2020

Mr. Paul Thompson
Director of Operations
Chester County Intermediate Unit
455 Boot Road
Downingtown, PA 19335

Re: Chester Upland High School - Indoor Air Quality Investigation

Dear Mr. Thompson,

In the capacity as the Chester County Intermediate Unit's (CCIU) environmental risk engineer, we offer you the following narrative.

On October 2, 2020, Environmental Control Systems, Inc. (ECS) conducted an airborne mold exposure assessment in the Chester Upland High School. Cooresponding sampling cassette numbers are as follows:

1. Chester Upland High School

a) Outdoor Control - Sample Cassette # 31063904
b) Outdoor Control - Sample Cassette # 31063813
c) Auditorium – Sample Cassette # 31186840
d) Library – Sample Cassette # 31063838
e) Room C-510 – Sample Cassette # 31063837
f) Room C-529 – Sample Cassette # 31186906
g) Room A-535 – Sample Cassette # 31063833
h) Room C-424 – Sample Cassette # 31298664
i) Room A-220 – Sample Cassette # 31063827
j) Room A-204 – Sample Cassette # 31063824

Separate temperature, relative humidity and dew points were measured in additional rooms not having their breathing space testing:

a. Main Office
b. IT Department
c. Guidance
d. Cafeteria
e. C-517
f. A-207

Air Sampling Method

If mold is suspected, but not visibly detected after a thorough inspection, then microbial air sampling conducted in accordance with guidance documents can be useful. ECS elected to use Air-O-Cell™ sampling cassettes as the screening device for this cursory event. The Air-O-Cell™ Air Sampling cassette is a sampling device designed for the rapid collection and analysis of a wide range of airborne aerosols. These include fungal spores, pollen, insect parts, skin cell fragments, fibers, and inorganic particulates. Air enters the cassette, the particles become impacted on the sampling substrate, and the air leaves through the exit orifice. The airflow and patented cassette housing is designed in such a way that the particles are distributed and deposited equally on a special glass slide contained in the cassette housing called the "trace".

Air Sampling Laboratory Report

Attached you will find the laboratory report of the samples taken on October 2, 2020. Sample locations and corresponding sample numbers are listed above. The "Control" sample is referred to and becomes the "Background" sample to which all other samples acquired on this date are compared.

Regulatory Guidance

The most common fungi are ubiquitous within our environment and we are constantly exposed to them both in the air and on many surfaces. Current filtration systems are designed to prevent a majority of these high outdoor counts from getting inside, however, the EPA states that "There is no practical way to eliminate all mold and mold spores in the indoor environment and spores can be found almost anywhere and can grow on virtually any substance, providing moisture is present". Constituents travel indoors inside through normal everyday actions such as through open doors/windows, and attaching itself to clothing, shoes, and bags. Constituents that get inside require moisture to grow mold on any organic surface (i.e.: wood, paper, plastic & carpet) so the most effective course is to limit the potential for microbial growth indoors by reducing the causes of persistent dampness. Mold growth does not require the presence of standing water; it can occur when high relative humidity or the hygroscopic properties (the tendency to absorb and retain moisture) of building surfaces allow sufficient moisture to accumulate.

Currently, there are no EPA, CDC or OSHA regulations or standards for airborne mold contaminants, therefore, there are no quantitative health-based guidelines, values, or thresholds for acceptable, tolerable, or normal concentrations for airborne fungi spores. The most commonly cited indoor air quality standards and generally accepted practices supporting acceptable indoor air quality are those established by the American Society of Heating and Air Conditioning Engineers (ASHRAE), and the American Industrial Hygiene Association (AIHA).

- ASHRAE Standards 55 & 62 provide guidelines addressing optimum achievable "thermal comfort" for occupants of buildings and system requirements which are expected to result in indoor air quality “acceptable” to human occupants.

  (ANSI/ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy establishes the ranges of indoor environmental conditions to achieve acceptable thermal comfort for occupants of buildings and ANSI/ASHRAE Standards 62.1 and 62.2 are the recognized standards for ventilation system design and acceptable IAQ).

  Since there are individual differences in preferences for thermal comfort, it may not be possible to achieve an acceptable comfort level for all occupants. That being said, ASHRAE guidelines recommend 68ºF to 74ºF in the winter and 75ºF to 80ºF in the summer. as well as a relative humidity (RH) range of 30% to 60%.
  In addition, the required minimum ventilation rate in cubic feet per minute (CFM) per person in an educational classroom is suggested to have 15 CFM per person (students ages 5-8); and 13 CFM per person (students age 9+) **ASHRAE 62.1-2016 recommends that relative humidity in occupied spaces be controlled to less than 65% to reduce the likelihood of conditions leading to microbial growth.

- The AIHA Position Statement (Recognition, Evaluation, & Control of Indoor Mold) states that sampling for airborne mold spores can indicate whether the mix of indoor constituents is “typical” of the outdoor mix or, conversely, “atypical” or unusual at the time of airborne sampling. The AIHA suggests a useful method for interpreting microbiological results is to compare the kinds and levels of organisms detected in different environments. Usual comparisons include indoors versus outdoors, or complaint areas versus non-complaint areas. Specifically, in buildings without mold problems, the qualitative diversity (types) of airborne fungi indoors and outdoors should be similar. Conversely, the dominating presence of one or two kinds of fungi indoors, coupled with the absence of the same kind of fungi outdoors, may indicate a moisture problem and degraded air quality. Generally speaking, indoor mold types should be similar to, and airborne concentrations should be no greater than, those found outdoors and in non-complaint areas

Guidelines for Interpretation of Results

Since there are no standards which establish acceptable, tolerable, or normal concentrations for airborne fungi spores, ECS adheres to the following professional standards as sources of guidance:

- The National Allergy Bureau (NAB™) a section of the American Academy of Allergy, Asthma and Immunology's (AAAAI™) considers 'mold counts in outdoor air of 0-6499 spores per cubic meter of air as low, to 6500 to 12,999 spores per cubic meter of air as moderate, to 13,000 to 49,999 spores per cubic meter of air as high, and above 50,000 as very high'.

- The AIHA suggest that indoor mold types should be similar to and airborne concentrations should be no greater than those found outdoors and in non-complaint areas.

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- The EPA defines "Good Air Quality" as a result of: Introduction and distribution of adequate ventilation, Control of airborne contaminants, & maintenance of acceptable temperature and relative humidity.
- World Health Organization (WHO) Guidelines for Indoor Air Quality

- Environmental Protection Agency – Indoor Air Quality Best Practices

Findings/Recommendations

1. Outdoor temperature, RH, & Dew Point obtained during the sampling event was 55ºF with 90% RH, & Dew Point 52ºF

2. Indoor temperature, RH & Dew Point obtained during this sampling event:

    A. Auditorium - 75ºF with 44% RH & Dew Point 51.6ºF. Surface temperatures were greater than the dew point.
    B. Main Office - 75ºF with 42% RH & Dew Point 50.3ºF. Surface temperatures were greater than the dew point.
    C. Library - 72ºF with 48% RH & Dew Point 51.2ºF. Surface temperatures were greater than the dew point.
    D. IT Department - 72ºF with 43% RH & Dew Point 48.3ºF. Surface temperatures were greater than the dew point.
    E. Guidance - 72ºF with 49% RH & Dew Point 51.8ºF. Surface temperatures were greater than the dew point.
    F. Cafeteria - 72ºF with 44% RH & Dew Point 48.9ºF. Surface temperatures were greater than the dew point.
    G. Room C-510 - 72ºF with 48% RH & Dew Point 51.2ºF. Surface temperatures were greater than the dew point.
    H. Room C-517 (Interior Lecture Hall) - 73ºF with 46% RH & Dew Point 51ºF. Surface temperatures were greater than the dew point.
    I. Room C-529 - 73ºF with 45% RH & Dew Point 50.4ºF. Surface temperatures were greater than the dew point.
    J. Room A-535 - 72ºF with 50% RH & Dew Point 52.3ºF. Surface temperatures were greater than the dew point.
    K. Room C-424 - 72ºF with 48% RH & Dew Point 51.2ºF. Surface temperatures were greater than the dew point.
    L. Room A-220 - 68ºF with 44% RH & Dew Point 45.3ºF. Surface temperatures were greater than the dew point.
    M. Room A-204 - 64ºF with 64% RH & Dew Point 51.6ºF. Surface temperatures were greater than the dew point.
    N. Room A-207 - 68ºF with 54% RH & Dew Point 50.7ºF. Surface temperatures were greater than the dew point.

3. EPA states that *"mold spores will not grow if moisture is not present. Indoor mold growth can and should be prevented or controlled by controlling moisture indoors."*

    a. At the time of this investigation, there was no condensation observed on any horizontal or vertical surfaces as all surface temperatures were higher than the dew point temperature of the space.

b. No visible mold was observed on walls, desks, or chairs. There were, however many water stained ceiling tiles throughout the building both in hallways and classrooms. These tiles must be discarded and the source of the leak fixed. See Attachment A for photos.

c. The unit ventilators in Rooms A-220 & A-204 should be serviced as the relative humidity of the conditioned air was 82% and 61% respectively. All other rooms evaluated were consistent with 50-54%

d. The EPA suggests that in order to maintain "good air quality", the following procedures should be followed: introduction and distribution of adequate ventilation, control of airborne contaminants, and maintenance of acceptable temperature and relative humidity.

   Acceptable indoor air quality (IAQ) is typically not achieved by addressing any one specific building product, system, or procedure. Rather, it is the result of careful attention to each of the following fundamental elements:

   - Contaminant Source Control
   - Proper Ventilation
   - Humidity Management
   - Adequate Filtration

   Careful attention to each of the above followed by proper operation and maintenance of your HVAC system can significantly reduce the risk of indoor air quality related problems.

4. Analytical data shows that total fungi in this space was lower than the outdoor airborne control samples obtained and that the types of mold in both the indoor and outdoor samples were "typical". This falls within the scope of guidelines we follow when qualifying data.

   a. Microorganisms get indoors through the heating, ventilation, and air conditioning system (HVAC), doors, windows, potted plants (soil), crack in the walls, potable drinking water system, or are brought into the building on shoes and clothes of people coming into the building. As a general rule, total indoor airborne spore concentrations in a typical clean HVAC supplied building should be less or equal to the total outside concentrations.

Conclusion

Based on the sampling data received during the October 2, 2020 airborne mold exposure assessment, the total airborne fungal constituents identified within the area sampled were below those found in the outdoor air.

Therefore, considering the specific definitions, standards and guidelines as documented by NAB, AIHA, ASHRAE, WHO, & EPA, it is the opinion of Environmental Control Systems, Inc. that the breathing zones sampled should be considered “acceptable” to persons within these occupied spaces.

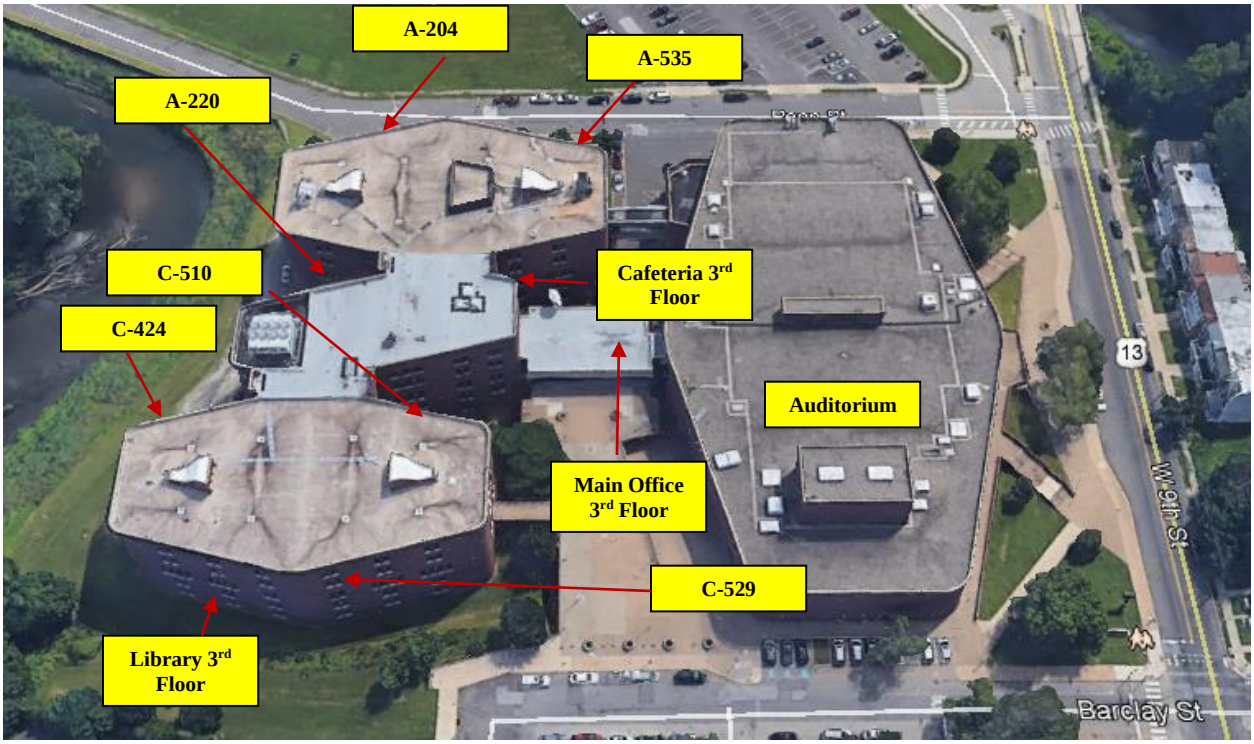
Mr. Thompson, should you have any further questions, please feel free to contact us.

Respectfully Submitted,

Wayne R. Pistoia, MSE, NSPE
Operations Director
Environmental Control Systems, Inc.

Attachment A: -
Photos


Penn St
Barclay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A-535
A-220
C-510
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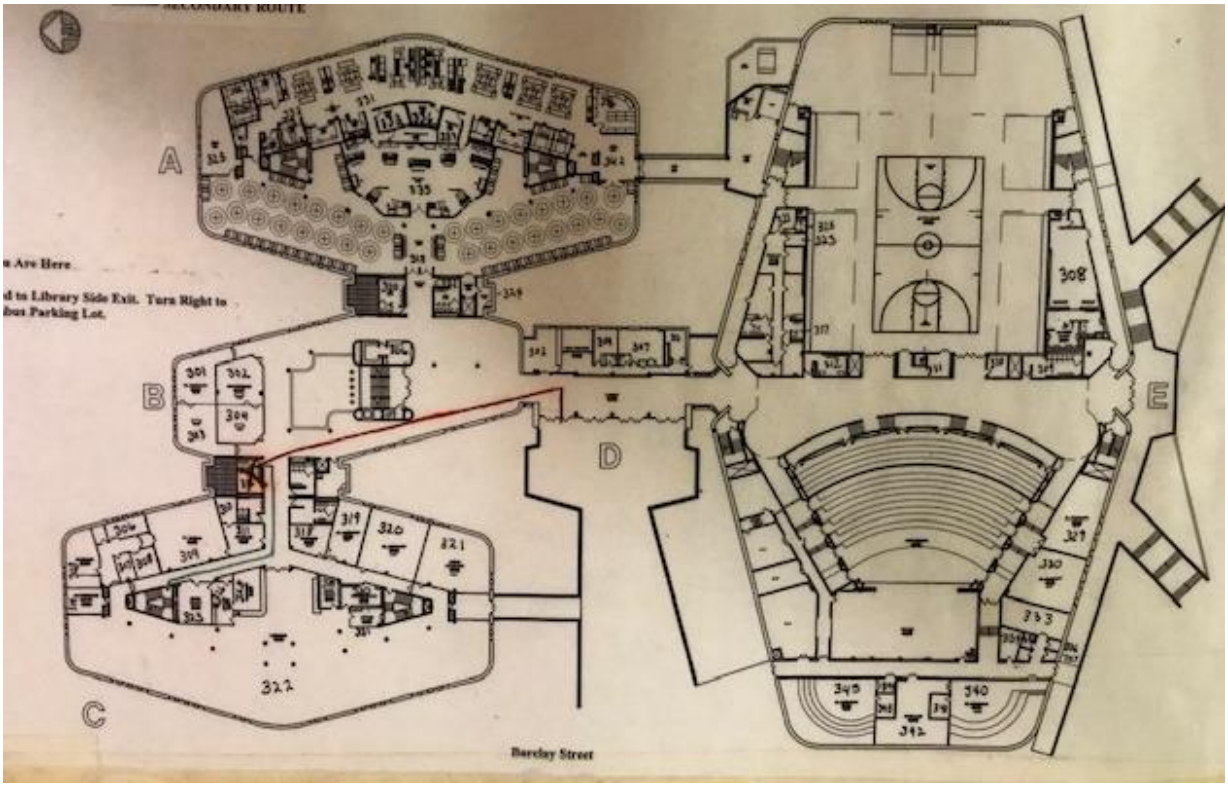
C-424
Auditorium
Main Office 3rd Floor
C-529
Library 3rd Floor
13
W 9th St
Barclay St


A
B
C
D
E
308
322
Barclay Street


HOT WATER RETURN
HOT WATER SUPPLY


EXIT

Attachment B: -
Recommendations & Guidelines for Acceptable Thermal Comfort & Moisture Control

- A practical guide to indoor air quality (IAQ) cannot overlook temperature and humidity, because thermal comfort concerns underlie many complaints about "poor air quality." Furthermore, temperature and humidity are among the many factors that affect indoor contaminant levels. Thermal comfort is determined by the room's temperature, humidity and air speed. There are many additional factors such as activity level, clothing, age, gender and health status that affect the comfort of the occupant(s). Thermal discomfort is also a common complaint of building occupants. There are individual differences in preferences for thermal comfort, so it may not be possible to achieve an acceptable comfort level for all occupants. The normal levels of relative humidity and temperature for indoor air will also vary widely from region (climate) to region (climate).

  Individuals can also vary widely as to what they find acceptable. Since thermal comfort is subjective to the individual, indoor air quality is not regulated. However, the EPA, CDC, and OSHA follow recommended guidelines published by the American Society of Heating, Refrigerating, and Air Conditioning Engineers, Inc. (ASHRAE) who provide guidelines intended to satisfy the majority of building occupants wearing a normal amount of clothing while working at a desk. Guidelines are listed above.

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- Moisture problems can have many causes, including water intrusion (leaks), condensation, and uncontrolled high humidity. Therefore, it is important to prevent moisture problems in buildings. Modest wetting and drying in buildings and in ventilation systems is normal and generally poses little risk for occupant health. Similarly, very brief episodes of wetting are not usually a problem provided that steps are

taken to rapidly dry all materials. “Dampness” is the presence of unwanted and excessive moisture in buildings. This can lead to the growth of mold, fungi, environmental bacteria.

- The dew point is defined as “the temperature at which air becomes saturated with water vapor; the temperature at which air has a relative humidity (RH) of 100 percent.”
    - In order to reduce the moisture level in air during periods of high outdoor humidity:
        1. Exterior air leaks should be sealed.
        2. Indoor air movement should be constant and/or increased during unoccupied periods, since HVAC system controls typically reduce or eliminate outdoor air ventilation at these times. The timing of occupied and unoccupied cycles should be adjusted such that the building is flushed by the ventilation system before occupants arrive
        3. Conditioned space temperature should be higher than the dew point to prevent indoor condensation. Condensation should not occur when the temperature of a material is above the dew point. The lower the temperature of a material, the more water vapor it will pull out of the air. Where you have cool surfaces (*i.e.*, below the dew point), you need to keep humid air to a minimum. Where you have humid air, you need to keep the neighboring surfaces above the dew point.
        4. Dew point is a predictive measure that indicates the temperature at which moisture in the air will reach 100% and condense onto a surface. It can be a useful measure for controlling moisture levels to avoid mold growth because it is usually very easy to determine the temperature of the coldest surfaces within a building. To ensure high moisture levels or condensation does not occur on those surfaces, dew point levels in the air should be controlled in the building to below temperature of the coldest surfaces in a space
        5. Areas should be dehumidified to less than 65% RH using dehumidifiers and/or reheating the area of concern during unoccupied times. Reheating is a form of simultaneously cooling and then heating to enhance dehumidification. A 1ºF change in room temperature (in either direction) can change the relative humidity by 2% (in the opposite direction).
        6. Methods of reheating include direct or indirect gas-fired heating; hot water heating; hot gas reheating for refrigeration-based units; and electric heating.