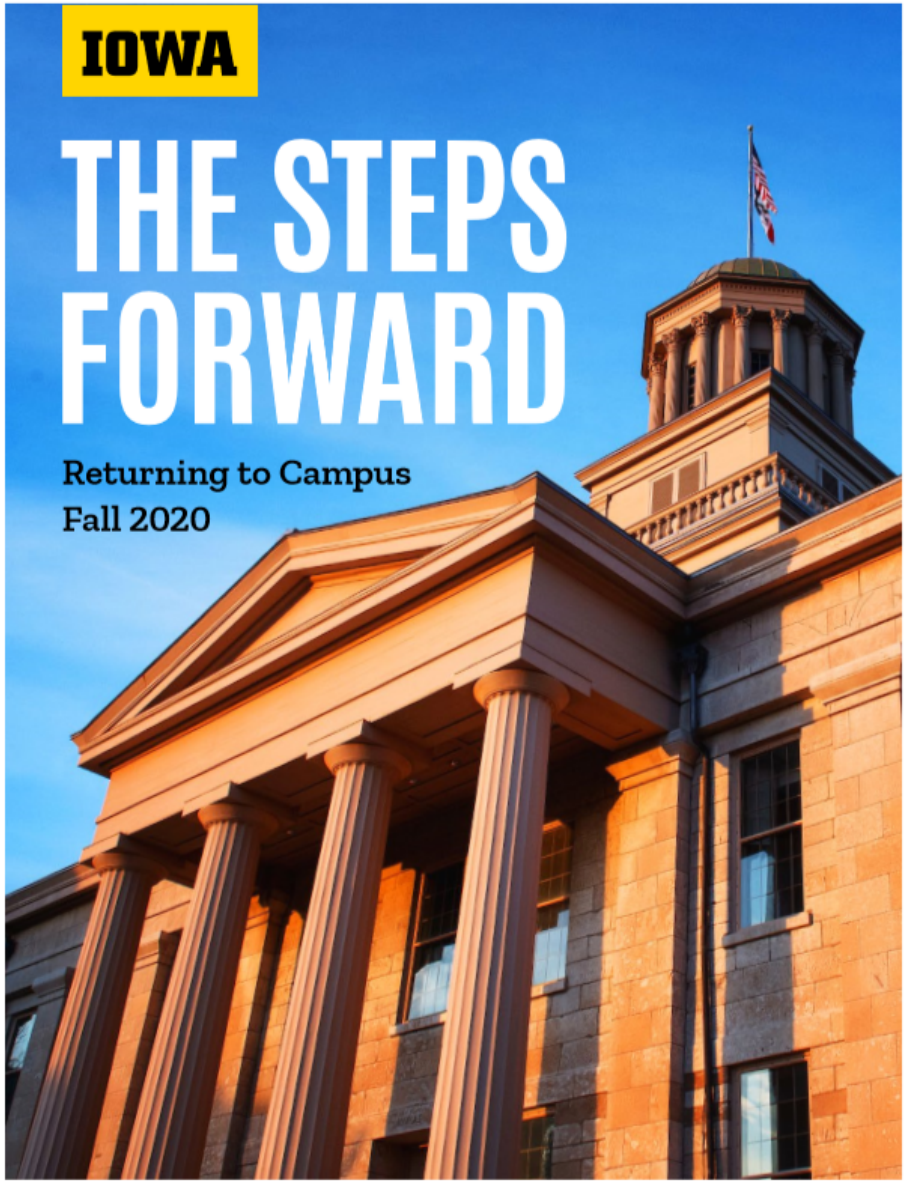
Steps Forward:

Facilities, Buildings and Grounds

August 13, 2020



AGENDA

- Review Grounding Principles and August 7th CIMT Decision
- Review Risk Mitigation Strategies
- Review Buildings with mixed ventilation capabilities—forced ventilation and no forced ventilation
- Discuss space use for no forced ventilation areas
  - Non-classroom spaces
  - Classroom spaces

Steps Forward → Building Practices

Guiding principles of Steps Forward: Returning to Campus Fall 2020

"The University of Iowa is committed to providing a world-class educational experience for our students and a great place to grow and thrive for faculty and staff. As a guiding principle, the UI recognizes the more an individual interacts with others, and the longer the interaction, the higher the risk of COVID-19 spread."

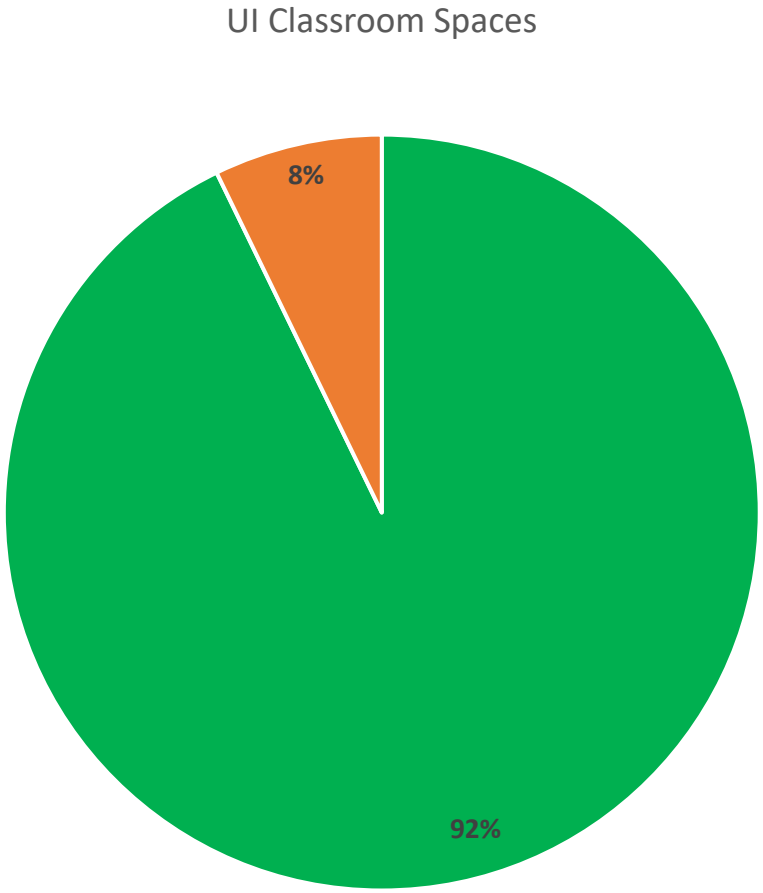
https://coronavirus.uiowa.edu/fall-2020

Steps Forward → Building Practices

Primary Decision Drivers

- Focus on risk mitigation not elimination.
- Limit unintended consequences
- Risk mitigation is interdependent: the effectiveness of building and operational practices are directly related to behavior and community health conditions.
- Prioritize by occupancy and time: the more people in a space for longer periods of time represents greater risk.
- Emerging information and recommendations require need for agility and capability for adjustments and change to increase risk mitigation options.

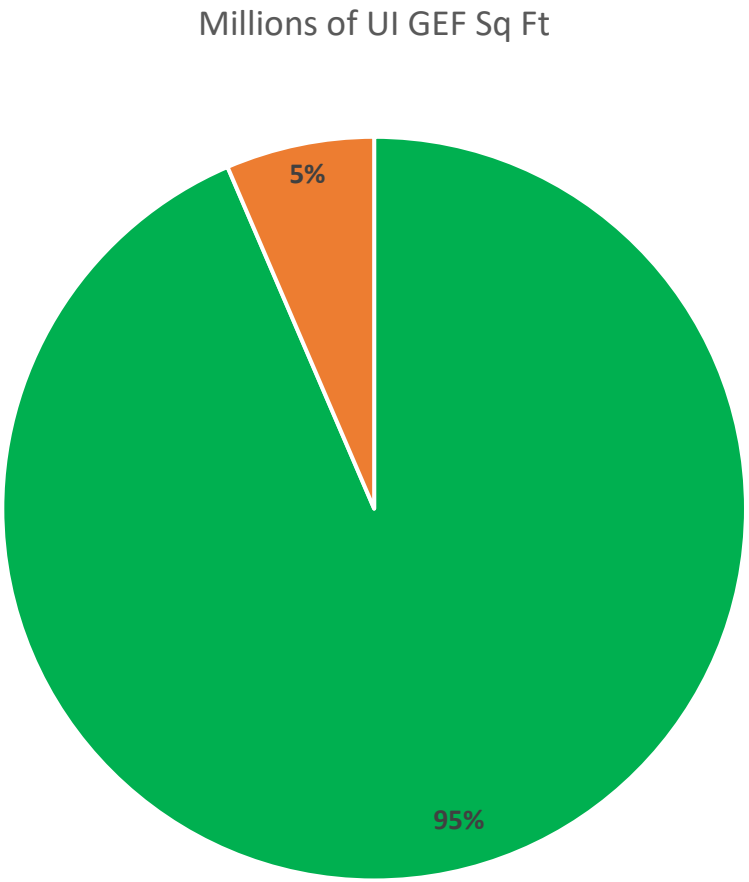
Summary by Classroom Spaces



- Forced Ventilation: Implementation of risk mitigation measures per CDC and ASHRAE

- No Forced Ventilation: Fewer risk mitigation options due to system capabilities
  - Deprioritize class scheduling

Summary by Non-Classroom Spaces



- Forced Ventilation: Implementation of risk mitigation measures per CDC and ASHRAE

- No Forced Ventilation: Fewer risk mitigation options due to system capabilities

  - Deprioritize class scheduling
  - Emphasize on face covering compliance, hand-washing, social distancing
  - Deprioritize multi-user space utilization for extended periods of time

Steps Forward:

Facilities, Buildings and Grounds

Ventilation

August 2020

Ventilation

Ventilation systems will operate according to CDC Considerations for Institutes of Higher Education. The UI will implement the following strategies:

- Ensure ventilation systems operate properly.
- Facilities Management will coordinate and monitor building occupancy, using data to inform operations.
- Facilities Management will review and assess building systems, including restroom ventilation, before the start of the fall 2020 semester and will carefully monitor building system performance.
- Monitoring, including advanced Fault Detection Diagnostics, will be used to identify changes in operations or conditions that may affect performance or building conditions.
- In addition to ensuring proper operation, operating parameters will be adjusted to increase fresh air mechanically (not open doors or windows), as well as increase filtration levels as system age and capabilities allow.
- Develop communication processes to ensure that information is available to building occupants and coordinators regarding system operations.
- Using FM@YourService, develop a process for addressing concerns regarding ventilation or filtration in campus buildings.

FACILITIES, BUILDINGS, AND GROUNDS

Ventilation

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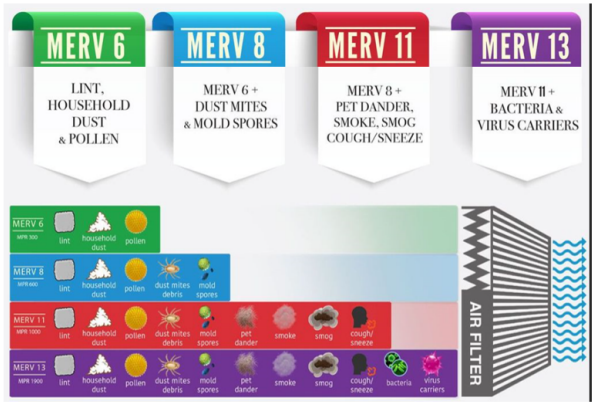
- Operations
- Verification
- Monitoring
- Communication

- Develop communication processes to ensure that information is available to building occupants and coordinators regarding system operations.
- Using FM@YourService, develop a process for addressing concerns regarding ventilation or filtration in campus buildings.

Steps Forward Commitment: Operations

- Upgrade to MERV 13 across all capable AHUs (**$475,000).** Installation planned prior to start of classes.
- Adjust classroom operations to maximize airflow during occupancy, increasing filtration and fresh air.
- Purge building air daily, by activating the HVAC systems at least two hours prior to occupancy.



As recommended by CDC or ASHRAE

Steps Forward Commitment: Verification

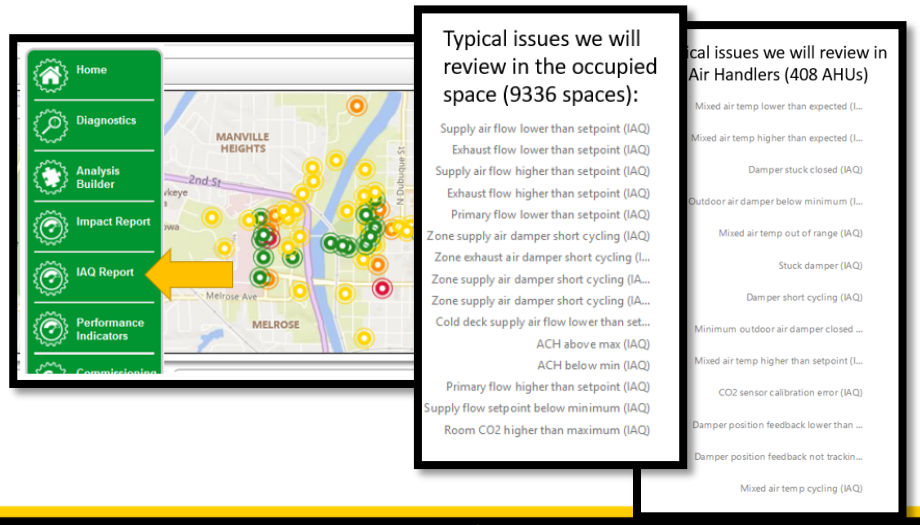
- Extensive operational assessment with focus on classroom spaces - high density priority
- Identify system capabilities related to infection risk mitigation
- Document building level ventilation capabilities in academic and administrative (GEF) spaces

TH- AHU-1 Review Area Maint Checkpoints for Fall Return to Campus.

Checkpoint	Value	Description	Extra Description
1.	YES	Did you check outdoor air intakes to make sure they are clear of debris and obstructions? Please note any deficiencies or access issues that make it difficult to keep these clear in the future.	
2.	NO	Do filters in unit need to be replaced?	
3.	YES	Is the filter rack in good repair? Please note any deficiencies or access issues.	
4.	YES	Is the filter rack sealed to prevent bypass of	
5.			
6.			
7.			
8.	NO	TH Classroom 125: Are any supply or return diffusers or vents covered or obstructed?	
9.	YES	TH Classroom 125: Are supplies and returns a good distance apart? Please note any air quality or short cycling issues you are aware of in the extra description field.	
10.	NO	TH Classroom 125: Are there operable windows in the space? Please note in the extra description field if the windows can still open or if they are screwed shut.	Windows are sealed.

Steps Forward Commitment: Monitoring

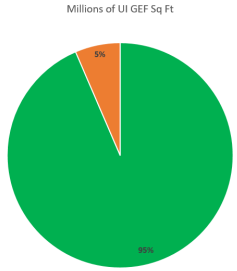
- Building Controls Program
- Fault Detection & Diagnostics (FDD) Program
  - 12,000 pieces of equipment
  - 53 buildings
  - 90,000 data points
  - 5-min intervals scanning for early detection faults
- Program Enhancement for additional indicators for Indoor Air Quality monitoring



Steps Forward Commitment: Communication

- Building Coordinator Network engagement
- Return to Campus Unit Planning
- FM@YourService Covid19 enhancement

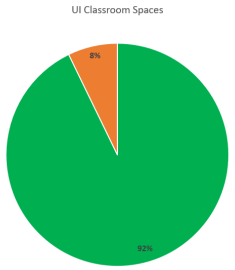
Spaces without Forced Ventilation:



Additional Risk Mitigation Levers for these spaces

- Additional emphasis on face covering compliance, hand-washing
- Enforce social distancing to 6ft (113 square feet/person) vs. 50% capacity
  - Typical UI office is 150-200 sqft
- De-prioritize multi-user space utilization for extended periods of time
- Arrange seating to limit air flow passing by others in areas with window units
- Portable air purifiers can be beneficial in certain circumstances (vulnerable populations, etc.)

Classrooms without Forced Ventilation:



De-Prioritize these spaces for instructional purposes in accordance with guiding principles

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