Spring 2022 at MIT

8AM Covid-19 Response Call

anuary 14, 2022

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Reminder: Dec 21, 2021 Letter to Community

How Omicron is shaping our approach to 2022

For the last 18 months, MIT has relied on an approach that uses testing to spot infections early so we can quickly isolate individual cases from the community.

The lesson from the Cornell situation and others, however, is that Omicron spreads so quickly that identifying and containing it is nearly impossible, even with a strong system like ours.

- Already, the ongoing surge is stressing our contact tracing and student isolation operations.
- We are therefore developing adjustments to our approach to student isolation to ensure we can continue to operate during the Independent Activities Period (IAP).
- We will continue with our standing testing system in the near term as we learn how best to manage through the Omicron surge going forward.

Primary Goal for Spring 2022 is to:

Fully pursue our on campus education and research missions.

Expected Plan for Spring 2022

Thanks to our community's high vaccination and booster rates, our experience managing Covid, and the expectation of Omicron peaking, we are planning for:

- Spring semester to be fully in-person for academics and research
- Staff and faculty generally resume their fall 2021 schedules and/or work arrangements on Jan 31 (subject to DLC modifications based on the work)

Uncertainty still remains, and Covid will still be with us, thus:

- Strong academic and business continuity plans must be in place
- Student isolation and support strategies implemented over IAP will continue
- Testing will continue initially then transition to less surveillance testing/more test-on-demand when appropriate to do so
- Campus access restrictions to stay in place while we have testing requirements
- Events and other academic and research meetings and activities may proceed (but no food; will re-evaluate after we get up and operating at full capacity in early February)

Fall-back Position for Spring 2022

To be used ONLY if conditions worsen in a way that significantly stresses our operations.

If a high number of cases raise concerns about academic and business continuity and student support operations, we have developed the following fall-back positions:

- First two weeks of education remote (students still on campus), or allow individual instructors to choose
- Extend encouragement for work from home (for appropriate staff) if feasible
- If we have to move to a fall-back position, we will announce it early in the last week of January; otherwise assume we are proceeding as planned

How Did We Get Here?

We considered the following items:

- Trajectory of Omicron (latest from SA and UK, US, Greater-Boston, etc.)
- How our management strategy has functioned so far in IAP
 - Academic and business continuity
 - Isolate-in-place and automated notification and contact tracing systems
- Strong enforcement of booster compliance
- "Pulse of the people"

Guidance and input from:

 Academic continuity group which includes Faculty Governance, DSL/Heads of House, Student Leaders, Research Continuity leads; Deans; CMT/CDT; Discussions with peers; 8am call

We Developed Plans for Two Potential Scenarios

- Nominal/favorable (pandemic starts to ebb; life 'normalizes')
- Unfavorable (pandemic persists/worsens)

We are optimistic, but must have back-up plans to address the pessimistic case too.

Nominal / Favorable Scenario

- Pandemic conditions rapidly improve at the end of January/beginning of February (post-Omicron surge)
 - The community is anxious for relaxed policies (even more so than May 2021)
- Build upon lessons learned during IAP
 - Isolate-in-place effective
 - Contact tracing manageable
 - We understand how to ensure academic and research/business continuity (5-day isolation more manageable than prior 10-day)
- Some variation in booster status as remaining members of community become eligible
- Gradual ramp-up in campus density over IAP; so essentially full capacity by late January in terms of students

Unfavorable Scenario

- Omicron wave is 12 weeks (or longer), stretching to spring break
- Academic continuity approach for 150 subjects in IAP does not scale to 1200
 - We see significant transmission in classrooms and labs
 - Insufficient remote learning options for students in isolation
- High number of admin, instructor, and support staff are out
- Still assuming isolate-in-place works
- Variations:
 - everyone out sick at same time, high positivity rolls through community over longer period of time, new variant with higher severe health risk
- We have the tools to address these (but sincerely hope we do not have to!)

What We Know about the Trajectory of the Disease

- South African peak ~6-8 weeks wide; conditions differ from ours
- UK and some parts of the US (including Boston) appear to have peaked
 We are ~4 weeks behind SA and ~2 weeks behind the UK
- Probability of hospitalization and death if one tests positive are lower for Omicron than for prior strains
 - No instances of hospitalization on campus because of Omicron (> 2000 cases)
- The MWRA wastewater data (our best benchmark) looks promising
- Many organizations shifting focus to reducing risk of severe illness vs. number of cases; diminished role for surveillance testing

South African Peak = 6 to 8 Weeks

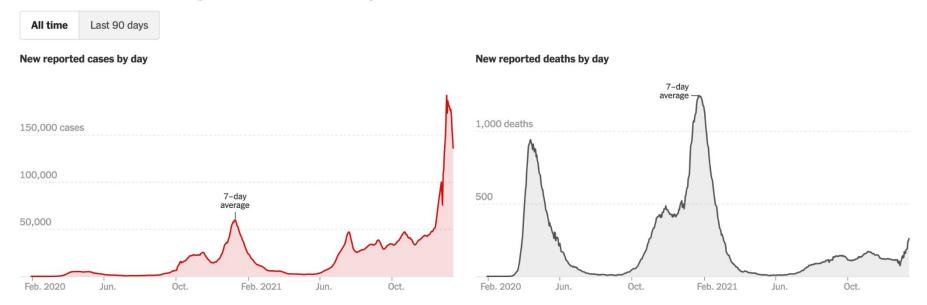
All time Last 90 days New reported cases by day New reported deaths by day 7-day average 7-day 20.000 cases average 400 deaths 10,000 200 Apr. 2020 Aug. Dec. Apr. 2021 Aug. Dec. Apr. 2020 Aug. Apr. 2021 Aug. Dec. Dec.

How trends have changed in South Africa

https://www.nytimes.com/interactive/2021/world/covid-cases.html, 1/14/22

United Kingdom Trends

How trends have changed in the United Kingdom

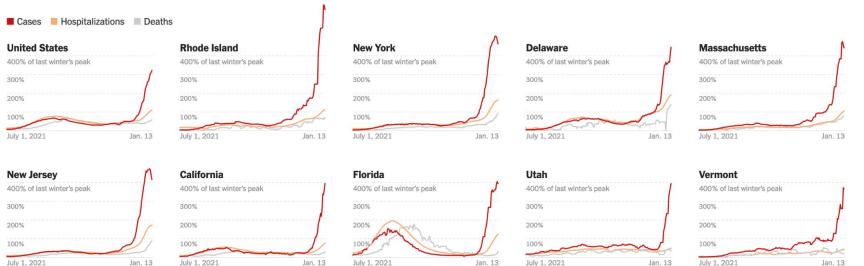


https://www.nytimes.com/interactive/2021/world/covid-cases.html, 1/14/22

Regional Covid-19 Cases, Hospitalizations & Deaths

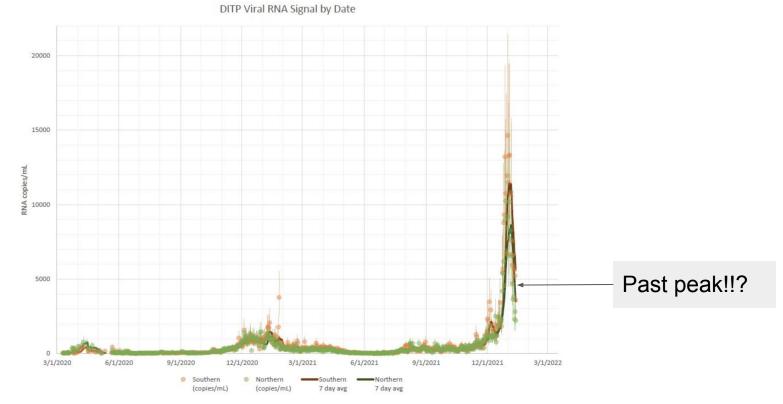
How cases, hospitalizations and deaths are trending

Each chart shows how these three metrics compare to the corresponding peak level reached nationwide last winter. For example, a state's case line exceeds 100 percent on the chart when its number of cases per capita exceeds the highest number of U.S. cases per capita reached in January 2021.



https://www.nytimes.com/interactive/2021/us/covid-cases.html, 1/14/22

Wastewater Concentration (Best Measure)



https://www.mwra.com/biobot/biobotdata.htm, 1/14/22

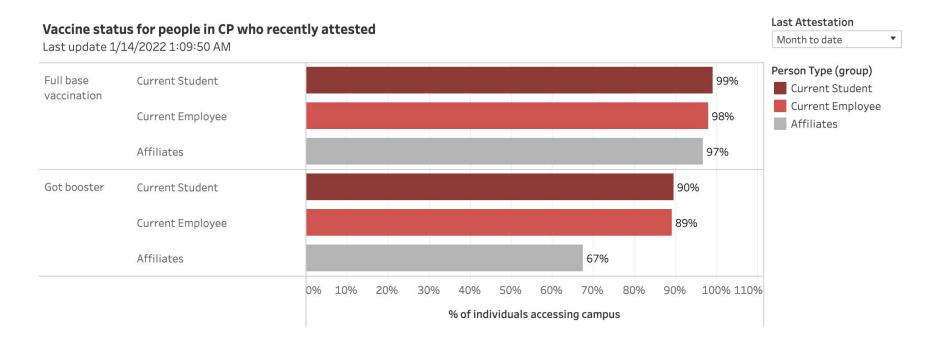
MIT Positivity Rate High But Declining

Tests Since 8/16/2021		Positives Since 8/16/2021		Rate Since 8/16/2021			Currently in Isolation		Fully Vaccinated			
608,299		3,080		0.51%			526		98%			
Period =	Positive Rate		COVID	COVID-19 Tests Since 8/16/2021 Time Period Weekly-Current Ar			cademic Year 🔻					
1/9 - 1/15	2.58%	Tests							21,134			
		Positive Tests	545									
1/2 - 1/8	4.42%	Tests							22,377			
		Positive Tests	988									
12/26 - 1/1	6.64%	Tests			7,894							
		Positive Tests	524									
12/19 - 12/25	1.98%	Tests	_				14,923					
		Positive Tests	295									
12/12 - 12/18	0.54%	Tests									29,198	
		Positive Tests	159									
12/5 - 12/11	0.28%	Tests	_								33,628	33,628
		Positive Tests	94									
11/28 - 12/4	0.26%	Tests	_								33,683	33,683
		Positive Tests	88									
11/21 - 11/27	0.16%	Tests						18,5	00			
		Positive Tests	29									
11/14 - 11/20	0.17%	Tests										33,732
			0K 5K 10K 15K 20K 25K 30K 35K # of Tests									

https://covidapps.mit.edu/dash board, 1/14/22

Strictly Enforcing Booster Reqs after Jan. 14th

(percentages contain some people who are not yet eligible)



Lessons from IAP So Far

- >1100 cases in first week and our systems functioned well
 - Automated notifications and automated case information collection
 - Isolate-in-place going smoothly
- Continuity impacts of 5-days isolation are very different from 10-days
 - Due to our testing cadence, weekend is included in the 5 days for most cases
 - Implication is 3-4 days of missed school/work
 - Most students in isolation can keep up with studies with remote options
- With 100-300 cases on some days, 25% of cases reported "not sure" about transmission
 - Most transmissions are still occurring in off-campus settings
 - Not seeing patterns in classrooms or labs; low transmission risk
- Staff and instructors continue to face significant personal disruptions, including increased workload, school/childcare closures, etc.

High Level Summary of Plans for Spring

	Nominal / Favorable Scenario	Unfavorable Scenario
Academic Continuity	Spring to be fully in-person for academics and research	Pivot to online instruction for first two weeks if conditions worsen
Student & Residential Life	Isolate-in-place; new food distribution for isolating students; Re-evaluate once full operations are up and running: no food at events (small, house-sponsored 10 or fewer people, grab and go ok); no spectators at athletic events; and non-Covid Pass guests are not permitted	No change
	overnight in Institute-approved undergrad housing (on-campus and FSILGs).	

High Level Summary of Plans for Spring

	Nominal / Favorable Scenario	Unfavorable Scenario		
HR	Staff and faculty generally resume their fall 2021 schedules and/or work arrangements on Jan 31 (subject to DLC modifications based on the work)	Extend encouragement to work from home (when/where appropriate)		
Research Community	Encourage in-person research-related meetings (e.g., group meetings), seminars (including invited visitors), non-student employee recruiting All groups should have contingency plans, especially for research support staff [e.g., core facility operations] and associated campus building operation staff (DLC + DoF)	No change		

High Level Summary of Plans for Spring

	Nominal / Favorable Scenario	Unfavorable Scenario		
Events, internal meetings, etc.	No change (meaning no food) Re-evaluate two weeks into the semester after full operations are up and running.	If classes go remote, pause (virtualize, postpone, or cancel) in-person events		
Visitors	No change	No change		
K-12 Programs	Resume in-person student-led and 3rd party programs	If classes go remote, pause (virtualize, postpone, or cancel) in-person K-12 programs		
Travel	Eliminate exception requirement for student travel to CDC Level 4 countries	No change		
	KEEP: Travel registry requirement			

Testing & Other Operations

- Encourage high quality masks; continue to make them available to the entire community
- Will consider changes to testing after we get through the initial start to the semester
- No changes to campus access while mandating testing
- Ensure all community members understand:
 - What to do if you have Covid-19 symptoms, test positive, or are a close contact
 - <u>https://now.mit.edu/latest-updates/what-to-do-if-you-have-covid-19-symptoms-test-positive-or-are-a-close-contact/</u>

Information for Instructional Teams

Objectives for a Successful In-Person Spring Semester

- Ensure as much learning / academic progress as possible
 - Learning in academic subjects
 - But also labs, UROPs, peer to peer learning, student study groups
 - Ensure students can meet requirements / stay on track for degree completion
- Minimize extra work for instructors
- Provide resources for instructor support
 - Backup classroom support: TAs, graders, undergraduate classroom assistants
 - Guidance and dissemination of ideas and best practices

Considerations

- Planning as robust as possible to worsening conditions before classes start Jan 31
- Planning as robust as possible to variable conditions across units and time
- High levels of accumulated fatigue and stress among instructors and students
- Logistical uncertainty for instructors who are subject to work disruptions outside of their control (ill caregivers and dependents, school disruptions, day care closings (10 days isolation time rather than 5 days), travel and commuting interruptions)

Policies and other actions

- Policy for approving semester-long remote teaching
 - Same as Fall semester: Medical requests reviewed by HR; pedagogical requests reviewed by CoC/CGP; all other requests reviewed by Deans' Council.
- Policy for approving temporary switch to online synchronous teaching
 - Same as Fall semester: For temporary changes (instructor is sick, a lot of students are sick, etc.) that amount to less than 25% of the instructor's contact hours with students, no approvals are needed. For changes that amount to more than 25% of contact hours, instructors should notify their DHs.

Before the start of the semester

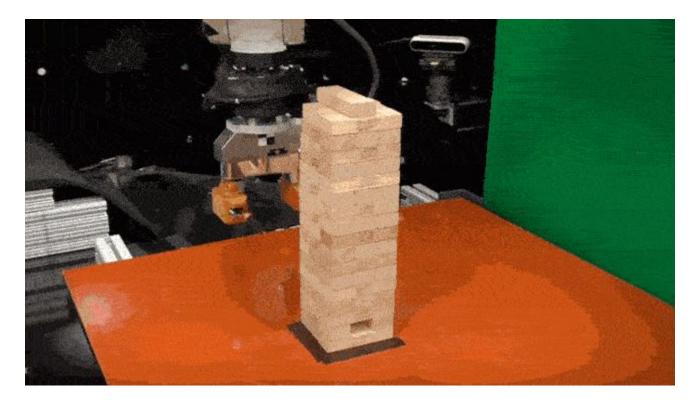
Instructional teams:

- Develop and disseminate a written plan for backup in-person instruction. If you need backup TAs, graders, undergraduate Zoom/classroom assistants, please reach out to your DH.
- Provide written guidance to students on your syllabi for whom to contact if they are sick/isolating and what they can expect if they miss assignments/exams.

Department heads:

- Reach out to your faculty proactively to see whether they are facing challenges and offer flexibility and support for backup instructional staff.
- If units or schools lack the resources to support backups, the Chancellor and Provost will be prepared to provide support.

Final Thoughts & Q&A



It's all about balance

https://www.youtube.com/ watch?v=o1j_amoldMs