TO: Leaders and Members of the UWEC and Eau Claire Community
FROM: Silviana Amethyst, Mohammad Aziz, Allison Beemer, Abra Brisbin, Kelli Coller, Chris Davis, Katie Elliott, Jennifer Harrison, Ryan Harrison, Chris Hlas, Jessica Kraker, Carolyn Otto, Debra Smieja, Andrew Swanson, Melissa Troudt, Mckenzie West
RE: Choose remote instruction after Fall Recess 2020
DATE: October 27, 2020

To All Campus Leaders, Colleagues, Students, Community Members,

The authors of this memo, being concerned mathematicians and statisticians in the Department of Mathematics at the University of Wisconsin-Eau Claire, urge UWEC to immediately plan to adopt online-only classes and remote work for the weeks after Fall Recess (Thanksgiving Break), to the greatest extent possible. This memo urges a holistic, data-aware, and health-conscious approach to concluding the Fall 2020 semester.
We recommend:

- Move instruction and university business to a remote format from Fall Recess until the semester concludes. This should be done wherever possible; exceptions may include clinical training and use of laboratories, studios, practice rooms, and other facilities.
- Campus constituents should not travel for Fall Recess if they have on-campus commitments after Fall Recess which cannot be completed remotely.
- Students and faculty who travel away from campus for Fall Recess and return to UWEC should self-isolate for 14 days after returning to UWEC.

Reasons for our recommendations are detailed below.

Choose Certainty Over Uncertainty

To be blunt: our students live in fear. Our faculty and staff, our communities and families, all live in fear. This fear is fueled in part by uncertainty. This uncertainty includes the conclusion of the fall semester amid rapid statewide intensification of the pandemic and a nearing major travel holiday. At any moment, the administration may suddenly close campus and send everyone home. Living in a constant state of uncertainty is unhealthy and is not conducive to a productive learning environment [Medina 2014].

We can provide some certainty for our UWEC community. We can implement a plan for the end of the semester that allows students, faculty, and staff to prepare for something known, instead of trying to prepare simultaneously for every unknown. Deciding now to hold classes remotely after Fall Recess will give all community members the means to conclude the semester in a prepared, safe way. Let us choose certainty.

Many other campuses in the UW System have decided to operate remotely after Fall Recess. Our flagship campus, UW-Madison announced their decision on October 12. Additionally, UW-Superior, UW-Stevens Point, UW-Platteville, and UW-Whitewater have implemented plans for remote delivery after Fall Recess. We should follow their lead.

Support Campus and Broader Communities

The Eau Claire City-County Health Department's Community Expectations order, effective October 15, 2020, directly states, "To the greatest extent feasible, use technology to avoid meeting in person, including virtual meetings, teleconference, and remote work." The expectation is clear: UWEC should be remote after Fall Recess.

Students and their families will likely gather for a celebratory meal or other festivities. Compared to earlier in the fall semester, these gatherings are likely to be COVID-unsafe (*e.g.* indoor gatherings, involving eating and drinking, etc.). Operating remotely at UWEC after Fall Recess will decrease transmission during the weeks leading up to finals week and provide an opportunity for members of the campus community to reduce contact, prepare, and feel safe enough to more responsibly visit with family and others during winter break.

Wide adoption of remote delivery during this period will also create equitable opportunities for students to prepare for and complete final exams regardless of health or quarantine status. There is a high likelihood of infected students being quarantined during finals week, and faculty are already planning for remote delivery of final examinations for some students. Why not create equity and make final exams remote for *all* students?

Follow Data Trends

As members of the Department of Mathematics, we try to make decisions based on evidence and trends in both quantitative and qualitative data, and we seek to empower all others to do the same.

Note that the following data and the particular details of the discussion are inevitably out of date given a rapidly intensifying situation. That's not a reason to dismiss the below argument. In fact, the situation continues to worsen. See Appendix and Addendum.

In the third week of October, Wisconsin was experiencing its highest levels of transmission since the beginning of the pandemic. According to the New York Times, statewide there were 36 deaths and 4721 new cases on October 20. Two people have died from COVID in Eau Claire County in the last week, and a total of 136 people died of COVID in the last week across the state. Eau Claire and UWEC are neither isolated nor insulated from the rest of the state.

As of October 20, Eau Claire County was experiencing 41 daily COVID cases on average and a density of 39 cases per 100,000 residents per day. The momentum of the spread is strongly upward, and other counties have more intense outbreaks. The spread of COVID after break is predictable: our students come from across the state and region, and will vector the virus to and from those places.

The COVID data, both from the UWEC Dashboard and the Eau Claire Department of Health, indicates there is a sharp increase in cases associated with college-aged students immediately following return to campus. Eau Claire saw a 4-fold increase in daily cases for the 20-to-29-year-old age group in the two weeks after the return to campus in August. There is also a concerning two-week-lagged increase in rates for those 30 or older: daily and active cases approximately tripled between 14 and 28 days after students returned, and still maintain that high level [See Appendix]. Final exams occur two weeks after Fall Recess. Sending students home again after a likely spreading event during the November holiday will exacerbate the spread of COVID, both initially among students, and then more widely to the surrounding community.

The impetus is on us, as campus and community leaders, to choose our collective path. We can invite the spread of COVID by moving to and fro within Wisconsin in November. Or we can choose now to take steps to safeguard our friends, neighbors, and families by working remotely after the break.

Conclusion

Let us choose to ensure the certainty, health, safety, and well-being of not only our campus, but also our entire community. Returning in-person after Fall Recess will exacerbate Wisconsin's perilous position. We must take responsibility for the broad and extensive impact of our decisions. Operating remotely to the greatest extent possible, and reducing travel, will enhance certainty and health, and aid in a successful winter holiday and Spring 2021.

Signed,

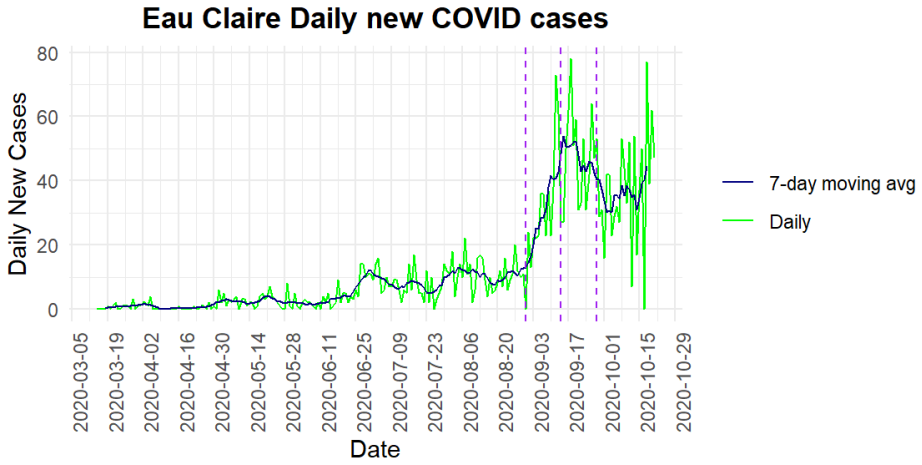
Silviana Amethyst, PhD	Mohammad Aziz, PhD	Allison Beemer, PhD	Abra Brisbin, PhD
Kelli Coller, MS	Chris Davis, PhD	Katie Elliott, PhD	Chris Hlas, PhD
Jennifer Harrison, PhD	Ryan Harrison, PhD	Jessica Kraker, PhD	Carolyn Otto, PhD
Debra Smieja, M.S.	Andrew Swanson, PhD	Melissa Troudt, PhD	Mckenzie West, PhD

Appendix

Daily cases in Eau Claire County (as of October 20):

Notably, between August 31 to Sept 14, the 7-day average number of daily cases jumped from 13 to 48 (nearly quadrupled).

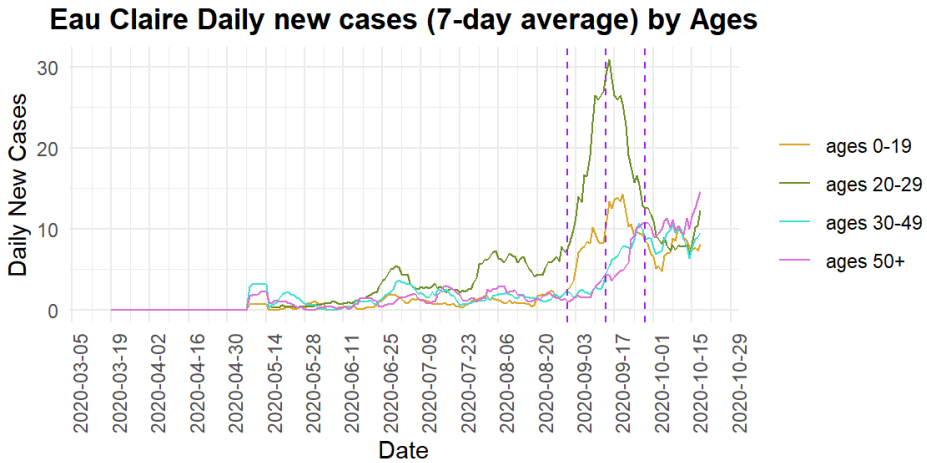
Plot 1 - *Vertical lines on August 31 (return to campus), Sept 14 (two weeks later), and Sept 28 (four weeks later)*



How do we know this is related to campus? The daily cases for ages 20-29-year-olds (clearly neither grade- nor high-school) were by far the most dramatic increase in daily rates during this time range.

How do we know this wasn't just due to increased testing? First, the daily cases have been maintaining at a level 3-4 times higher than in August. While this was indeed eventually brought down among college-aged individuals, by the time it was, it had transitioned into community spread. This is visually evident in the increasing daily rates in **Plot 2**, for ages 30-49 and 50+. Note that these daily rates went up and have stayed consistently high in our community.

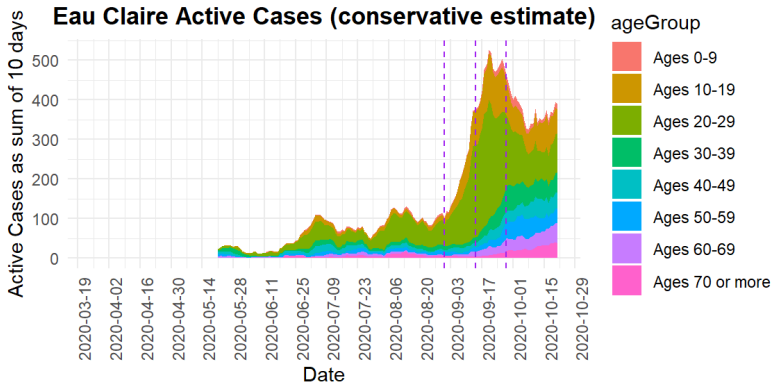
Plot 2



Active* cases in Eau Claire County (as of October 20):

That rates have risen and stayed high is perhaps even more evident in active cases. We can see that the active-case increase in the 30+ age groups was most dramatic from Sept. 14-28 (2-4 weeks after students returned to campus, lagged by the time it took to spread into the community), rising from 52 to 179 active cases over that time range. The 30+ age group (for whom COVID fatality rate is notably much higher) has continued to maintain approximately 180-200 active cases, now for over three weeks.

Plot 3



*Active cases are estimated by a 10-day prior total, which is conservative (i.e., a slight underestimate) based on conversations with Eau Claire County Health Department and CDC resources.

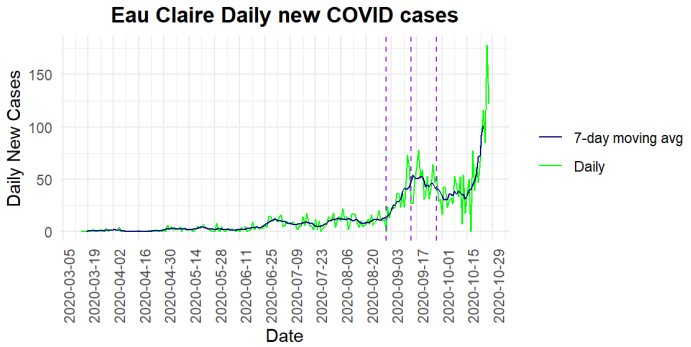
Source: https://jjkraker.github.io/EauClaireCOVIDsummary/TabbedDashboard.html, with data pulled daily from https://www.dhs.wisconsin.gov/covid-19/data.htm

Addendum: IMPORTANT - October 27 update for Eau Claire county: Please be safe.

General observations: There is a quickly-worsening situation in the area. Over the last week, we have seen an average daily rate of just over 100 per day (**Plot 1***); by comparison, the average daily rate was 39 in the two weeks before and 40 during the month of September. Not only are daily cases very high (and rising), active cases increased by over 120% (from 395 to 884) over just the last week (see **Plot 3***), and we haven't even started leveling yet. Note that this means about 1 in every 120 Eau Claire residents is a currently active case.

Hospital concerns: Hospitalization rate continues to average about 3+ new COVID hospitalizations per day during the last week. (this is 10-12 times higher than the rate in August, and about five times as high as the rate in September). This is bound to increase to an even higher rate over the next 2-3 weeks, given the current trajectory in cases.

Plot 1*



Plot 3*