RESEARCH TOWN HALL

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Vice Chancellor for Research

May 6, 2020
UC San Diego
“Return to Learn”
Coronavirus Disease 2019 (COVID-19)
Change in Daily Incidence*,
by U.S. County, 30 April 2020

Change in incidence per 100,000 per day
- Greater decline
- Moderate decline
- Plateau
- Moderate increase
- Greater increase
- 1-5 cases in the past 2 weeks
- 0 cases in the past 2 weeks
- No reported cases

Purpose of this map
Describes the trajectory of new illnesses as recently increasing, being stable, or decreasing in number

Main Findings
- Incidence rates continue to decrease in multiple counties, including hard hit areas in Louisiana and in the New York City region
- Incidence rates have recently plateaued in areas around Chicago

*Measured as the change in slope of a spline fit to smoothed daily incidence. Incidence was smoothed using a 3-day moving average. These values therefore represent the change in 3-day average number of new cases per 100,000 per day. Greater declines are ≤-1, moderate declines are >-1 to -0.1, plateaus are >-0.1 to ≤0.1, moderate increases are >0.1 to 1, greater increases are >1. Counties denoted as 0 cases in the past 2 weeks have had at least 1 case previously.

Sources: USAFacts, US Census
New Cases Per Day

The rest of the U.S.

New York City
COVID-19 Cases by Date Reported

COVID-19 Cases among San Diego County Residents
New Cases and Total Cases by Date Reported
Total Number of Cases = 4,160

- Total Cases
- New Cases

Data are preliminary and subject to change
Prepared by County of San Diego, Emergency Operations Center, 5/5/2020
County of San Diego
Daily Coronavirus Disease 2019 (COVID-19)
Confirmed Cases by City of Residence Map
Data through 5/4/2020, updated 5/5/2020

4,160
Total Confirmed Cases
(San Diego County Residents)

3,514
Incorporated City Confirmed Cases

593
Unincorporated Area Confirmed Cases

53
Unknown*

*More information may become available as individual case investigations are completed.

Some San Diego County cases have been travel-related and did not contract COVID-19 in the County. Some addresses with special addresses indicating a city may be reallocated to the unincorporated area based on their physical location of the address.

COVID-19 now has reached community transmission status, which means people may have contracted the disease elsewhere in the County. This may not necessarily be in the city where they live. These cases should not be interpreted as a manifestation of activity in any specific location. Under a community transmission status, the true prevalence of this disease may not be known as most cases are likely not diagnosed or reported.

Data Source: Epidemiology & Immunization Services Branch, San Diego County Health and Human Services Agency
Projected Deaths per Day

United States

Outcomes
- Modelled Deaths
- Reported Deaths

Range Estimates
- 2.5% - 97.5%
- 25.0% - 75.0%

Number of Deaths

Date

NB: Run Date 2020-05-01; IDD Combined
Cumulative number of infections (including recovered)

Date when probability of detecting >1 case exceeds 90% with testing rates of:

- 10%/month
- 25%/month
- 40%/month
- 50%/month
- 100%/month

Doubling time 5 days
Doubling time 7 days

Martin and DeGruttola
UC San Diego: “Return to Learn” Program

• Mitigation
• Vigilance
  – Medical case ascertainment
  – Viral shedding initiative
  – Environmental surveillance
• Isolation of Infected Persons and Exposure Notification
• Adaptability

Full University Engagement
Questions re: “Return to Learn”?

• Please use Q&A button on the bottom of your webinar screen
Looking Forward

• Current surveillance program is an interim one
• We will need to develop more affordable diagnostic technologies to have this be a sustainable endeavor
• Campus innovators working closely with CALM scientists are working together to leverage campus innovation and to bring this into the regulatory environment required by the Clinical Laboratory Improvement Act (CLIA)
Seed Funding Opportunity

• Joint ORA–EDI awards to enable inclusive research excellence
  – Awards of $5K for research-enabling activities in light of differential impacts of the COVID-19 pandemic
  – One-page justification due May 26, 11:59 pm, via https://ucsd.infoready4.com
• Eligibility: Assistant or Associate appointments/ PI eligibility
• Use of funds:
  Starting COVID-19 related activities; mitigating impact on research and creative activities due to COVID-19; aid re-start of research, scholarship or creative activity quickly; supporting grant-funded trainee research impacted by care-giving responsibilities
• Contact Miroslav Krstic or RPDS (researchdevelopment@ucsd.edu)
Launching plans to scale up UCSD research

• Campus-wide committee working to develop process and plans to scale research up as quickly as we can do safely

• Research ramp-up will be in full alignment with university’s overall plans for scaling up activity
  – A Phased approach
  – Continued commitment to maintaining remote work where possible

• Health risks associated with different types of research will determine requirements for increasing on-site activity
Continuity of Research Task Force

• Co-Chairs: Miroslav Krstic and Jim McKerrow
  – Douglas Bartlett, John Bauer, Ben Bergen, Eli Berman, Sandy Brown, Andrew Chisholm, Linda Collins, Bob Continetti, Ross Dammann, Peter Ebenfeldt, Michelle Franklin, Tracy Handel, Gene Hasegawa, Faith Hawkins, Martin Hetzer, Andrew Kehler, Nancy Kwak, Tia Levine, Eric Mah, Angela McMahon, Phil Richter, Chip Schooley, Lance Scott, Dio Siegel, Frank Truong, George Tynan, Samuel Ward, Erika Wilson, Jerry Yang + faculty, staff and student advisors

Subgroups addressing issues particular to specific types/contexts of research:
  Health/Safety Considerations, Wet Labs, Equipment/Instrumentation/Dry Labs, Clinical Trials, Non-clinical Human Subjects, Animal Research

Follow-on input, feedback for these and other areas, including Field Research, Performing and Visual Arts, Libraries
California’s 6 indicators for modifying the Stay-at-Home Order

1. Monitor and protect communities through testing, contact tracing, isolating & supporting those who are positive or exposed.
2. Prevent infection in people who are most at risk.
3. Handle surges in the hospital and health systems.
4. Develop therapeutics to meet demand.
5. Ensure businesses, schools, and child care facilities can support physical distancing.
6. Determine when to reinstitute certain measures, such as the stay-at-home orders.

[covid19.ca.gov]
Principles

• Physical and Mental HEALTH & SAFETY

• PRACTICAL ETHICS

• RETURN TO PRODUCTIVITY WITH SAFETY
  – Restart research without undue delay, with adherence to authorities’ orders

• SIMPLICITY OF PROCESS
  • transparent, consistent, easy to explain
  • minimal complexity for going from one phase to the next, or back
  • minimal enforcement; rely on new social norms (distancing, masks,…)
  • implement at unit level, to get the details right (PI, department, Research Centers)
  • flexibility within necessary parameters
“Obvious” rules (CDC standards +)

• Feel sick or suspect exposure should work remotely
• Those on-site should adhere to CDC guidelines re: hygiene, social distancing, etc.
• Use of PPE: face coverings for all; other PPE is context-specific
• SANITIZATION before/after each use of facilities, labs, equipment
• Physical distancing: safety requires that density of personnel remain low
• Work that can be done remotely continues remotely
• Students and staff are not pressured; exception process for off-site work
• Coordination within floor/building/facility to ensure safety in common spaces
Context-specific requirements

- Identified by workgroups with expertise in different contexts & types of research and creative activity. Examples:
  - All human research requires screening of research participants and staff prior to face-to-face activity
  - Wet labs would initially restrict personnel to 1 person per aisle at a time
  - Local Field/Community based research requires planning travel to site with no more than 2 people in a car pool

- If requirements cannot be met, submission and approval of risk-mitigation plan is required
Preparatory Tasks

- **PPE and sanitation materials** (acquisition by campus as needed)
- **PI’s ON-SITE PLAN** (density, sanitation, scheduling) and site safety and **approval by chairs/deans**
- **ADHERENCE AGREEMENT** to be signed by Pis and all personnel
- **Creative planning within units** to maximize research and creative activity
# Phases of scale up

<table>
<thead>
<tr>
<th>Campus PHASE</th>
<th>RED</th>
<th>ORANGE</th>
<th>YELLOW</th>
<th>GREEN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PPE, physical distancing, sanitation</strong></td>
<td>Required</td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Remote work continues remotely</strong></td>
<td>Required</td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td><strong>Remote work by vulnerable groups</strong></td>
<td>Required</td>
<td>Recommended</td>
<td></td>
<td>Not required</td>
</tr>
<tr>
<td><strong>DENSITY</strong> restriction for on-campus research, rehearsal, etc. (with safety &amp; sanitation per EHS)</td>
<td>Only essential personnel allowed</td>
<td>wet labs: 1 person/aisle other spaces ≤ per 250 sqft: 1 pers</td>
<td>wet labs: 2 persons/aise other spaces ≤ per 150 sqft: 1 person</td>
<td>None</td>
</tr>
<tr>
<td><strong>Chair/Dir./Dean actions required</strong></td>
<td>Review/Approval of on-site research plans, exception requests</td>
<td>Review/Approval of on-site research plans, exception requests; floor/adjoining facilities' plan coordination, building egress</td>
<td>Review/Approval of on-site research plans, exception requests; floor/adjoining facilities' plan coordination, building egress</td>
<td>As per usual practice</td>
</tr>
<tr>
<td><strong>PI actions needed</strong></td>
<td>Submission of on-site &amp; remote site plans</td>
<td>Submission of density management plans, SOPs for Exceptions, Adherence pledge</td>
<td>Submission/update of density management plans, SOPs for exceptions, Adherence pledge</td>
<td>None</td>
</tr>
<tr>
<td><strong>Researcher/staff actions needed</strong></td>
<td>Remote work plans, contact information to PI/supervisor</td>
<td>Adherence agreement submitted to PI/supervisor; Training if required</td>
<td>Adherence agreement submitted to PI/supervisor, Training if Required</td>
<td>None</td>
</tr>
<tr>
<td><strong>TRIGGER</strong> Campus level determination with public health considerations (state and local)</td>
<td>Shelter-at-home order instituted by Governor or by County</td>
<td>From RED: shelter-at-home lifted; campus defined low-density research with health &amp; safety standards CAN BE REVERSED</td>
<td>From ORANGE: campus further relaxes density restrictions with campus defined health &amp; safety standards CAN BE REVERSED</td>
<td>Normal functions resume (restrictions may remain) CAN BE REVERSED</td>
</tr>
</tbody>
</table>
Process

Prior to resumption/expansion:
• Planning (as above) to ensure & safety
• PIs submit completed On-site Activity Framework (via a new and improved system) to Department Chairs/Division Heads and Deans/Department Chairs for approval.
• PIs, researchers, and staff complete and sign Adherence Agreement
• PIs conduct EHS’s Start-up Process
• PIs confirm availability of PPE, disinfecting supplies

During on-site activity:
• PIs ensure the observance of density restrictions, required use of PPE
• Personnel disinfects research spaces at beginning/end of every shift, or day (whichever is more frequent)
• Campus guidelines on common spaces (hallways, restrooms, stairwells, etc.) observed
Work Groups by “types” of research

- Wet labs
- Instrumentation-intensive (dry) labs
- Performing arts
- Clinical trials
- Human subject (non-clinical) research
- Animal research
- Off site research
Actions in Process to Augment On-site Research

- Defining access to and from laboratories and restrooms
- SOPs & training for equipment operation and multi person tasks
- Exception request process (Chairs, Deans, & VCR as needed)
- Orchestrate staff PPE needs and ordering process
- Sign in/out at building entrances, floors, or individual laboratories
- Vetting outside technical personnel for repair & maintenance
- Fieldwork and community based research requiring travel to outside sites.
- Animal Facilities – surgical procedures requiring team approach.
Q&A

On the call today:

Animal Care: Phil Richter
EH&S: Lance Scott
Government Relations: Kaitlin Chell, Angela Phillips Diaz
Graduate Division: Judy Kim
Innovation & Commercialization: Paul Roben
IRB: Kip Kantelo
Research Compliance & Integrity: Angie McMahnill
Research Proposal Development: Sharon Franks
Sponsored Program Offices: Linda Collins, Ross Dammann, Frank Truong, Erika Wilson

On-line resources:

Research-related:
https://blink.ucsd.edu/research/covid-19/index.html
links to Animal Care, IRB, OCGA here
https://blink.ucsd.edu/research/covid-19/faqs.html
https://blink.ucsd.edu/research/covid-19/index.html#Guidance-from-Sponsors-&-Resear

HR: https://blink.ucsd.edu/HR/services/covid-19/
EHS: https://blink.ucsd.edu/sponsor/EHS/index.html

General information: https://coronavirus.ucsd.edu/