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**CE Instructions**

- To obtain CE credit, you must **pass the post-test** and **participate for a minimum of 50 minutes**.
- Once you've met both requirements, you can access your certificate by clicking the document icon in the Certification widget.
- Download CE instructions in the Resource widget below.



**Tech Tips**

- Console application widgets are resizable and moveable.
- Webcast is being streamed through your computer, so there is no dial-in number.
- For best viewing experience, close any applications or browser sessions running in the background.
- If your slides are behind or you lose audio, try refreshing the page. 🔄
- Submit your questions using the Q&A window throughout the program.

**NOTE:** You can find answers to common technical issues in the Help widget below.

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**Eve Cuny, MS**  
Director of Environmental Health and Safety,  
Assistant Dean for Global Relations,  
Associate Professor,  
Pacific Dugoni School of Dentistry

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# Dental Practices, Institutions and COVID-19

Eve Cuny

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## Program Objectives

- 1 Define the signs and symptoms of COVID-19 or other respiratory illnesses.
- 2 Understand which types of PPE are appropriate for standard precautions and transmission-based precautions.
- 3 Determine how to communicate critical information to patients, employees, students, and critical partners.
- 4 Describe the methods of social distancing, including self-isolation and shelter in place.

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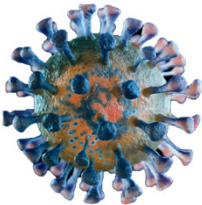
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## The Origins of COVID-19

- A pneumonia of unknown cause detected in Wuhan, China was first reported to the WHO Country Office in China on 31 December 2019
- The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020.
- Currently present in at least 160 countries, territories, or areas
- Exact source of the virus has not been confirmed
  - Coronaviruses that infect animals can become able to infect people



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## Slide 5

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**JW1** Eve, we should probably move the order of these as the social distancing is covered at the end.

Jessica Wilson, 3/23/2020

**COVID-19 in the United States**



- U.S. COVID-19 cases include:
  - Imported cases in travelers
  - Cases among close contacts of a known case
  - Community-acquired cases where the source of the infection is unknown.
- Reported illnesses as of March 24 (CDC data)
  - **Total cases: 54,453**
  - **Total deaths: 737**
- Jurisdictions reporting cases: 54 (50 states, District of Columbia, Puerto Rico, Guam, and US Virgin Islands)
- Official figures for diagnosed and presumptive cases reported to CDC

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**COVID-19 in the United States**



- Currently, certain locations report higher cases and more community transmissions than others
- All experts tell us that we are still in the early phase of this pandemic in the US, but it's not too late to take measures to slow the transmissions
  - Whether or not you are in a "hot spot" today.

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**Exponential Transmissions**

- The spread of illness from COVID-19 is exponential
- This means the illnesses will double during each given amount of time
- For example, if the growth of disease A is doubling every 3 days and you start on January 1
  - January 1: 1 infection
  - January 31 : 1024 infections
  - February 3: 2038
  - February 6: 4096
  - If it keeps doubling every three days unabated, by March 19, 67 million infections would have occurred.



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## Slide 7

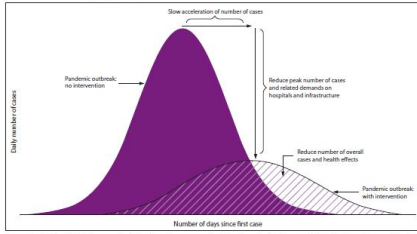
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**EC1** We will update these figures at the latest possible time--I've left them in red as a reminder

Eve Cuny, 3/23/2020

## Flattening the Curve

FIGURE 1. Goals of community mitigation for pandemic influenza



Source: Adapted from: CDC. Interim guidance for pandemic planning: community strategy for pandemic influenza mitigation in the United States—early, targeted, layered use of nonpharmaceutical interventions. Atlanta, GA: US Department of Health and Human Services, CDC, 2017. <https://stacks.cdc.gov/view/cdc/71455>.



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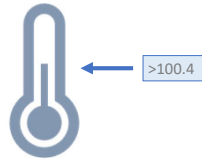
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## COVID-19 Symptoms

- Primarily, people will exhibit
  - Fever
  - Cough
  - Shortness of breath
- Symptoms usually appear 2 – 14 days after exposure
- Some people have one of these, some have multiple, and some people who have tested positive for COVID-19 report no symptoms.



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## If you or a family member has symptoms (Source: CDC)



- If you are a close contact of someone with COVID-19 or you are a resident in a community where there is ongoing spread of COVID-19, contact your healthcare provider and tell them about your symptoms and exposure
  - If symptoms are mild, you may be able to self-isolate at home and you may not need testing
  - If you have risk factors for complications, contact your healthcare provider early, even if symptoms are mild

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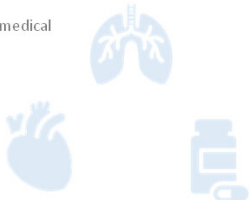
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### People at Higher Risk for Complications

- Older adults
- People who have serious underlying medical conditions like:
  - Heart disease
  - Diabetes
  - Lung disease



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### When to Seek Emergency Care



- Seek immediate medical attention for an ill person if any of the symptoms are present:
  - Difficulty breathing or shortness of breath
  - Persistent pain or pressure in the chest
  - New confusion or inability to arouse
  - Bluish lips or face

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### How is it Transmitted?

- The primary way COVID-19 is transmitted is through close (within 6 feet) personal contact with an infected person.
- Carried in droplets from the respiratory tract when an infected person coughs or sneezes.
- These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- No documentation of spread via contaminated surfaces
  - Theoretically possible
  - According to a study published this week in the NEJM, this virus is believed to survive up to 2-3 days on certain surfaces, and up to 3 hours in aerosols.
    - Carefully controlled lab settings—not necessarily duplicating what would happen in a clinical setting

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### What Can We Do as Dental Professionals?

- Access reliable information (CDC, OSAP, ADA, etc.)
- Avoid panic and rumors
- Take the recommendations from local, state, and federal public health officials seriously
- “dental facilities postpone elective procedures, surgeries, and non-urgent dental visits, and prioritize urgent and emergency visits and procedures now and for the coming several weeks”  
CDC March 20
- Heed the numerous calls to temporarily treat dental emergencies only, until this crisis is over and health officials indicate it is appropriate to resume all care.




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### Why Reduce Practice to Emergency/Urgent Care Only?

- Limit contact with potentially infected individuals
- Conserve supplies of PPE for critical medical care
- Avoid becoming infected and spreading infection to household contacts and others

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### Dental Emergencies

- Potentially life threatening and require immediate treatment to stop ongoing tissue bleeding, alleviate severe pain or infection, and include:
- Uncontrolled bleeding
- Cellulitis or a diffuse soft tissue bacterial infection with intra-oral or extra-oral swelling that potentially compromise the patient’s airway
- Trauma involving facial bones, potentially compromising the patient’s airway



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**Urgent Dental Care**

- Urgent dental care focuses on the management of conditions that require immediate attention to relieve severe pain and/or risk of infection and to alleviate the burden on hospital emergency departments. These should be treated as minimally invasively as possible.



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**Urgent Dental Care**

- Severe dental pain from pulpal inflammation
- Pericoronitis or third-molar pain
- Surgical post-operative osteitis, dry socket dressing changes
- Abscess, or localized bacterial infection resulting in localized pain and swelling
- Tooth fracture resulting in pain or causing soft tissue trauma
- Dental trauma with avulsion/luxation
- Dental treatment required prior to critical medical procedures
- Final crown/bridge cementation if the temporary restoration is lost, broken or causing gingival irritation



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**Additional Urgent Dental Care**

- Extensive dental caries or defective restorations causing pain
- Manage with interim restorative techniques when possible (silver diamine fluoride, glass ionomers)
- Suture removal
- Denture adjustment on radiation/oncology patients
- Denture adjustments or repairs when function impeded
- Replacing temporary filling on endo access openings in patients experiencing pain
- Snipping or adjustment of an orthodontic wire or appliances piercing or ulcerating the oral mucosa



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**Dental Schools and Large Dental Organizations**

- Should also follow the CDC guidance to limit care to urgent needs
- Minimize work force
  - Appoint providers on rotating basis
- Allow adjustments for providers more at risk of complications, and those with family needs (e.g.; single parents of young children with no day care)
- Faculty-provided care to reduce the number of people in the facility and duration of care
- Update infection control training, including droplet precautions and management for patients with COVID-19 exposure or symptoms



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**Equipment**

Consult with manufacturer's instructions for temporary closure if all or some equipment needs to be shut down.

- Additional steps may be needed when resuming regular operations.

**COVID-19 and A-dec Dental Equipment Infection Control**

Dear Valued Customer,


**Closure Protocols for Dental Facilities**

Please contact your dental unit manufacturer for questions related to extended storage periods of facility and start-up recommendations.

**Protocol recommendation for facilities using:**

Prior to office closure:

- Remove file
- Wipe down the cartridge
- Place in air drying bag
- Label bag with opening & put initial resolution date. Store away from direct sunlight.
- All purge lines and waste bins/liner replaced.
- Follow dental unit manufacturer recommendations for storage or periods of facility.



<https://www.a-dec.com/United>

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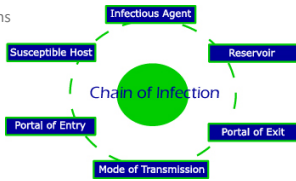
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**Steps to Take to Break The Chain of Infection**

- In the dental office
  - Standard and droplet precautions
- In public
  - Hand and cough hygiene
  - Social distancing



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## Slide 22

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**EC6** We should be cautious using the CDC logo to not appear to have taken info directly from CDC. These are summary measures -- not taken directly from CDC--I removed the logo.

Eve Cuny, 3/23/2020

## Slide 23

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**JP13** Examples of protocol for water treatment - you dont have to include these, just wanted you to see what is out there. We can hide branding if you want to use or delete.

Jennifer Pottala, 3/23/2020

**JP14** <https://www.a-dec.com/united>

Jennifer Pottala, 3/23/2020

**EC7** This is helpful, thank you. I can use it as an example and refer ppl to their manufacturers. I am fine leaving it in if you hide branding

Eve Cuny, 3/23/2020

**JP15** Hlde Branding

Jennifer Pottala, 3/23/2020

### Reducing Exposures in Dental Offices When You Must Treat Patients

- Standard precautions -- and droplet precautions if a patient has a respiratory illness
- Limit aerosol-producing procedures
- Provide **only emergency care**, and screen patients when making and confirming appointments, and again when they arrive
- Supplies of PPE for treating sick people in hospitals is critically low
  - If we use these items for non-urgent care we contribute to the risk of front line healthcare workers being left unprotected
  - These shortages currently have no end date in sight



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### Standard Precautions



- Elements of Standard Precautions and droplet precautions that apply to patients with respiratory infections, including COVID-19
  - Hand Hygiene
  - Respirator or facemask (if respirator is not available)
  - Eye protection
  - Gloves
  - Gowns
- All other standard precautions, such as sterilization and disinfection procedures, vaccinations, training, etc.

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### What Are Droplet Precautions?

- For patients known or suspected to be infected with pathogens transmitted by respiratory droplets that are generated by a patient who is coughing, sneezing, or talking
- Put a mask on the patient
- Place patient in a single room
- Don a mask upon entry into the patient room and leave it on
- Wear a respirator when treating patients diagnosed or being investigated for COVID-19
  - If supplies of respirators are limited, prioritize N95 respirators for procedures that generate respiratory aerosols and wear masks for other procedures



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COVID-19 Guidelines 

**Protect Your Patients and Staff from COVID-19:  
CDC's Recommended Infection Control Procedures**

In March 2020, CDC updated its Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings. See the full guidance at [www.cdc.gov/COVID19](http://www.cdc.gov/COVID19).

**Before patients arrive**

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Current CDC Guidelines

- CDC Guidelines are frequently updated
  - As information and needs emerge
- For dental providers:
  - No elective procedures
  - If you must treat emergencies, ask screening questions
  - If patients fall into risk categories for possible infection, consider referral to a medical center, if available




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Key Concepts in CDC Guidelines



- Limit how germs can enter a facility
  - Cancel elective procedures
  - Use teledentistry as much as possible (screen emergencies to determine if they absolutely require in-person care)
    - Use webcam or smart phone video capabilities to examine swelling, etc. before determining if patient must be seen
- Limit points of entry for larger facilities and manage visitors
- Screen patients for respiratory symptoms

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### Key Concepts in CDC Guidelines

- Isolate symptomatic patients as soon as possible
  - Set up separate, well-ventilated triage area (may be able to do this via phone triage in most dental settings)
- Place patients with suspected or confirmed COVID-19 in private room with door closed (if you must treat these patients, and have personnel qualified to do so)
- Prioritize AIIRs for patients undergoing aerosol-producing procedures (those procedures that make the person cough)




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### Key Concepts in CDC Guidelines



- Protect healthcare personnel
  - Emphasize hand hygiene
  - Limit contact with patients at triage (again, phone triage will limit contact further)
- Prioritize respirators and AIIRs for aerosol-generating procedures
  - This measure may not be feasible in most dental settings
- Implement PPE optimization strategies, when needed

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### PPE Optimization Guidelines

- **Because of the critical shortages of PPE**, interim guidance includes:
  - During this time, available respirators should be prioritized for procedures that are likely to generate respiratory aerosols, which would pose the highest exposure risk to HCP.
  - Facemasks protect the wearer from splashes and sprays.
  - Respirators, which filter inspired air, offer respiratory protection.
  - Examples of procedures that produce respiratory aerosols are those likely to induce coughing (e.g., sputum induction, open suctioning of airways)
    - Dental aerosols are not specifically mentioned

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### CDC Guidance on optimization of PPE



- This is after all administrative and work practice controls are exhausted
  - Providing only urgent care
  - Limiting people in the facility
  - Telemedicine
  - Limiting procedures in length and in spread of oral fluids
  - A full list is on the CDC website

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### Optimization of PPE

- Includes wearing a surgical mask for more than one patient encounter
- Reuse of respirators
- Other strategies, as critical needs indication
- **KEY MESSAGE:** not to be used when adequate supplies are available and not for routine procedures, only in an emergency, critical need situation when treating patients with respiratory infections



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### Additional Suggested Precautions During Pandemic



- Minimize time in waiting rooms and encourage spacing emergency patients 6 feet apart if waiting is necessary.
- Consider having patients wait in their cars to be called in via phone/text when a dental chair is available
- Exercise social distancing in the treatment areas by ensuring that patient care is provided with patients at least 6 feet apart
- When providing services in an integrated health system with medical services, consult with medical colleagues to review protocols and make necessary adjustments to the above steps as some jurisdictions may have stricter recommendations.

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## Slide 35


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**JP17** Here is a link to a person wearing a surgical mask -  
<https://canelmedical.box.com/s/p1bpkbyoc0wh5c37bdy56ri8k4ta>  
Jennifer Pottala, 3/23/2020



**What's the Difference Between a Mask and a Respirator?**

- A surgical mask is intended to protect the mucous membranes of the wearer from contact with patient body fluids
  - It may also be worn by a person with a respiratory illness to reduce the droplets released into the air when they cough or sneeze
- A medical N95 respirator filters particles to prevent them reaching the respiratory tract of the wearer
  - Different N95 respirators are used for different purposes, but during this shortage OSHA, the CDC and FDA agree healthcare workers treating active COVID-19 patients may use N95 respirators that are not labeled for medical use if medical respirators are unavailable



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**Requirements for N95 respirators**

- Employers must first institute engineering and work practice controls before resorting to PPE as a measure to protect workers
- Before an employee can use a N95 respirator, they must have a medical examination by a qualified health care provider (this includes a specific list of steps and evaluations), receive fit-testing, and receive training, including training on COVID-19
  - OSHA has modified some of the requirements and should be consulted before implementing a new program



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**What is Social Distancing?**

- CDC provides guidance on community mitigation
- Varies depending on many factors
- Currently being decided on local (city and county) and state levels
- Implementing mitigation strategies in communities with low levels of transmission may still be effective in reducing overall infection rates
  - School closures
  - Limiting social activities and gatherings
  - Reconsider nonessential travel
  - Develop work from home, and relaxed sick leave policies



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## Slide 37

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**JP16** Here is a link to a person wearing a surgical mask -  
<https://canelmedical.box.com/s/p1bpkbyoc0wh5c37bdy56ri8k4ta>  
Jennifer Pottala, 3/23/2020

### What is Shelter in Place?

- Increased efforts to distance people from each other to slow the spread of infections. Term is currently being used very broadly.
- May include:
  - Closure of non-essential businesses
  - Orders to remain at home with household contacts only
  - Only leave home for essential needs such as groceries and prescriptions
  - Limiting businesses that must stay open to essential functions, essential personnel and may impose restrictions on hours they may remain open




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### What type of PPE and Precautions Should I Use?

- On March 16, the American Dental Association recommended all US dental practices limit treatment to emergency procedures
  - This is consistent with ADA, some state and county dental associations, state boards of licensure, CDC and White House recommendations
- Consider providing phone triage of patients to determine if an in-person visit is necessary
- If the patient must be treated, ask the screening questions for COVID-19 risk.
- Provide standard precautions for patients negative for risk factors
- Patients positive for risk factors should be treated under droplet precautions




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### What Else Can We Do?

- Prepare for when normal operations resume
  - Clean and stock clinics
  - Follow any screening protocols recommended by health authorities for accepting patients and returning to work
- If you have excess stock of PPE critically needed by frontline healthcare workers consider contacting your local hospital to see if you can share the excess stock
- Continue to monitor reliable sources of information such as CDC, ADA, and OSAP




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### Resuming Normal Operations

- Some locations that quickly resumed normal public contact have experienced a second wave, such as in Hong Kong
- When it's time to return to normal operations
  - Check equipment to ensure it's functioning properly
    - Test sterilizers with a BI
    - Test waterlines
  - Reinstall or replace disposable filters (e.g.; waterline treatment devices, evacuation filters in dental units, compressors, amalgam separators, etc.)
  - Consult with equipment manufacturer for specific protocols




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### CDC COVID-19 Guidelines for Businesses

Dental facilities are healthcare settings and businesses

- Educate employees about how to reduce the spread of COVID-19 using nonmedical language
- The virus is thought to spread mainly from person-to-person.
  - Between people who are in close contact with one another (within about 6 feet).
  - Through respiratory droplets produced when an infected person coughs or sneezes.
  - These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- Hand hygiene and cough etiquette
- Clean and disinfect touch surfaces




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### Communication

- During times of uncertainty, people need communication and reassurance
- The way you communicate may vary depending on the size of your organization and your current electronic resources
- For a small dental office:
  - If you have a website, provide updates of importance to patients
  - Have regular calls with team members to discuss current situation and adjustments to existing interim plans
  - Review current guidelines from CDC
  - Ensure you are complying with any state health authority orders, which may be more stringent than CDC guidelines


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**Large Organizations and Schools** 

**Leadership activities**

- Develop a crisis leadership team to address all critical operations
  - They can have separate teams to work on their specific areas (e.g. academics, clinical, HR, public safety, etc.), but report back to the leadership team
- Stay in touch with networks to see what we can do on a national level
  - Provide input to boards of licensure regarding exam requirements
  - Provide input to accreditation body regarding how to support students but ensure competent practitioners
- Develop contingency plans for different time frames and scenarios (e.g. closure times, additional waves requiring closure later, summer make-ups, etc.)
- Coordinate activities with parent university or college, and other departments (e.g.; medicine)
- Provide regular communication to students, faculty, staff and patients (e.g.: daily updates, tips and helpful information for internal, and updates to patients via email and website)

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**Schools of Dentistry and Dental Hygiene**



**Faculty activities**

- Prepare to deliver course content electronically
  - Consider preparing for longer than you think you will need
- Have departmental online meetings to keep everyone on the same page
- Review and update materials for the coming year
  - Update on learning management system
- Complete online continuing dental education
- Continue working on scholarly activities (literature reviews, preparation of manuscripts, etc.)
- Continue collaborating colleagues using electronic resources

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**Large Organizations and Schools**

**Staff activities**

- Check phone messages and return calls
- Review department policies and update documents and protocols
- Stay in touch with supervisor (supervisor to provide support and ideas for work from home tasks)
- Be flexible-work with supervisors to identify tasks that can be done by staff that otherwise do not have work to take home
- Provide support to other departments



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Communication for Large Organizations and Schools



- Establish standard lines of communication and use them consistently
  - Web page—notices and FAQ
  - Emails
  - Automated messages to patients
  - Outgoing phone messages
- Continue external communication
  - Local health department advisories
  - Professional organizations—both for information and to organize advocacy efforts

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Questions?

**CE CREDIT NOTICE**

- To access the post-test or certificate icon after the live program, you will need to wait 10-15 minutes to log back on and view again.
- Don't forget to download the CE instructions from the resource widget below before the live Q&A session concludes.

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