Covid-19 update May 14

Teams Meeting

1. From the ChristianaCare internal communications newsletter
   1. ***Dashboard***
      1. ` [COVID-19 dashboard](http://dshcctabdev1/#/site/CSIM/views/COVID-19Analytics_15856178120480/COVID-19AcuteCare?:iid=1)
      2. Status quo – inpatients plateaued for the last three weeks. Vent utilization stable
2. Overview of epidemic
   1. [Overview of Covid impact on healthcare as a system](http://www.healthbox.com/blog/how-will-covid-19-change-healthcare-over-the-next-18-to-36-months/?mkt_tok=eyJpIjoiWVdFNVpXSTFZakptTkdGaCIsInQiOiJ1VUgyQnlWY1JMWGpuWjVnbTF2SjNaSTZKM3hqazRyVCt5Q0hkTFp6Y3Fwckt0WXdcL3FaajdpQ0RjR3lYc3dUbHUyaG5Yd0RyK29ZTkk4Y1RKSHRjQ2JXSDAremx6MzgzZHF0SGpTaUd1SHN4YXM2YVVmTzFhU1RXajRXTVZvWTcifQ%3D%3D) Well worth the quick read
   2. [Unexpected gap in system](https://www.nature.com/articles/d41586-020-01355-z?utm_source=Nature+Briefing&utm_campaign=efb5ca752c-briefing-dy-20200511_COPY_01&utm_medium=email&utm_term=0_c9dfd39373-efb5ca752c-43410617). Lack of autopsies
   3. [Good overview of what’s known about the virus and the body’s response.. Current as of May 4](https://secure-web.cisco.com/1nOxDdbsohr3QVv8bcdXL-BAbpwd6m-I7jxVcVU-KrooulhBX6p_mDr8hs77FC77F_Sj4on_ijgwm1dtehxUCaolXdnJqjGxvCYLYpNealpeRh-GuSLpfL8qzIiZyESknRe1sdj6-uBJm_rnhpl8nYQTetFUhC6kHFjnjaIotkZNh2QNXymRljDYpzt2Rcws-0Zzz8RJDIfMO0DAhNv6dv_G0nrIs8BAJYf5F_tGB68j6-n3qYfTYiLh6ZN88uMzKUfyM0WejahvRnzuKl_mTibJlxSXck5WlkSh4cK9go4IUwAn8FvINfYUWFW9rafa7hJvjRhEvITu04hfxUD7FMw/https%3A%2F%2Fwww.nature.com%2Farticles%2Fd41586-020-01315-7)
   4. Interesting article on the types of vaccines in development
      1. <https://www.nature.com/articles/d41586-020-01221-y>
   * [Antigen testing coming online – think of it like a strep test.](https://secure-web.cisco.com/1paCL6AOk8CdgVY6JnHSo7BZoM-_mqn1Xn6R8ypRuDuOPlU2YZzX4NTt1YKxlm7z_IbP3BeC6J8ZOW9WOa3bixvn48U2RRFoaAp9s-cik5RAEoOGY4K_LfLj3tuyQMW6QkUczOOZtPHOxVDkBlCavk8LCp6j4MszIYlWLK8N_0N3r2-0lgy9v9iB3j_wk0-JxcF-vopkSRX_pbrILbKBt1RERwjuwxLF81H_H--9reYPC5ABRDNOlOUqJ9QWYGCEAQb5uSreLdMyVpbYNxcpc9N0xwfShxH6mVQOZQJQLddqHdp9VW9MxfYyaIKxUuktq3EsCDOKagrJvaH2GnuEUgszhPwn1JWGbRueI1DIIRYk/https%3A%2F%2Flink.360dx.com%2Fclick%2F20282669.12501%2FaHR0cHM6Ly93d3cuMzYwZHguY29tL3JlZ3VsYXRvcnktbmV3cy1mZGEtYXBwcm92YWxzL3F1aWRlbC1yZWNlaXZlcy1maXJzdC1mZGEtZW1lcmdlbmN5LXVzZS1hdXRob3JpemF0aW9uLXJhcGlkLXBvYw%2F5e80faba954fcf7c3e781f4cB9879d93c)
   * Antibody testing
     + FDA [now requires application for emergency use authorization](https://www.medscape.com/viewarticle/929925) from test makers.
     + diseases in the next 10-15 years.
   * Free resources from Elsevier

* Health Hub ([https://covid-19.elsevier.health/](https://secure-web.cisco.com/1Mq4T0RH2jNw33DharJ7Gv_891ejK-vdfx1dJ5Vva1WZTmbarUtZQCeQBvdZ0x41Ac0FVmDuH3NZOEl1I2Cz4QF0KNhixcY7FPqCGLO9yeN6S6O2io5pdcoEZ_o0tf7_aTW0mM_anb7eVJmrR6aA8pRGRTCbQoGIFT2LxKW5eZnrpja-6-OwT7AKJQeEiMa1RZCBAG5Odwt4TEiz2eEXzQ5EI76LH9eNpHcGs9HX5qfKOQg9-crHeFsPqZbY-DPUozRHU8igsgDoBzajfmuA_32CHbLxGVQArFcfUVFToJ_CwEVpquk1BYUn7eLqJfMHl1cTyMjQ6ma64s5yKf3tJPw/https%3A%2F%2Fcovid-19.elsevier.health%2F)):  geared towards practicing clinicians and provides clinical practice toolkits, refreshers and mental health resources
* Elsevier Novel Corona virus site ([https://www.elsevier.com/connect/coronavirus-information-center](https://secure-web.cisco.com/162Re7UGAyGDEivSVh9zz4AMqhYxDfJj1PH6_6GpTSXiGXa7Vg2ZOU49yx22QYm6iqVpxcTC0ummGmWj20s8DH-_JIdRpAnpwj7Q1_-tOveE1bnTC0mpDtQxtNybuqhVuAGP9zBlIddfeNpW4HuEM_rrfdDvLVHezdXDRtaevZhvBabTYCpO5jAKFEuZ4Xj9th5IpiOX-4BaVDWFuK54RoM1KQpNr1j1sqBXOfA7sJEyJgE6A9JiqKPVEBtkdlGfqJa86dkEIyg7AokFdAvqmmhS8bG7IJh5ViU5Mizg_BpEP74XNy9xu0iu-ObNwxG7gfa3dtP4oJTHayyGskpGiGA/https%3A%2F%2Fwww.elsevier.com%2Fconnect%2Fcoronavirus-information-center)): main site we launched in January, contains some stuff from health hub above but also a vast amount of COVID-19 related research articles, book chapters, drug discovery, etc.
* Research Hub ([https://www.elsevier.com/research-platforms](https://secure-web.cisco.com/1ny1XtjPmgvIHgGiX6DFc_4nxObUXoI9Nnui60zF6BzdZxi1abNDT4kn--hZOk0ePLqH9HOE8kCvNfZoZW6NyRaqxvRuIXZ-QUcXNcVe9LBIounjI6yNdVyU4vIEsk4q6S42HfKAdlh5SOtnnUp2GrKwszz-Ktkz5_gKbowVfUvPPdYNEFwYAWgyPj4skJMb5tNnjnpatcJKsoz1KZwYi_qaJjzgPQl5HbpHQn2D8ckpcrRRCkBhDQ9UAl3bhF0ZCmBKZEc0Zretv_5jCakkDY1kFcwtFiuM2vMJJXShLWll_qkUwy8zaELXJsvZgAlTztBDPmre3QnPx9Ek8fgZAAw/https%3A%2F%2Fwww.elsevier.com%2Fresearch-platforms)) geared towards clinicians who want to do research on COVID

1. Restart of surgery
   1. Surgical posting at ChristianaCare is still restricted until June 1. Past June 1 will depend on a number of factors including staff, PPE, and bed space availability.
2. Preoperative testing
   1. No commitment to standard pre op testing yet.
   2. I have continued the discussion with Marci Dress and others in infection prevention about the availability of tests and the utility of testing presurgical patients. As discussed, this is a moving target given the variability of the test, the supplies of reagents etc.
   3. A pre op test will not change the PPE requirements in the room. Use airborne for all intubations. A negative test just means that test did not show viral rna, it doesn’t mean the patient doesn’t have it.
   4. Interesting phenomenon in employees returning to work. They are showing positive nasal and NP swab tests longer than was anticipated. Because these are PCR tests which work by amplifying viral RNA, it is not clear if they remain infectious. CDC is changing its guidance to choice of symptom based, time based or test based. Christiana stiller quires negative tests to enable return to work.
   5. From the [CDC guidance](https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html):  
      *Decisions about return to work for HCP with confirmed or suspected COVID-19 should be made in the context of local circumstances. Options include a symptom-based (i.e., time-since-illness-onset and time-since-recovery strategy) or time-based strategy or a test-based strategy. Of note, there have been reports of prolonged detection of RNA without direct correlation to viral culture.*
3. Use of N95s
   1. N95s have been removed from the intubation boxes. 15 N95s were taken from the boxes in the last week without recording who took them or why. Since everyone has an N95 while working and is expected to wear it regardless of the type of case that you have been working with, use from the intubation boxes should not be this high.
   2. A limited amount is available in the lock box in the office Please continue to sign them out so we can track usage.
   3. We are looking at removing the lockbox and instead putting N95s in the Accudose in PACU. That will make it easier for you to access the masks and your use will be automatically logged.
4. Machine Filters
   1. HME filters, the ones bundled with the circuits are sufficient for all cases.
   2. Hepa filters, if available, are preferable for known Covid cases but the HME filters are actually superior to N95 s
5. Intubation/ Extubation
   1. Updated guidelines that simplify PPE for intubation and presence in room
      1. If the patient is Covid +, PUI or emergent with no opportunity to screen then all people in room wear N95 or PAPR (not both)
      2. **Do not throw out your N95. Continue to use it.**
      3. Pts who are asymptomatic/screen negative are treated like regular surgical patients. If you are wearing an N95 all day, continue to do so and explain to staff in room that is what you are doing. They can wear standard surgical mask.
   2. Please do everything possible to avoid taking patients to PACU on T piece. Hold the patient for extubation in the OR and/or decide on an alternate destination for the patient should they require the vent.  
        
      While protocol calls for NON covid patients to be treated with standard precautions, PACU staff are nervous and need time to adjust. Clinical leadership are speaking to their counterparts in the PACUs to agree on workflow.
   3. Trachs are being done open/in the OR to minimize aerosolization compared to percutaneous. This protocol was established with input from trauma/surgery/anesthesiology/Ent and MICU.
   4. Extubations – Please warn staff in the OR that you are about to extubate. If you are extubating a possible Covid patient, please use plastic shielding.
6. PAPRS
   1. PAPRs can be requested from the equipment room
      1. Christiana 733-2765
      2. Wilmington 320-4112
7. ORs and Procedure areas
8. Donning and Doffing info
   1. Feedback from Covid positive intubations reveals that our staff’s doffing habits are subpar. **Propper doffing PROTECTS YOU**. Please use the nursing staff positioned outside the rooms to assist you in doffing. Perform hand hygiene after every piece of equipment comes off.
   2. Remember - the N95 protects you, the surgical mask protects other people. Wearing the N95 on your forehead, around your neck, casually placed on the lunch table etc. makes it more likely you are contaminating yourself by contact with the exterior surface of the mask. Doff properly and place in a paper bag or Tupperware container.
   3. Conserve PPE. You should be using a face shield and unless your N95 is soiled, it should be reused/maintained even after interaction with Covid+ patients.
   4. Review of PPE donning and doffing procedures put together Friday evening by iLead and RRT group. We are working on getting these to rotate on the education screen in the main lounge.
      1. Donning Contact and Droplet PPE: <https://vimeo.com/397544513/40d240bb7c>
      2. Doffing Contact and Droplet PPE: <https://vimeo.com/397541526/ef6b376c85>
      3. Donning PPE with N95 respirator: <https://vimeo.com/christianacare/review/397526462/0bff7c41de>
      4. Doffing PPE with N95 respirator: <https://vimeo.com/christianacare/review/397524368/e6d53bc57c>
      5. Donning PPE with PAPR: <https://vimeo.com/397549095/485b5b4c13>
      6. Doffing PPE with PAPR: <https://vimeo.com/christianacare/review/397551932/c273be218c>
9. Supply Chain