Hello!



Lessons Learned: It's not just about COVID-19!

Lynnette Savaloja Pineault, MBA, SCT(ASCP)

Laboratory Operations Manager Medical Laboratory and Pathology Services Regions Hospital, St. Paul, MN

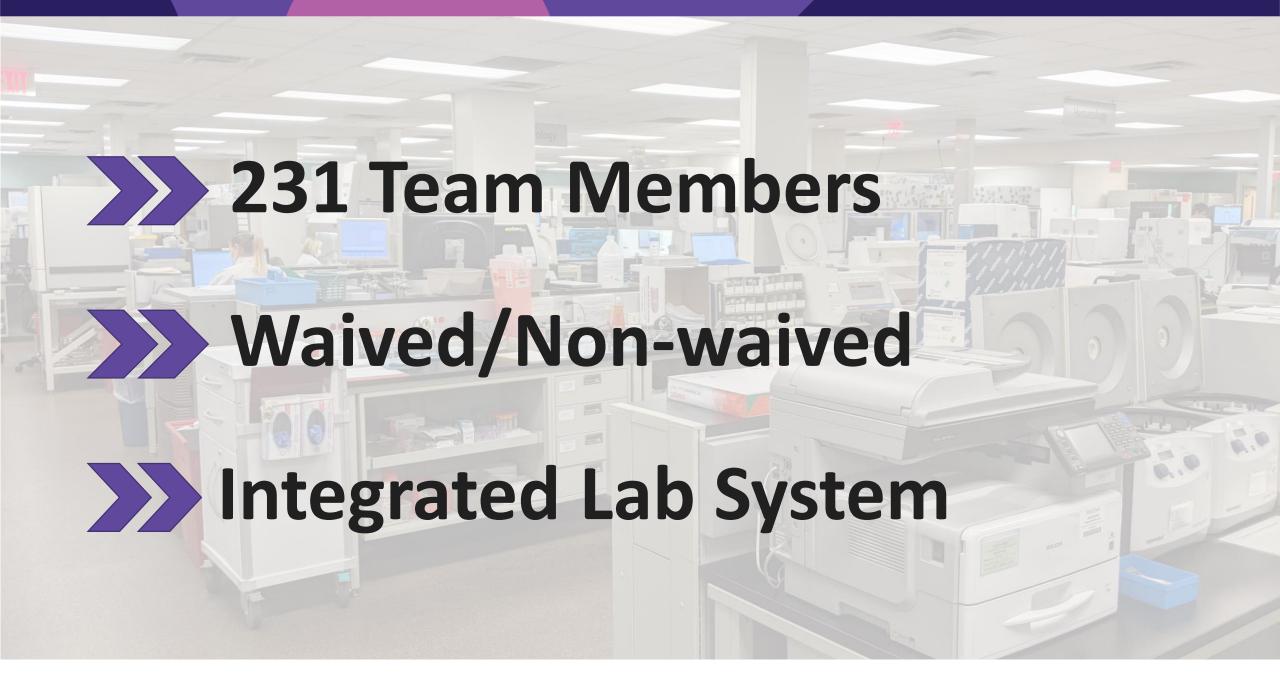


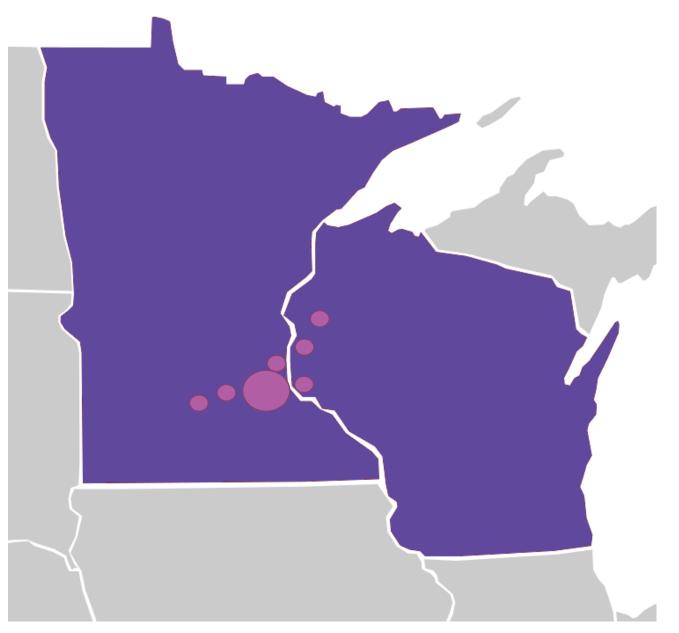


About Regions Hospital and Laboratories









- 90 Hospitals and Clinics
- One System Micro Lab
- Two System AP Labs

COVID-19 and Continual Compliance

Surge Plan Example



Regions Lab Surge Plan

Surge Plan Definition: Planning to provide adequate patient services and care during events that exceed the limits of our normal level of staffing and service.

MDH Surge Plan Tier Definitions

Tier 1 (Conventional)

Usual resources and level of care provided

Tier 2 (Contingency)

Provision of functionally equivalent care that may incur a small risk to patients. Care provided is adapted from usual practices (boarding CC patients in PACU, using less traditional but appropriate resources).

Tier 3 (Crisis)

Disaster strategies used when demand forces choices that pose a significant risk to patients but is the best that can be offered under the circumstances (cot-based care, severe staffing restrictions, or restrictions on use of certain medications or resources)

Surge Plan Categories/Sections

- Staffing
- Standard of Care
- Supplies
- Space

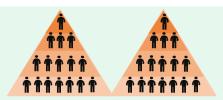
Regions Lab Surge Plan Triggers

Trigger Definition: The event or action that will signal us to move to the next tier in our surge plan.

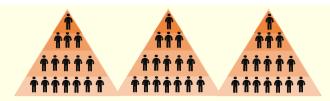
Laboratory Covid-19 Trigger Overview											
Tier 1	Tier 2	Tier 3									
At full staffing, maximizing scheduled resources to meet all Service Level Agreements: • Morning Draw completed at 0800 • Result TAT met • Morgue a normal capacity • Blood Bank standard inventory	 Morning draw exceeds the number of LSTs/Techs scheduled, or there is a significant delay in meeting TAT expectations: Additional staff moved from other sections to support Client Services. Reduce hours in Outpatient Blood Draw (OPD) and other areas Batch testing, as needed. Reduced workload in AP Morgue shelves built and overflow plan activated Blood Bank at reduced inventory (2-3 days on hand with resupply issues) 	 Inability to maintain all routine services; services suspended to meet COVID-19 patient demands. All staff who can perform phlebotomy moved to Client Services OPD closed Some Micro/Manual testing suspended AP staff available for support tasks Morgue contingency overflow activated Blood products issued based on the Crisis Standards of Care (<2 days on hand with no ability to resupply) 									



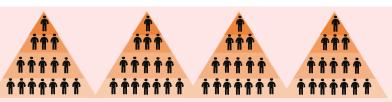
ICU/ER Beds



ICU: 0-60 beds ED: 0-54 beds



ICU: 61-118 beds ED: 0-54 beds



ICU: 119-134 (Max 441) beds ED: 55-95 beds/Recliners

Lab Staffing

<u>Tier 1 Model – Normal Weekday Staffing</u> Client Services/Core/Micro

- Day Shift 36 Techs, 23 LSTs, 2 LST/Tech
- Evening Shift 16 Techs, 7LSTs, 8 Tech/LST
- Night Shift 8 Techs, 7LSTs

AP (Cyto/Histo/Gross/Admin)

• 29 bench staff

<u>Current (Low Vol) Weekday Staffing</u> Client Services/Core/Micro

- Day Shift 28 Techs, 17LSTs
- Evening Shift 9 Techs, 6 LSTs
- Night Shift 4 Techs, 4 LSTs

AP (Cyto/Histo/Gross/Admin)

Tier 2 Model

- Reduce staff in OPD from 5 to 1
- Divide LSTs into two groups:

Non-COVID-19: 3 LSTs for C5/C6, C9 and BH/Gillette/Capital View

<u>COVID-19</u>: 7 LSTs, 6 Techs – 1 LST and 1 Tech for each tower floor, 1 LST to cover SDEX, Pre-op, STCU and OPCU

- Additional LSTs for ED and other non-tower locations.
- Core 3 staff to cover tower (see above)
- Micro 3 staff to cover CS benches
- Will call in staff to staff up, if needed.
- TS and Leads moved to cover bench
- Nursing pool trained on iSTAT

Tier 3 Model

- · Close the OPD
- All Core and Micro Leads/TS working benches
- · 3 Evening staff moved to CS
- 3 additional Core staff moved to CS
- 3 Micro staff moved to CS to relieve desk
- Can train Core staff and nurses for draws JIT as needed
- Coordinate with ED to support (2 LST on day and evening shifts and as needed on nights)
- POCT staff to provide JIT training as needed

Scope of Service

- All current Service Level Agreements met
- May have increased isolated TAT at higher volumes
- Some tests may be batched (Micro, Core) based on need/volumes
- Testing panels for COVID-19 patients may increase volume of some automated tests
- TAT increased for other routine testing

- Micro Suspend/send out Mycology, AFB culture reading.
 Continue AFB smears for respiratory TB orders. Monitor blood cultures, reduce incubation to 4 days with Med. Dir. and IP approval.
- Core Suspend Toxicology, TB Gold, Special coagulation, flow cytometry at direction of Med. Dir.
- Non-urgent AP procedures suspended
- TAT further increased for routine testing

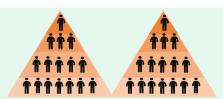
Laboratory Leadership Scheduling										
Tier 1	Tier 2	Tier 3								
 Normal Leadership Team Day Shift Staffing: 1 Director 3 Managers 5 Supervisors 13 Technical Specialists 1 Lead PA 5 Leads (Micro) 1 Pathology Support Coordinator One charge tech for Core and Micro assigned daily for each shift	In addition to the charge techs and supervisor on call, a manager will be available for call on weekends.	In addition to Tier 2 support, a manager and Supervisor will be on staff for day and evening shift, 7 Days/Week.								

TASK TRACKER	Return to Dashboard
	Netari to bashboard

	NC COTTL C	U Dasiibuaiu			
TASK TITLE	STATU S	PRIORITY	OWNER	PERCENTAGE OF TASK COMPLETE	COMMENTS
Identify HR considerations associated with changing staff duties	×	Tier 2 Contingency	SS	75%	shifts, staffing bonus, overtime approval, staff working outside
Establish staff list of core competencies, special skills and contact in		Tier 1 Conventional	BA,KE,LPS	75%	Need to update phone numbers for CS and AP, also need to add Micro
Identify critical staff positions/roles to maintain required services, pg. 17 BCP as a starting point		Tier 2 Contingency	BA,RN,KE	75%	Define Position/Role, What duties need to be trained, Who can be trained, Abbreviated trainers, checklists, procedures. LST role, Blood Bank, Sendouts, Culture desk
Establish leadership list for essential duties for lab oversite		Tier 1 Conventional	LP	90%	Start with Meeting list, add duties, roles and coverage, assign three deep. Need emphasis on CLIA Oversight
Create tasks lists for staff to do when low test volumes	×	Tier 1 Conventional	Sups	75%	Create list of tasks for low test volumes, prioritize example: AP Task Tracker
Inventory QSA activities		Tier 3 Crisis	TS's	75%	Classify activities (eg temporarily suspended, decrease freq, done as exception, no longer needed) Use for task reassignments and/or id ones needing policy exceptions
Identify staff willing to work in the hospital labor pool or reassigned	×	Tier 2 Contingency	Sups	100%	<u>Labor Pool List</u>
Develop JIT Training materials for iSTAT	×	Tier 2 Contingency	RN	75%	
Develop JIT Training materials for CS duties	×	Tier 2 Contingency	ВА	75%	
Train lab staff on iSTAT	×	Tier 2 Contingency	ВА	75%	
Train nursing staff on iSTAT		Tier 3 Crisis		100%	Plan is in place if needed
Train lab staff on phleb, EKG and other CS duties.		Tier 2 Contingency		100%	Plan is in place if needed
Train nursing on pheb, EKG and other CS duties		Tier 3 Crisis		100%	Plan is in place if needed
Determine what benches can be combined	\boxtimes	Tier 2 Contingency	Sups	100%	
Review and Updated Call Out Roster	×	Tier 1 Conventional	ALL	100%	
Dashboard Staffing Supplies Space St	andard o	of Care N	Morge Plan	ning (+)	



ICU/ER Beds



ICU: 0-60 beds ED: 0-54 beds



ICU: 61-118 beds ED: 0- 54 beds



ICU: 119-134 (Max 441) beds ED: 55-95 beds/Recliners

Lab Staffing

<u>Tier 1 Model – Normal Weekday Staffing</u> Client Services/Core/Micro

- Day Shift 36 Techs, 23 LSTs, 2 LST/Tech
- Evening Shift 16 Techs, 7LSTs, 8 Tech/LST
- Night Shift 8 Techs, 7LSTs

AP (Cyto/Histo/Gross/Admin)

29 bench staff

<u>Current (Low Vol) Weekday Staffing</u> Client Services/Core/Micro

- Day Shift 28 Techs, 17LSTs
- Evening Shift 9 Techs, 6 LSTs
- Night Shift 4 Techs, 4 LSTs

AP (Cyto/Histo/Gross/Admin)

15 bench staff

Tier 2 Model

- Reduce staff in OPD from 5 to 1
- Divide LSTs into two groups:

Non-COVID-19: 3 LSTs for C5/C6, C9 and BH/Gillette/Capital View

<u>COVID-19</u>: 7 LSTs, 6 Techs – 1 LST and 1 Tech for each tower floor 1 LST to cover SDEX, Pre-on, STCU and OPCU

- floor, 1 LST to cover SDEX, Pre-op, STCU and OPCU

 Additional LSTs for ED and other non-tower locations.
- Core 3 staff to cover tower (see above)
- Micro 3 staff to cover CS benches
- Will call in staff to staff up, if needed.
- TS and Leads moved to cover bench
- Nursing pool trained on iSTAT

Tier 3 Model

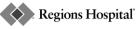
- · Close the OPD
- All Core and Micro Leads/TS working benches
- · 3 Evening staff moved to CS
- 3 additional Core staff moved to CS
- 3 Micro staff moved to CS to relieve desk
- Can train Core staff and nurses for draws JIT as needed
- Coordinate with ED to support (2 LST on day and evening shifts and as needed on nights)
- POCT staff to provide JIT training as needed

Scope of Service

- All current Service Level Agreements met
- May have increased isolated TAT at higher volumes
- Some tests may be batched (Micro, Core) based on need/volumes
- Testing panels for COVID-19 patients may increase volume of some automated tests
- TAT increased for other routine testing

- Micro Suspend/send out Mycology, AFB culture reading.
 Continue AFB smears for respiratory TB orders. Monitor blood cultures, reduce incubation to 4 days with Med. Dir. and IP approval.
- Core Suspend Toxicology, TB Gold, Special coagulation, flow cytometry at direction of Med. Dir.
- Non-urgent AP procedures suspended
- TAT further increased for routine testing

	HISTOLOGY/ GROSS ROOM	CYTOLOGY	PATHOLOGY ADMINISTRATON				
Triggers	Normal weekday sta						
Triggers	Reduced OR/Radiology schedules. Reduction of visits in clinics/specialty co	enters/other ambulatory locations	AP caseload Reaches Tier 2				
Staffing: Unscheduled staff are available for support roles in other areas of the lab or labor pool.	 Reduce Gross room to 2 PAs Reduce Histology staffing: Days – 3 HTs Evenings – 1 HT Nights – 2 HTs 	 Reduce Cytotechs to 2 Reduce prep staff to 1.5 	Staffing based on volume, outside requests.				
Scope of Service	 Coordination with OR for COVID19 protocol on gross consults, frozen sections. Processors batched based on volume 	More coordination required for scheduling of ROSE with reduced staff	Unaffected				
Triggers	OR conversion to COVID rooms: Only emergent (non-scheduled surgeries) surgical case performed Significantly reduced caseload to Histology.	Radiology restricts procedures to critical cases only	AP caseload Reaches Tier 3				
Staffing See Tier 2 note	 Reduce PA to 1 Reduce Histo Staff to 2-3 Suspend 24 hr services in Histology (reducing service hours) 	 Reduce Cytotechs to 1-2 based on radiology schedule Reduce processing staff to 1 	Reduce path admin staff to 1-2 based on pathologists' schedule.				
Scope of Service	 Prioritizing Critical Services: Surgical case with time constraints (lymphoma, breast, esophagus, gastric) Ancillary biopsies with time restraints (breast, upper GI biopsies) Critical frozen that could alter surgeries (including r/o ectopic cases) Reduce processor run schedule to 1/day Batching of IHC stain requests TAT decreased for non-complex case. 	 Prioritizing Critical Services: Batch Pap processing based on volume Pap test TAT is increased Limited ROSE/collect and send process implemented. Staffing: CT may process in absence of prep staff 	Request for materials (consult/second opinion) may be delayed				



Q

Collab Spaces, Resources, Teams, Topics, COVID-19,

myPartner / Laboratory

Laboratory

Company: All | Location: All | Union: All union & non-union colleagues

Our employees include Pathologists, Pathologist Assistants, Medical Laboratory Scientists, Me

Refer to the <u>Laboratory Test Catalog</u> for test details, including specimen collection requirem specimen transport, testing information, and turn around times.

Our subsites

HPMG Central Lab and Clinics

Methodist H

Hospital Priority Card Workflow

In Clinic Priority Card Workflow

Drive Up Priority Card Workflow

COVID-19 Specimen Collection Guide

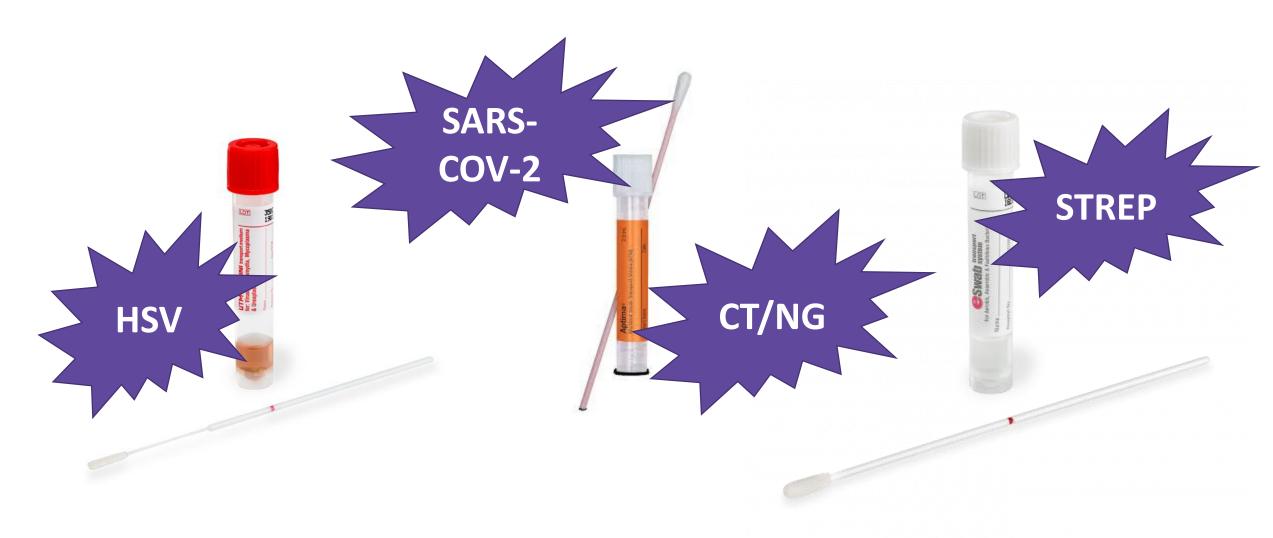
COVID-19 Lab Testing Processes

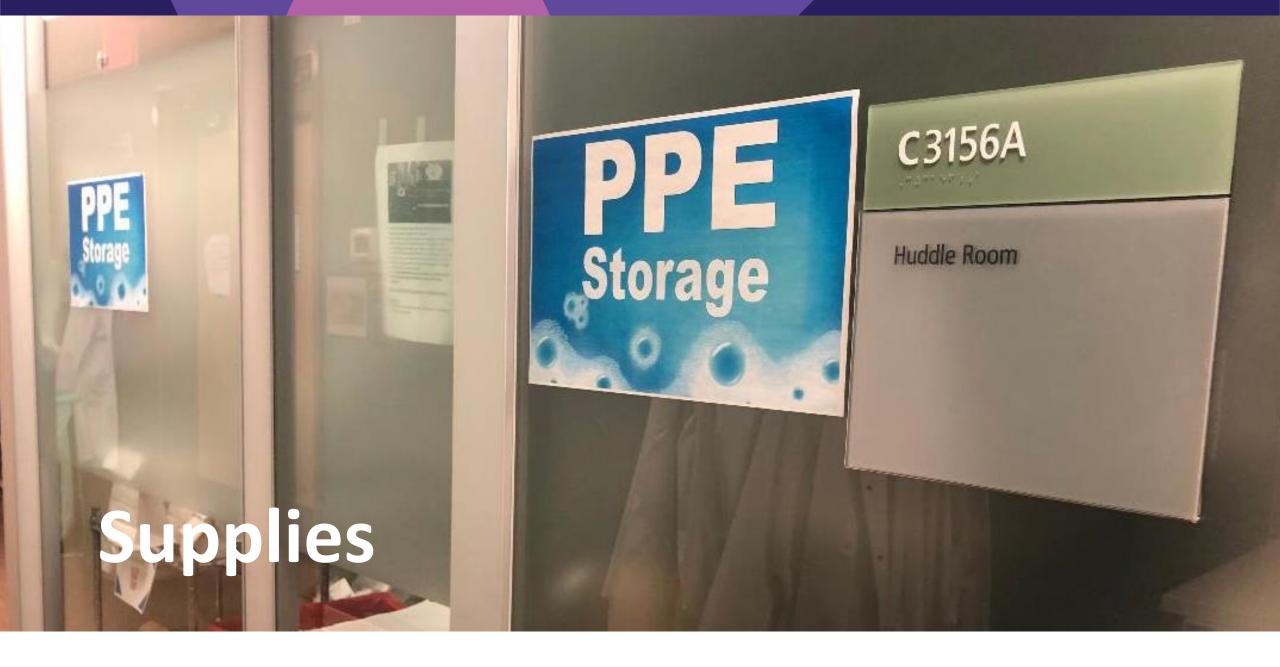
COVID-19 Specimen Rejection Criteria Add page to My Links



ations

Popular Links + Medical Links + My Links +





ICU/ER Beds **ED: 0-54 beds**





ICU: 61-118 beds **ED: 0-54 beds**



ICU: 119-134 (Max 441) beds ED: 55-95 beds/Recliners

Supplies

- Supplies monitored in intervals determined by testing bench and available storage.
- 29 Phlebotomy Carts
- EKG machines on all units
- iSTATS available on all units

- · Increase inventory with testing volume
- Increase frequency of inventory monitoring
- Engage supply chain on pending on orders
- Order additional inventory for tests identified as higher volume due to COVID19: iStat, BG, CRP, Ferrit, LDH, Trop, BNP, Procalc, D-Dimer, CBC...
- Vendors providing weekly updates on supply usage and inventory status.
- Determine alternate supplies, if needed
- Blood Supply Shortage reference crisis standards of care documents
- 5 additional iSTATS available for floors, if needed

- Review test menu and reduce testing as needed and approved by medical director to conserve reagents.
- Add 1 iSTAT and 2 Accucheks to ED
- Blood Supply Shortage reference crisis standards of care documents

Space

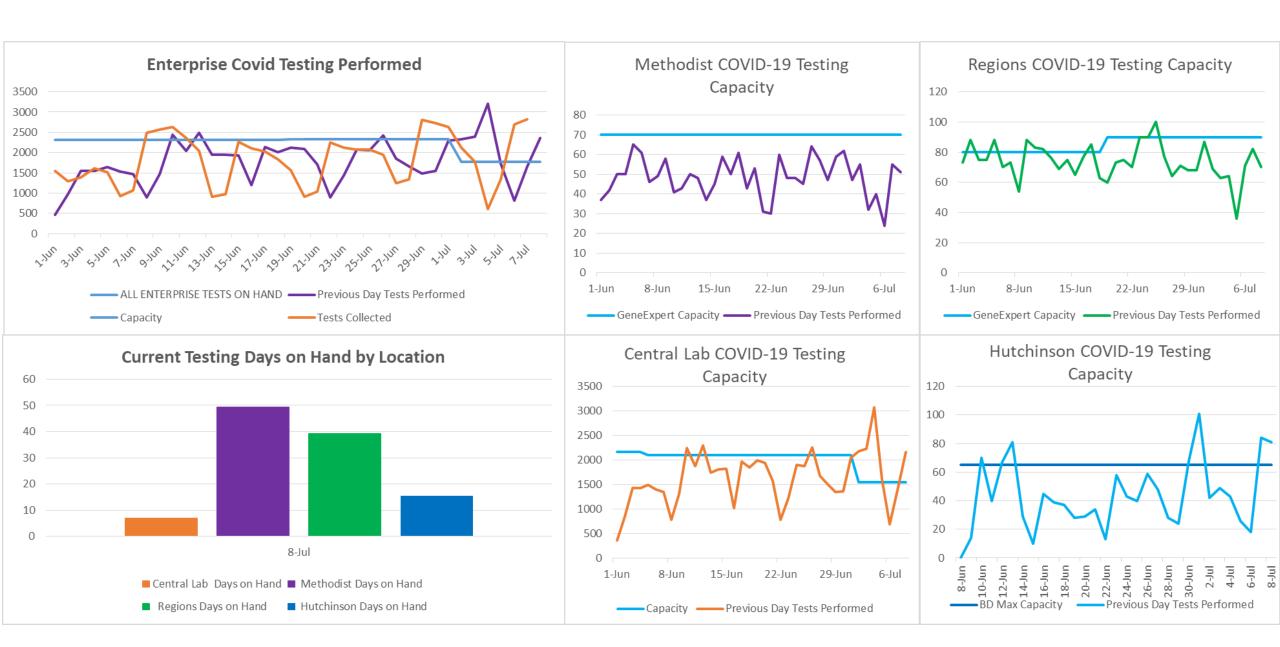
Space utilized as currently allocated

- Micro-Monitor hood space and watch for bottleneck of work
- Cytology hood available, if needed
- Storage available in AP locations

- Micro-Move culture desk to a different hood in order for GeneXpert to have a dedicated hood or move the GeneXpert to the counter by Molecular hood.
- May be able to offer OPD and other lab spaces for use by other departments, if needed.

20

DATE	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	n 17-Jun	n 18-Jun	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun
ALL ENTERPRISE TESTS ON HAND																											
Capacity	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315	2315
Previous Day Tests Performed	470	981	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Tests on Hand	34628	33141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Days on Hand	15	14	0	1	'	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0
TOTAL RAPID TESTS ON HAND - MH/RH				1		F	المه	110 01	Jaul	ator	for	Ent	250	100	Con	two l	Lab	and	Day	:a /	A 411/	ALIV.	toci	ing			4
Capacity	150	150	150		4	1 1	.OII U	D Ce	ICUIT	aleu		⁻ Ente	3101	ise,	cen	urair	Lab	anu	Kap			Killy	tesi	ing.			.50
Previous Day Tests Performed	110	130	0		6	0	0	0 '	0	0	0	0 '	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Tests on Hand - MH/RH	5622	5505	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Days on Hand - MH/RH	37	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CENTRAL LAB TESTS ON HAND																											
Capacity	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165	2165
Previous Day Tests Performed	360	851						4				4					4										
Total Tests on Hand - Central Lab	29006	27636	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Days on Hand - Centra Lab	13	13	0	0	0																						0
METHODIST					4		To	ctin		actio	200	200	ntor	ctho	- 10111	asha	ar of	toct	leite	in V	and	by	inct	el Im	ant F	ЛГ	
GeneExpert Capacity	70	70	70	70	70			عاالاد	3 100	allo	U2 a	are er	nuer	une	Mur	une	1 01	lest	KILS		dillu	Dy	IISU	unne			70
Previous Day Tests Performed	37	42					by	10	A N /																		
Tests on Hand	2876						Dy	/ 10 <i>F</i>	AIVI.																		
Days on Hand	41	41	0	0	0																						0
REGIONS																											
GeneExpert Capacity	80	80	80 /									A		A		ATT											80
Previous Day Tests Performed	73	88		1			Da	JVS C	if ter	sting	on	han	c ca	CUF	atec'	VC	Curr	ent	test	ing (capa	City	anc	allo	cati	on	
Tests on Hand	2746	2666			Days of testing on hand calculated by current testing capacity and allocation																						
Days on Hand	34	33	0		0_'		DE	er ins	STRUP	men	4																0 /
CENTRAL LAB																											
BD Max Capacity	85	85	85	85	85																						85
ExK TNA-3 (Lawson 5014719)	1080	1056																									
Reagents (Lawson 5014720)	1080	1056				•	Te	ctsr	perf	arme	ad n	revic	OUS	day	are	incl	ude	dfor	cor	nnar	cisor	1 202	ainst	CUIT	rent		
Tests on Hand	1080	1056						م حاد	Circ	A LINE	A P	CVIC	JUS	day	all	Hich	duce		COII	Ipai	DOI	ape	Allie	Cui	City		
Days on Hand	13	12	0	0	0		Ca	naci	±v.																		0
Diasorin MDX Capacity	80	80	80	80	80		La	apacit	Ly.																		80
Test Kit (Lawson 5014723)	1176	1080																									
Tests on Hand	1176	1080					<u>'</u>											<u> </u>			<u> </u>						·
Days on Hand	15	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hologic Panther Capacity	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Test Kit (Lawson 5014868)	26750	25500																									
Lysis Buffer (Lawson ???)	8100	8100		3			Lutc	ainse	an is	inc	TIGE	ed an	ad re	andv	for	inc	usio	n w	nen	they	1 her	gin t	esti	nσ			
Tests on Hand	26750	25500	1				utci	Illibe		IIIC	uuc	u an	ure	lauy		HICH	usic	II VV	TC11	UIIC y	DC		Coun	18·			
Days on Hand	13	13	0	-	0	0	0	0	0	0	0	0	0 '	0	0	0	0	0	0	0	0	0′	0	0	0'	0	0
HUTCHINSON								4				4										4					
BD Max Capacity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Previous Day Tests Performed								1				4									$\overline{}$						
ExK TNA-3 (Lawson 5014719)																											
Reagents (Lawson 5014720)																											
Tests on Hand	0	0	0	0	0	0	0	0	0_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Days on Hand	#DIV/0!	! #DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/01	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	! #DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/01	.! #DIV/0"	#DIV/0!	#DIV/O!	#DIV/01	#DIV/0!	#DIV/0!	#DIV/O!	! #DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
							•										•	•		•	*			•			



SUPPLY	TEST
ESWABS	Strep
UTM/VTM Swabs	SARS-COV-2, CT/NG, HSV
FIT Kits	FIT
Sterile Disposable Pipettes	Aliquot Supply
Transfer Pipette Tips	Aliquot Supply



ICU/ER Beds ICU: 0-60 beds **ED: 0-54 beds** Supplies monitored in intervals determined by testing bench and available storage. 29 Phlebotomy Carts EKG machines on all units iSTATS available on all units **Supplies**



ICU: 61-118 beds ED: 0-54 beds



ICU: 119-134 (Max 441) beds ED: 55-95 beds/Recliners

- · Increase inventory with testing volume
- · Increase frequency of inventory monitoring
- Engage supply chain on pending on orders
- Order additional inventory for tests identified as higher volume due to COVID19: iStat, BG, CRP, Ferrit, LDH, Trop, BNP, Procalc, D-Dimer, CBC...
- Vendors providing weekly updates on supply usage and inventory status.
- Determine alternate supplies, if needed
- Blood Supply Shortage reference crisis standards of care documents
- 5 additional iSTATS available for floors, if needed

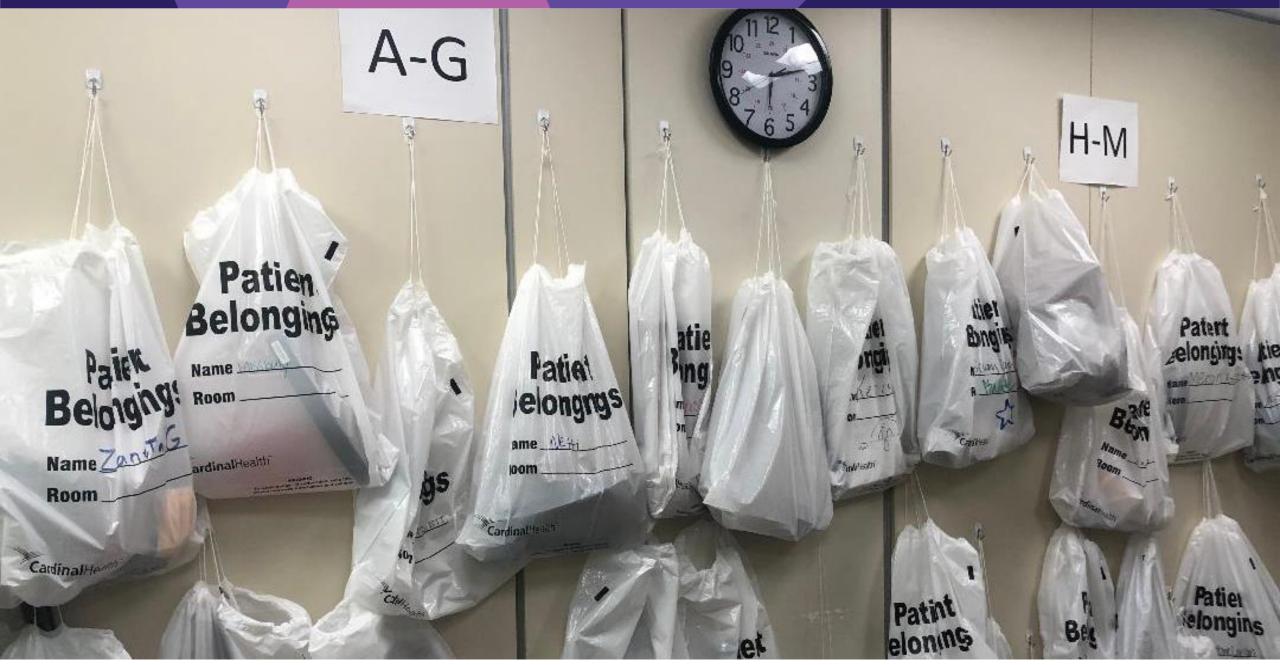
- Review test menu and reduce testing as needed and approved by medical director to conserve reagents.
- Add 1 iSTAT and 2 Accucheks to ED
- Blood Supply Shortage reference crisis standards of care documents

Space

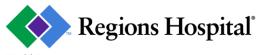
Space utilized as currently allocated

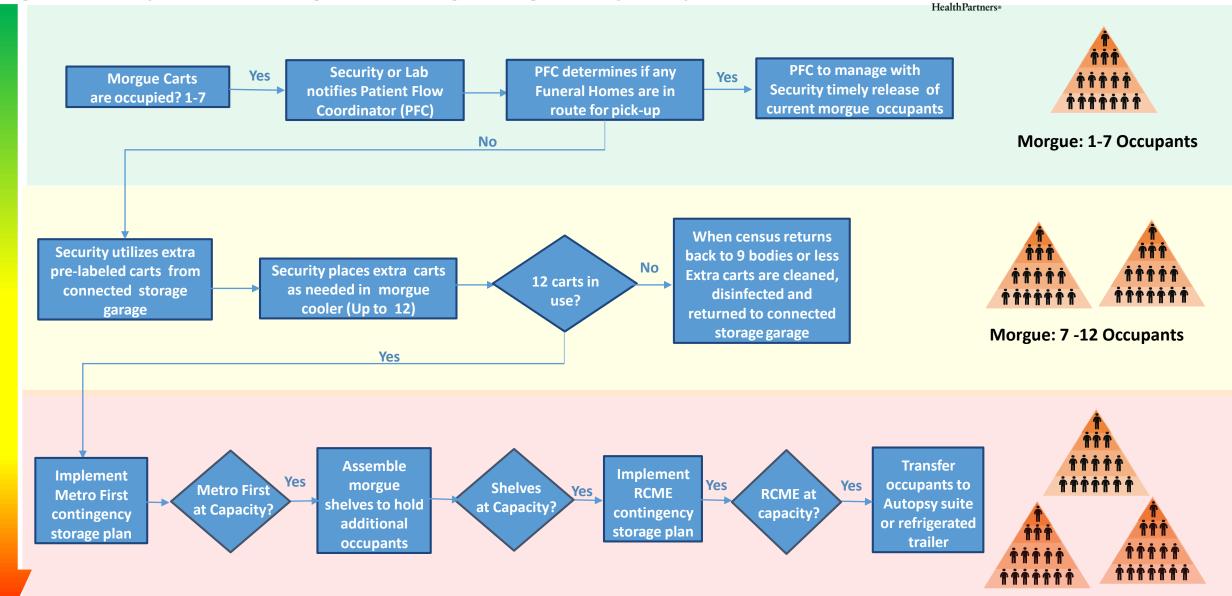
- Micro-Monitor hood space and watch for bottleneck of work
- Cytology hood available, if needed
- Storage available in AP locations

- Micro-Move culture desk to a different hood in order for GeneXpert to have a dedicated hood or move the GeneXpert to the counter by Molecular hood.
- May be able to offer OPD and other lab spaces for use by other departments, if needed.



Regions Hospital Lab Surge Planning Morgue Capacity





Morgue: > 12 Occupants



Your Role in Laboratory Accreditation

"It's bigger than you think!"

- No food or drinks should be near testing supplies.
- > Test strips must be kept tightly closed.
- The quality control bottles are not dated.
- > The glucometer is soiled.
- The lancets must be kept in the original box, which has the expiration date on it.

*Staged photo for teaching purposes

Lessons Learned





- >>> Planning helps prepare for the unplanned
- There is no back to normal
 - Understanding compliance is critical for success

Questions?



Thank you!

