

# COVID-19 INTUBATION PROTOCOL

## VERDUN HOSPITAL

UPDATED 19/03/2020

### GENERAL PRINCIPLES

- LIMIT INS AND OUTS OF THE ROOM
- LIMIT EXPOSED PERSONNEL
- FAVOR ELECTIVE INTUBATION FOR FOR PATIENTS AT RISK OF DETERIORATION
- PROCEED IN NEGATIVE PRESSURE ROOM IF POSSIBLE
- NO BIPAP / HFNC (EX: *OPTIFLOW*) FOR PRE-OXYGENATION
- NO BAGGING
- ALWAYS KEEP VENTILATION CIRCUIT CLOSED
- VIDEO-LARYNGOSCOPY FIRST
- END-TIDAL CO<sub>2</sub> MANDATORY (NO CXR POST-INTUBATION)
- ONLY “FIT TESTED” PERSONNEL MAY PARTICIPATE
- 2 PHYSICIANS IF AVAILABLE
- **HEAD NURSE MUST VERIFY CHECKLIST ONCE PER SHIFT**

### ACTIVATION CRITERIA

- PATIENT BROUGHT BY PARAMEDICS IN RESPIRATORY DISTRESS WITH SUSPECTED OR CONFIRMED COVID-19
- PATIENT WITH SUSPECTED OR CONFIRMED COVID-19 AND:
  - SATURATION <90% WITH 4L/MIN NASAL CANULA OR FIO<sub>2</sub> >0.5
  - DETERIORATION AFTER 1 HOUR OF TREATMENT WITH NON-REBREATHER MASK
  - DETERIORATION AFTER 1 HOUR OF TREATMENT WITH HFNC : ROX INDEX < 4.88  
\*ROX INDEX = (SPO<sub>2</sub> / FIO<sub>2</sub>) / RESPIRATORY RATE
  - PHYSICIAN ORDERS TO INTUBATE

**AUTHOR:** DR DAT NGUYEN-DINH CCFP(EM)

### CONTRIBUTORS:

IVAN PAVLOV, JOCELYN BARRIAULT, BENOIT GAILLOUX, SIGNE RICHER, MICHELINE VIENS, PATRICE PLAMONDON, ERIKA FONTAINE-PAGE, ISABELLE AUCLAIR, BARBARA MARTEL, JENNY ULLOA

VERDUN HOSPITAL, MONTRÉAL, CANADA

TRANSLATED BY DR DAT NGUYEN-DINH CCFP(EM)

# CHECKLIST

## INSIDE NEGATIVE PRESSURE ROOM

- CARDIAC MONITOR / VITAL SIGNS MONITOR
- CARDIAC ELECTRODES / WIRES / CHEST LEADS
- DEFIBRILATOR AND MULTIPADS
- SATURATION FINGER SENSOR
- 2 FULL OXYGEN TANKS / OXYGEN SOURCE
- NASAL CANULA
- NON-REBREATHER MASK
- WALL SUCCION
- ELECTRICAL OUTLETS / POWER SUPPLY
- IV POLE AT HEAD OF GURNEY / BED
- 2 INFUSION PUMPS
- 1L NS (CHECK EVERY 24H)
- GURNEY / BED
- CALL BELL
- 2 BEDSIDE TABLES
- 2 LARGE TRASH BINS
- SHARP CONTAINER
- BIN FOR CONTAMINATED REUSABLES
- CHECK NEGATIVE PRESSURE PARAMETERS
- CHECK COMM/CAMERA SYSTEM
- HAND SANITIZER DISPENSER (CHECK IF EMPTY)

## OUTSIDE NEGATIVE PRESSURE ROOM


- HAND SANITIZER DISPENSER (CHECK IF EMPTY) AT EXIT
- TRASH BIN (CLOSED WITH FOOT HANDLE)
- ISOLATION GOWNS
- SPLASH RESISTANT GOWNS
- FACE SHIELD / GOGGLES
- SURGICAL / PROCEDURES MASK
- N95 MASKS
- LONG SLEEVE GLOVES
- SHORT SLEEVE GLOVES

## QUICK ACCESS STORAGE AREA

- COVID-19 VENOUS ACCESS KIT
- COVID-19 INTRAOSSEOUS ACCESS KIT
- COVID-19 FOLEY KIT
- COVID-19 INTUBATION KIT
- COVID-19 CRICOTHYROIDOTOMY KIT
- COVID-19 FEMORAL CENTRAL LINE KIT
- COVID-19 INDUCTION MEDICATION KIT
- PORTABLE VIDEOLARYNGOSCOPE (CHECK BATTERY)

# ACTION SHEET

## LEADER (HEAD NURSE)

<b>ACTIVATE</b>	<ol style="list-style-type: none"> <li>1. <b>READ</b> ACTION SHEET AND EXECUTE STEPS</li> <li>2. <b>CALL RT</b> AND GIVE ACTION SHEET (SAME RT FOR TRANSPORT IF POSSIBLE)</li> <li>3. <b>ASSIGN RN FOR INTUBATION</b> AND GIVE ACTION SHEET</li> <li>4. <b>ASSIGN MD FOR INTUBATION</b> AND GIVE ACTION SHEET (MOST EXPERIENCED INTUBATOR AVAILABLE)</li> <li>5. <b>ASSIGN 2 RNS FOR MEDICATION PREPARATION</b> AND GIVE ACTION SHEET</li> <li>6. <b>CALL ANESTHESIA</b></li> <li>7. <b>ASSIGN SECOND MD</b> FOR INTUBATION BACK-UP</li> </ol>
<b>VERIFY</b>	<ol style="list-style-type: none"> <li>8. <b>PUT ON N95 MASK</b></li> <li>9. <b>CHECK PROPER PPE DONNING</b> BEFORE INTUBATION TEAM ENTERS <ul style="list-style-type: none"> <li>• HAIR TIED / NO BEARDS</li> <li>• N95 GOOD SEAL</li> <li>• FACE SHIELD WELL ADJUSTED</li> <li>• SPLASH RESISTANT GOWN (CHECK BACK)</li> <li>• LONG + SHORT GLOVES (CHECK WRISTS)</li> <li>• NO STÉTHOSCOPE</li> </ul> </li> <li>10. <b>CHECK EACH PERSON ENTERS WITH DESIGNATED MATERIAL</b> <ul style="list-style-type: none"> <li>• RN FOR INTUBATION (ENTERS FIRST): <ul style="list-style-type: none"> <li><input type="checkbox"/> COVID-19 VENOUS ACCESS KIT</li> <li><input type="checkbox"/> COVID-19 INDUCTION MEDICATION KIT</li> <li><input type="checkbox"/> +/- COVID-19 FOLEY KIT (IF NO FOLEY)</li> </ul> </li> <li>• RT (ENTERS SECOND): <ul style="list-style-type: none"> <li><input type="checkbox"/> TRANSPORT VENTILATOR (CHECK BEFORE ENTERING)</li> <li><input type="checkbox"/> VIDEO-LARYNGOSCOPE (CHECK BEFORE ENTERING)</li> </ul> </li> <li>• MD FOR INTUBATION (ENTERS AFTER VENOUS ACCESS CONFIRMED) <ul style="list-style-type: none"> <li><input type="checkbox"/> COVID-19 INTUBATION KIT</li> <li><input type="checkbox"/> +/- COVID-19 INTRAOSSEOUS KIT (IF NO VENOUS ACCESS)</li> </ul> </li> </ul> </li> </ol>
	<ol style="list-style-type: none"> <li>11. DURING RSI, IS <b>AVAILABLE</b> AT COMM AND <b>TAKES NOTES</b> <ul style="list-style-type: none"> <li>• <u>IF FIRST PASS UNSUCCESSFUL</u>: ACTIVATE SECOND INTUBATOR TO DON PPE AND ENTER WITH COVID-19 CRICOTHYROIDOTOMY KIT AND SECOND VIDEO-LARYNGOSCOPE</li> </ul> </li> </ol>
<b>TRANSFER</b>	<ol style="list-style-type: none"> <li>12. <b>SUPERVISE</b> TEAM DOFFING AT EXIT OF ROOM</li> <li>13. <b>REMOVE</b> AND DISPOSE N95 MASK</li> <li>14. <b>ACTIVATE</b> TRANSFER PROCEDURE</li> <li>15. <b>REFILL</b> COVID-19 KITS FOR NEXT ACTIVATION</li> <li>16. <b>ACTIVATE</b> DECONTAMINATION PROCEDURE</li> </ol>

# ACTION SHEET

## NURSE FOR INTUBATION

### DONNING

1. **READ SHEET** AND EXECUTE STEPS
2. **DON PROPER PPE** OUTSIDE NEGATIVE PRESSURE ROOM
3. **PRESENT SELF** TO LEADER TO VERIFY PROPER DONNING
4. **ENTER FIRST** IN NEGATIVE PRESSURE ROOM WITH:
  - COVID-19 VENOUS ACCESS KIT
  - COVID-19 INDUCTION MEDICATION KIT
  - +/- COVID-19 FOLEY KIT (IF NO FOLEY)

### PREPARE

5. **ESTABLISH 2** LARGE BORE IVs
6. **CONFIRM** VASCULAR ACCESS SUCCESSFUL TO LEADER
  - IF NO VASCULAR ACCESS POSSIBLE: TELL LEADER FOR I/O ACCESS
7. **TAKE** COMPLETE VITAL SIGNS AND INSTALL HEART MONITOR +/- DEFIBRILLATION PADS
8. **PREPARE** LEVOPHED AND PROPOFOL INFUSION (READY TO START)
9. **POSITION** PATIENT FOR INTUBATION



10. **TIME OUT:** CONFIRM INTUBATION CHECKLIST BEFORE PROCEEDING

### RAPID SEQUENCE INTUBATION

**INDUCTION**  
ADULT DOSE  
**PROPOFOL 100MG**  
OR  
**KETAMINE 100MG**  
+  
**ROCURONIUM 100MG**

#### APNEIC OXYGENATION

NASAL CANULA  
+  
AMBU WITH PEEP VALVE  
**\*NO BAGGING**

#### INTUBATION

VIDÉOLARYNGOSCOPE WITH  
**VISUALIZATION OF TUBE**  
PASSING BETWEEN CHORDS

**\*NO BURP/SELICK**

INFLATE CUFF **BEFORE**  
CONNECTING TO VENTILATOR

#### CONFIRMATION

END TIDAL CO<sub>2</sub>  
+  
BILATERAL CHEST  
RISE  
\*NO AUSCULTATION  
\*NO CXR

#### PLAN B

**1ST PASS UNSUCCESSFUL** → TELL LEADER IMMEDIATELY AND TRY BOUGIE  
**BOUGIE UNSUCCESSFUL** → INSTALL SGA (IGEL) AND BAG WHILE SECOND INTUBATOR ENTERS WITH CRICOTHYROIDOTOMY KIT  
**CICO SITUATION** (CANNOT INTUBATE/CANNOT OXYGENATE) → CRIC. IMMEDIATELY

### STABILIZE

11. **START** PROPOFOL AND TITRATE LEVOPHED FOR MAP  $\geq$  65  
SUGGESTED DOSING: **PROPOFOL 150MG/H** - AIM FOR **DEEP SEDATION**
12. **RETAKE** VITAL SIGNS AND SET Q15MIN
13. **INSTALL** PHYSICAL RESTRAINTS
14. **INSTALL** FOLEY
15. **DRAW LABS** AND SEND TO LAB PER CONTAMINATION PROTOCOL
16. IF NEED CENTRAL ACCESS: STAY IN ROOM AND TELL LEADER
17. IF IMMEDIATE TRANSFER: FOLLOW TRANSFER PROCEDURES
18. AFTER PATIENT STABILIZED, SUPERVISE COLLEAGUE DOFFING AND FOLLOW DOFFING PROCEDURES FOR SELF

# ACTION SHEET

## MD FOR INTUBATION

**DONNING**

1. **READ SHEET** AND EXECUTE STEPS
2. **DON PROPER PPE** OUTSIDE NEGATIVE PRESSURE ROOM
3. **PRESENT SELF** TO LEADER TO VERIFY PROPER DONNING
4. **ENTER AFTER VASCULAR ACCESS CONFIRMATION** WITH:
  - KIT INTUBATION COVID-19 INTUBATION KIT
  - +/- COVID-19 INTRAOSSEOUS KIT (IF NO VENOUS ACCESS)

**PREPARE**

5. **INSTALL I/O PRN**
6. **IDENTIFY CRICO-THYROID MEMBRANE** AND MARK WITH PEN
7. **POSITION** PATIENT FOR INTUBATION



8. **TIME OUT:** CONFIRM CHECKLIST BEFORE PROCEEDIN
  - PRE-OXYGÉNATION AND PATIENT POSITION
  - VIDEOLARYNGOSCOPE FUNCTIONNING
  - LEVOPHED ET PROPOFOL READY TO START
  - RT READY FOR INTUBATION + ETCO2
  - RN READY FOR INDUCTION
  - SECOND INTUBATOR STAND BY OUTSIDE WITH CRIC. KIT AND SECOND VIDEOLARYNGOSCOPE

**RAPID SEQUENCE INTUBATION**

**INDUCTION**  
ADULT DOSE  
**PROPOFOL 100MG**  
OR  
**KETAMINE 100MG**  
+  
**ROCURONIUM 100MG**

**APNEIC OXYGENATION**

NASAL CANULA  
+  
AMBU WITH PEEP VALVE  
**\*NO BAGGING**

**INTUBATION**

VIDÉOLARYNGOSCOPE WITH  
**VISUALIZATION OF TUBE**  
PASSING BETWEEN CHORDS

**\*NO BURP/SELICK**

INFLATE CUFF **BEFORE**  
CONNECTING TO VENTILATOR

**CONFIRMATION**

END TIDAL CO2  
+  
BILATERAL CHEST  
RISE  
\*NO AUSCULTATION  
\*NO CXR

### PLAN B


- 1ST PASS UNSUCCESSFUL** → TELL LEADER IMMEDIATELY AND TRY BOUGIE  
**BOUGIE UNSUCCESSFUL** → INSTALL SGA (IGEL) AND BAG WHILE SECOND INTUBATOR ENTERS WITH CRICOTHYROIDOTOMY KIT  
**CICO SITUATION** (CANNOT INTUBATE/CANNOT OXYGENATE) → CRIC. IMMEDIATELY

**STABILIZE**

9. **START** PROPOFOL TITRATE LEVOPHED FOR TAM  $\geq 65$   
SUGGESTED DOSING: **PROPOFOL 150MG/H** - AIM FOR **DEEP SEDATION**
10. **VERIFY** VENTILATOR SETTINGS - AIM **6CC/KG OF IDEAL BODY WEIGHT**
11. **INSTALL** PHYSICAL RESTRAINTS
12. **DISPOSE** REUSABLE EQUIPMENT IN DESIGNATED DECONTAMINATION BIN
13. AFTER PATIENT STABILIZED, SUPERVISE COLLEAGUE DOFFING AND FOLLOW DOFFING PROCEDURE FOR SELF

# ACTION SHEET

## RESPIRATORY THERAPIST

<b>DONNING</b>	<ol style="list-style-type: none"> <li>1. <b>READ SHEET</b> AND EXECUTE STEPS</li> <li>2. <b>DON PROPER PPE</b> OUTSIDE NEGATIVE PRESSURE ROOM</li> <li>3. <b>PRESENT SELF</b> TO LEADER TO VERIFY PROPER DONNING</li> <li>4. <b>ENTER WITH NURSE</b> IN NEGATIVE PRESSURE ROOM WITH: <ul style="list-style-type: none"> <li><input type="checkbox"/> TRANSPORT VENTILATOR (CHECK BEFORE ENTERING)</li> <li><input type="checkbox"/> PORTABLE VIDEOLARYNGOSCOPE (CHECK BEFORE ENTERING)</li> </ul> </li> </ol>				
<b>PREPARE</b>	<ol style="list-style-type: none"> <li>5. <b>PREDETERMINE</b> ET TUBE DEPTH PER PATIENT SIZE</li> <li>6. <b>PREPARE</b> INTUBATION EQUIPMENT (FAVOR SIZE #8 TUBE)</li> <li>7. <b>PREPARE</b> CONNECTING TUBES TO TRANSPORT VENTILATOR</li> <li>8. <b>POSITION</b> PATIENT FOR INTUBATION</li> <li>9. <b>PRE-OXYGENATE</b> WITH NASAL CANULA AND AMBU BAG + PEEP VALVE <b>*NO BAGGING</b>  <b>***START O2 FLOW</b> IN NASAL CANULA <b>AFTER</b> AMBU ON FACE</li> </ol>				
	<ol style="list-style-type: none"> <li>10. <b>TIME OUT:</b> CONFIRM INTUBATION CHECKLIST BEFORE PROCEEDING</li> </ol>				
<b>RAPID SEQUENCE INTUBATION</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;"> <b>INDUCTION</b>            ADULT DOSE  <b>PROPOFOL 100MG</b>            OR  <b>KETAMINE 100MG</b>            +  <b>ROCURONIUM 100MG</b> </td> <td style="text-align: center; padding: 5px;"> <b>APNEIC OXYGENATION</b>             NASAL CANULA            +            AMBU WITH PEEP VALVE  <b>*NO BAGGING</b> </td> <td style="text-align: center; padding: 5px;"> <b>INTUBATION</b>            VIDÉOLARYNGOSCOPE WITH  <b>VISUALIZATION OF TUBE</b>            PASSING BETWEEN CHORDS   <b>*NO BURP/SELICK</b>             INFLATE CUFF <b>BEFORE</b>            CONNECTING TO VENTILATOR         </td> <td style="text-align: center; padding: 5px;"> <b>CONFIRMATION</b>             END TIDAL CO2            +            BILATERAL CHEST            RISE            *NO AUSCULTATION            *NO CXR         </td> </tr> </table> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p><b>PLAN B</b></p> <p><b>1ST PASS UNSUCCESSFUL</b> → TELL LEADER IMMEDIATELY AND TRY BOUGIE</p> <p><b>BOUGIE UNSUCCESSFUL</b> → INSTALL SGA (IGEL) AND BAG WHILE SECOND INTUBATOR ENTERS WITH CRICOTHYROIDOTOMY KIT</p> <p><b>CICO SITUATION</b> (CANNOT INTUBATE/CANNOT OXYGENATE) → CRIC. IMMEDIATELY</p> </div>	<b>INDUCTION</b> ADULT DOSE <b>PROPOFOL 100MG</b> OR <b>KETAMINE 100MG</b> + <b>ROCURONIUM 100MG</b>	<b>APNEIC OXYGENATION</b>  NASAL CANULA + AMBU WITH PEEP VALVE <b>*NO BAGGING</b>	<b>INTUBATION</b> VIDÉOLARYNGOSCOPE WITH <b>VISUALIZATION OF TUBE</b> PASSING BETWEEN CHORDS  <b>*NO BURP/SELICK</b>  INFLATE CUFF <b>BEFORE</b> CONNECTING TO VENTILATOR	<b>CONFIRMATION</b>  END TIDAL CO2 + BILATERAL CHEST RISE *NO AUSCULTATION *NO CXR
<b>INDUCTION</b> ADULT DOSE <b>PROPOFOL 100MG</b> OR <b>KETAMINE 100MG</b> + <b>ROCURONIUM 100MG</b>	<b>APNEIC OXYGENATION</b>  NASAL CANULA + AMBU WITH PEEP VALVE <b>*NO BAGGING</b>	<b>INTUBATION</b> VIDÉOLARYNGOSCOPE WITH <b>VISUALIZATION OF TUBE</b> PASSING BETWEEN CHORDS  <b>*NO BURP/SELICK</b>  INFLATE CUFF <b>BEFORE</b> CONNECTING TO VENTILATOR	<b>CONFIRMATION</b>  END TIDAL CO2 + BILATERAL CHEST RISE *NO AUSCULTATION *NO CXR		
<b>STABILIZE</b>	<ol style="list-style-type: none"> <li>11. <b>CLAMP</b> ET TUBE, <b>INFLATE</b> CUFF THEN <b>CONNECT</b> TO VENTILATOR (UNCLAMP)</li> <li>12. <b>CHECK/SECURE</b> ET TUBE POSITION PER PREDETERMINED DEPTH</li> <li>13. <b>VALIDATE</b> VENTILATOR SETTINGS - AIM <b>6CC/KG OF IDEAL BODY WEIGHT</b></li> <li>14. <b>INSTALL</b> PHYSICAL RESTRAINTS</li> <li>15. <b>DISPOSE</b> REUSABLE EQUIPMENT IN DESIGNATED DECONTAMINATION BIN</li> <li>16. AFTER PATIENT STABILIZED, SUPERVISE COLLEAGUE DOFFING AND FOLLOW DOFFING PROCEDURE FOR SELF</li> </ol>				

# ACTION SHEET

## RN FOR MEDICATION PREPARATION

<b>PREPARE</b>	<ol style="list-style-type: none"><li>1. <b>READ SHEET</b> AND EXECUTE STEPS</li><li>2. <b>RETRIEVE</b> COVID-19 INDUCTION MEDICATION KIT</li><li>3. <b>PRPARE</b> INDUCTION MEDICATION</li><li>4. <b>IDENTIFY</b> SYRINGES</li><li>5. <b>PUT</b> KIT ELEMENTS IN BAG</li><li>6. <b>GIVE</b> KIT TO LEADER</li></ol>
<b>DOSES</b>	<ul style="list-style-type: none"><li><input type="checkbox"/> 1 AMP PROPOFOL 100ML (1G)</li><li><input type="checkbox"/> 1 SYRINGE PROPOFOL 200MG</li><li><input type="checkbox"/> 1 SYRINGE KETAMINE 200MG</li><li><input type="checkbox"/> 1 SYRINGE ROCURONIUM 200MG</li><li><input type="checkbox"/> 1 BAG OF NOREPINEPHRINE 4MG/250CC NS</li><li><input type="checkbox"/> 4 SYRINGES SALINE FLUSH 10CC</li></ul>

# ANNEX I: EQUIPMENT LIST FOR COVID-19 KITS

## COVID-19 INTUBATION KIT

- 1 ET TUBE SIZE #6
- 1 ET TUBE SIZE #7
- 1 ET TUBE SIZE #8
- 1 INTRO POCKET BOUGIE (BOMIMED)
- 1 GUEDEL SIZE #9
- 1 GUEDEL SIZE #10
- 1 FLEXIBLE STYLET
- 1 CMAC/GLYDESCOPE STYLET
- 1 AMBU
- 1 PEEP VALVE
- 1 LARGE AMBU MASK
- 1 MAINSTREAM END-TIDAL CO2 SENSOR
- 1 EZ CAP
- 1 RIGID SUCCION
- 1 IGEL #4
- 1 ET TUBE FIXATOR
- 1 TAPE ROLL
- 1 TUBE CLAMP
- 6 STERILE GEL PACK
- 1 SYRINGE 10CC
- 4 ADDIPACK
- 1 TRACHCARE
- 1 VENTOLIN+ATROVENT DOSER
- 1 MIDI
- 1 VENTILATION SHEET + PAPER
- 1 PHYSICAL RESTRAINTS KIT
- 1 NASAL CANULA + EXTENTION
- 1 SURGICAL MARKER/PEN

## COVID-19 CRICOTHYROIDOTOMY KIT

- 1 ET TUBE SIZE #6 WITH CUFF
- 1 ET TUBE SIZE #5 WITH CUFF
- 1 ET TUBE SIZE #5.5 WITHOUT CUFF
- 1 GEL PACK
- 1 INTRO POCKET BOUGIE (BOMIMED)
- 1 SCALPEL BLADE #15 (DISPOSABLE)
- 1 TRACHEAL CANNULA SIZE #4
- 1 HEMOSTAT

## COVID-19 INDUCTION MEDICATION KIT

### (RECONSTITUTE BEFORE PROCEDURE)

- 1 AMP PROPOFOL 10MG/ML (100ML)
- 1 AMP PROPOFOL 10MG/ML (20ML)
- 1 AMP KETAMINE 10MG/ML (20ML)
- 4 AMPS ROCURONIUM 10MG/ML (5ML)
- 1 AMP DE NOREPINEPHRINE 1MG/ML (4ML)
- 1 BAG NS 0.9% 250CC
- IDENTIFICATION STICKERS
- 2 PUMP LINES
- 6 ALCOHOL PREP PADS
- 3 SYRINGES 10CC
- 1 SYRINGE 20CC
- 4 #20 NEEDLES
- 4 SYRINGES SALINE FLUSH 10CC

## KIT PONCTION VEINEUSE COVID-19

- 1 TOURNIQUET
- 1 TAPE ROLL
- 2 JELCO #18
- 2 JELCO #20
- 2 SYRINGES SALINE FLUSH 10CC
- 1 SYRINGE 3CC WITH #20 NEEDLE
- 2 OPSITE
- 4 COTTONS
- 6 ALCOHOL PREP PADS
- 2 NS LOCK
- 1 #20 NEEDLE
- 1 LUER ADAPTOR
- 1 PICCLINE BARREL
- 1 HEMOCULTURE BARREL
- 2 HEMOCULTURES (AEROBIC+ANAEROBIC)
- 2 YELLOW TUBES
- 1 BLUE TUBE
- 1 DARK GREEN TUBE
- 1 PURPLE TUBE

## COVID-19 FOLEY KIT

- 1 FOLEY KIT
- 1 FOLEY #16
- 1 PAIR STERILE GLOVES STÉRILE (S/M/L)
- 1 LORIS CLEANING SHEET
- 1 DRAINAGE BAG

## COVID-19 INTRAOSSEOUS KIT

- 1 EZ I-O DRILL
- 1 BLUE NEEDLE
- 1 YELLOW NEEDLE
- 1 TUBING
- 1 FIXATOR
- 1 SYRINGE SALINE FLUSH
- 1 INFLATABLE PRESSURE SLEEVE (FOR FLUSHING)

## COVID-19 FEMORAL CENTRAL LINE KIT

- 1 CENTRAL LINE KIT
- 1 PACK CHLOREXIDINE SPONGES
- 1 STERILE ULTRASOUND SLEEVE
- 1 STERILE ULTRASOUND GEL
- 3 CLAVE NEEDLEFREE CONNECTOR
- 1 SYRINGE 10CC
- 1 #23 1/2 NEEDLE
- 1 TEGADERM IV ADANCED
- 1 BAG NS 0.9% 250CC
- 1000 UNITS IV HEPARIN
- 1 PICK
- 1 3CC DISPOSABLE SYRINGE WITH NEEDLE
- 2 GAUZE 4x4
- 1 XYLOCAINE 2% WITHOUT EPINEPHRINE
- 1 PAIR STERILE GLOVES SIZE 7