# Suspected Uncomplicated Novel COVID-19 Infection (ARI)

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| **Field** | **Text** |
| Title | ICP: Suspected Uncomplicated Novel COVID-19 Infection (ARI) |
| Subtitle | Standard Precautions and Triage |
| Publishing Organization | Laerdal Medical |
| Overview tab |  |
| Simulation Type | Simulator based |
| Simulation time | 15 minutes |
| Debriefing time | 25-30 minutes |
| Level | Advanced |
| Patient Type | Adult |
| Target groups | Health Care Providers in Emergency Department |
| Summary | This scenario presents a 55-years-old male presenting in the emergency room with fever, coughing and generally feeling unwell. He returned from travel in an endemic area for COVID-19 1 week ago. Front desk has prioritized him to immediate examination and isolation.  The participants are expected to prepare equipment, don PPE, assess patient and triage to home quarantine, educate patient, communicate effectively with interprofessional team, escalate standard precautions for all patients and safely dispose of equipment and PPE. |
| Learning objectives | * Recognize the suspected patients early and rapidly * Apply appropriate source control * Apply routine Infection Prevention and Control (IPC) for all patients * Collaborate and communicate with the health care facility’s IPC infrastructure * Apply standard precautions according to presumed diagnosis at all times * Perform a primary assessment of a patient with suspected acute respiratory infection * Distinguish between severe acute respiratory infection and acute respiratory infection * Obtain specimen for laboratory test according to safety procedures * Triage the patient according to the general principles for patients with suspected COVID-19 infection * Obtain patient history on personal and work relations * Advice patient on home quarantine * Coordinate safe patient transfer * Doff PPE according to procedure |
| Educational information | NA |
| Further readings | *Infection prevention and control during health care when*  *novel coronavirus (nCoV) infection is suspected. Interim Guidance*, World Health Organization 25 January 2020, WHO/2019-nCoV/IPC/v2020.2 |
| Scenario image | Pending |
| Scenario Video | NA |
| Why use this scenario? | This scenario addresses key interventions for the preparation, identification, treatment and triage of the patient with uncomplicated acute respiratory infection (ARI) due to novel COVID-19 disease. The scenario is designed to train and test health care providers at the emergency department in standard precautions and Infection Prevention and Control (IPC) according to WHO Interim guidelines 25 January 2020 on IPC for the 2019-nCoV virus. |
| Prepare tab |  |
| Location | Emergency Department |
| Participants | 1-2 health care providers |
| Equipment list | Medical Supplies   * SpO2 probe * Stethoscope * Blood pressure cuff * ECG electrode cables * Thermometer * IV line * Oxygen delivery devices including minimum nasal cannula and bag mask * Oxygen supply source * Saline lock * Universal precautions equipment * Specimen collection kits * ABHR - Alcohol base hand rub * Medical face masks (N95 mask with respirator) * Standard precautions equipment including long-sleeved, disposable gown, goggles or face shield and non-sterile gloves  Props  * Patient clothing and shoes appropriate for 55-years-old * Local IPC check list and procedures |
| Preparation and setup | * Place the simulator sitting on the examination table * Dress the simulator in clothing and shoes suitable for a 55-years-old man * Apply a N95 mask to the simulator’s face * Apply moisture on forehead to simulate sweating |
| Role Information | NA |
| Patient chart | NA |
| Training Devices | SimMan 3G family, SimMan ALS, ALS SimMan, Nursing Anne, Nursing Anne Simulator, Nursing Kelly, MegaCode Kelly advanced, Resusci Anne Simulator |
| Simulation devices | Lleap, SimPad |
| Simulation mode | Automatic mode |
| Additional Simulation Equipment | Patient Monitor, SpO2 |
| Simulate tab |  |
| Learner Brief | Emergency Department  Time: 21:03  A 55-years-old man has presented unannounced in the emergency room. He is coughing and is generally feeling unwell. He has told that he returned from a vacation in a endemic COVID-19 area 1 week ago. Front desk personnel have offered him a N95 mask and placed him in examination room 2. Please, don PPE and go assess this patient. |
| Patient Picture | NA |
| Patient Data | Name: William Jones  Gender: Male  Age: 55 years  Weight: 89 kg  Height: 181 cm  Allergies: No known  Immunizations: None |
| Start vital signs | Heart Rhythm: Sinus  Heart rate: 105/min  Blood pressure: 150/83 mmHg  Respiration rate: 15/min  SpO2: 98%  PetCO2 (mmHg): NA  Temperature: 39 oC  Capillary refill time: 2 seconds |
| Medical history | **Past Medical History**  Appendicitis 10 years ago; otherwise healthy  **Resent Medical History**  Returned home from vacation in COVID-19 endemic area on week ago. Started feeling ill yesterday with headache, feeling of exhaustion and coughing.  **Social History**  Software-developer in private company; married, has a 20-year-old son, who is not living at home, studying out of town. |
| Clinical Findings | * Coughing * Sweating * Malaise |
| Diagnostics | NA |
| Provider’s orders | NA |
| Expected interventions | * Assemble and prepare equipment * Assure standard precautions * Don PPE according to procedure and IPC guidelines for acute respiratory infections (ARI) * Identify patient * Perform primary survey * Collect specimen sample * Safely contain specimen for transport * Contact laboratory personnel * Triage to home quarantine * Educate patient on home quarantine and personal IPC * Communicate effectively with interprofessional team * Escalate standard precautions for all patients * Safely dispose of equipment * Doff PPE according to procedure |
| Assessment Instruments | This scenario contains scoring that enables a summative assessment of the participants. The scoring is based on all key events which can be logged during simulation and is presented at the end of the debriefing log after simulation is ended. The scoring is presented as a sum of logged events compared to the maximum score.  **The scoring is based on the below key events:**  Wash hands = 1  Don all PPE = 1  Check that all equipment is ready for use = 1  Identify patient = 1  Obtain patient history = 1  Assess breathing = 1  Obtain all vital signs = 1  Obtain oxygen saturation = 1  Auscultate lungs = 1  Call front desk on IPC procedure = 1  Verbalize escalation of standard precautions for all patients = 1  Collect specimen from throat = 1  Place specimen sample bottle in safety bag = 1  Contact laboratory = 1  Arrange personal pick-up of safety bag = 1  Inform patient on pending test result = 1  Perform relevant documentation = 1  Triage patient to home quarantine = 1  Educate on home quarantine = 1  Educate on hygiene = 1  Education on close contact = 1  Obtain history on recent patient relations = 1  Arrange safe home transport = 1  Contact ED manager = 1  Contact IPC coordinator = 1  Dispose of single-use equipment = 1  Order disinfection of examination room = 1  Doff PPE = 1  Ensure safe disposal of PPE = 1  Disinfect hands = 1  **Total max score = 30** |
| Operator Information | Information on Scoring This scenario contains scoring that enables a simple summative test of the participants. After the simulation is ended, a total score for each correct intervention which has been logged, is displayed in the debriefing overview. It is therefore of upmost importance to log all interventions when done correctly to give an accurate end score of the performance. If using this scenario for training only, the instructor can ignore total score in the debriefing. Information on Logging PPE This simulation is a team training session. All participants are required to apply adequate PPE. If one of the participants fails to apply one of the required PPE equipment items, this item should not be logged even though the rest of the participants apply the PPE equipment item. It is a basic assumption that the team helps and ensures that all participants have don correct PPE after procedure. |
| Scenario Progression Image | NA |
| Scenario Progression Image Title | NA |
| Scenario Progression Image Description | NA |
| Scenario Progression Attachment | NA |
| Debrief tab |  |
| Guided reflection questions | These guided reflection questions are organized by the gather-analyze-summarize (GAS) method. The questions are presented to suggest topics that may inspire the debriefing conversation. Gather Information  * What are your reactions to this simulation? What are your other initial reactions? * Would one of you describe the events from your perspective? * From your perspective, what were the main issues you had to deal with?  Analyze  * Describe the general principles of IPC when caring for patients with ARI. How did you apply these principles? * Describe the characteristics of vital signs for respiratory virus infections. Which characteristics was applicable in this case? * Which syndromes requires hospitalization? How did these syndromes affect your decision making for this patient? * How did you apply specific measures in a hospital when caring for patients with ARI with pandemic or epidemic potential? * When should you verbalize an escalation in safety precautions? Describe your reasoning for your actions in this case. * Which diagnostic samples did you decide to collect for this patient? * How was your cooperation within the team and with the patient? * Describe the patient education you performed on standard precautions for this patient. What was your reasoning for this? * Which interprofessional communication did you perform? Discuss the importance of communication with other departments in this case. * How did you ensure safety precautions before leaving the examination room?  Summarize  * What are the key points from this simulation? * What would you like to do differently next time in a similar situation? * What are your main take-home messages? |
| Guided reflection Attachment | NA |
| Case considerations | The health care providers are expected to recognize suspected COVID-19 patients early and apply appropriate source control and diagnostic procedures. They should apply routine IPC (i.e. standard precautions) for all patients. Moreover, it is always of outmost importance to apply standard precautions including but not restricted to:  • Hand hygiene  • Respiratory hygiene  • PPE according to the risk  • Safe injection practices, sharps management and injury prevention  • Safe handling, cleaning and disinfection of patient care equipment  • Environmental cleaning  • Safe handling and cleaning of soiled linen  • Waste management  Considerations should also be directed at home quarantine and triage principles with description of general principles of managing the critically ill patient with acute respiratory infection (ARI). In this case, participants should recognize the patient with uncomplicated influenza-like illness (ARI) that can go home in contrary to patients with SARI that need emergent care and hospitalization (including ICU admission). |
| Case considerations image | NA |
| Case considerations image Descriptions | NA |
| Case considerations Attachment | NA |
| Files and attachments |  |
| Publication Details |  |
| Version number | 1.0 |
| Publication date | Target 17/3 2020 |
| Release note | NA |
| Co-developer One | NA |
| Co-developer Two | NA |
| Legal Notice | NA |
| Credits | NA |
| Scenario Settings |  |
| Training disciplines | |  | | --- | | x  Community Health and Public Safety | | ​​☐​  EMS /Prehospital | | x  Interdisciplinary | | x  Medical | | ​​☐​  Military | | x  Nursing | | ​​☐​  Nursing Aids | | ​​☐​  Occupational Therapy | | ​​☐​  Phelbotomy | | ​​☐​  Pharmacy | | x  Physician Assistant | | ​​☐​  Radiology Technician | | ☐  Respiratory Therapy | |
| Education level | |  | | --- | | x  Undergraduate | | x  Postgraduate | |
| Medical specialities | |  | | --- | | ☐  Allergy and immunology | | ​​☐​  Anesthesiology | | ​​☐​  Cardiology | | ​​☐​  Critical Care Medicine | | ​​☐​  Dermatology | | x  Emergency Medicine | | ​​☐​  Endocrinology | | ​​☐​  Family Medicine | | ​​☐​  Gastroenterology | | ​​☐​  Geriatrics | | ​​☐​  Hospital Medicine | | x  Infectious diseases | | ​​☐​  Internal medicine | | ​​☐​  Nephrology | | ​​☐​  Neurology | | ​​☐​  Neurosurgery | | ​​☐​  Obstetrics and Gynecology | | ​​☐​  Oncology | | ​​☐​  Ophthalmology | | ​​☐​  Orthopedics | | ​​☐​  Otolaryngology | | ​​☐​  Palliative care | | ​​☐​  Pediatrics | | ​​☐​  Pharmacology | | ​​☐​  Psychiatry | | x  Pulmonology | | ​​☐​  Radiology | | ​​☐​  Rehabilitation Medicine | | ​​☐​  Rheumatology | | ​​☐​  Surgery | | ​​☐​  Vascular surgery | |
| Nursing specialities | |  | | --- | | ​​☐​  Ambulatory care nursing | | ​​☐​  Advanced practice nursing | | ​​☐​  Burn nursing | | ​​☐​  Cardiac nursing | | ​​☐​  Diabetes nursing | | ​​☐​  Medical case management | | ​​☐​  Community health nursing | | ​​☐​  Critical care nursing | | x  Emergency nursing | | ​​☐​  Gastroenterology nursing | | ​​☐​  Geriatric nursing | | ​​☐​  Home health nursing | | ​​☐​  Hospice and palliative care nursing | | ​​☐​  Hyperbaric nursing | | ​​☐​  Immunology and allergy nursing | | ​​☐​  Intravenous therapy nursing | | x  Infection control nursing | | x  Infectious disease nursing | | ​​☐​  Maternal-child nursing | | ​​☐​  Medical-surgical nursing | | ​​☐​  Military and uniformed services nursing | | ​​☐​  Neonatal nursing | | ​​☐​  Neurosurgical nursing | | ​​☐​  Nephrology nursing | | ​​☐​  Nurse midwifery | | ​​☐​  Obstetrical nursing | | ​​☐​  Oncology nursing | | ​​☐​  Orthopaedic nursing | | ​​☐​  Ostomy nursing | | ​​☐​  Pediatric nursing | | ​​☐​  Perianesthesia nursing | | ​​☐​  Perioperative nursing | | ​​☐​  Psychiatric nursing | | x  Pulmonary nursing | | ​​☐​  Radiology nursing | | ​​☐​  Rehabilitation nursing | | ​​☐​  Renal nursing | | ​​☐​  Sub-acute nursing | | ​​☐​  Substance abuse nursing | | ​​☐​  Surgical nursing | | ​​☐​  Urology nursing | | ​​☐​  Vascular access | | ☐  Wound care | |
| Nursing courses | |  | | --- | | ☐  Child & adolescent health | | ​​☐​  Community and family health nursing | | ​​☐​  Fundamentals of nursing | | ​​☐​  Gerontology | | ​​☐​  Health assessment | | ​​☐​  Leadership | | ​​☐​  Maternal-neonatal health | | x  Medical-surgical nursing | | ​​☐​  Pathophysiology | | ​​☐​  Pharmacology | | ​​☐​  Psychiatric and mental health | |
| Body systems | ​☐  Circulatory  ☐  Digestive  ☐  Endocrine  ☐  Hematopoietic  ☐  Immune/lymphatic  ☐  Integumentary  ☐  Muscular  ☐  Nervous  ☐  Renal/Urinary  ☐  Reproductive  x  Respiratory  ☐  Skeletal |
| Assessment type (summative/formative) | |  | | --- | | x  Formative | | x  Summative | |
| Free for public use | YES |