

CASE DEFINITIONS OF INFECTIONS

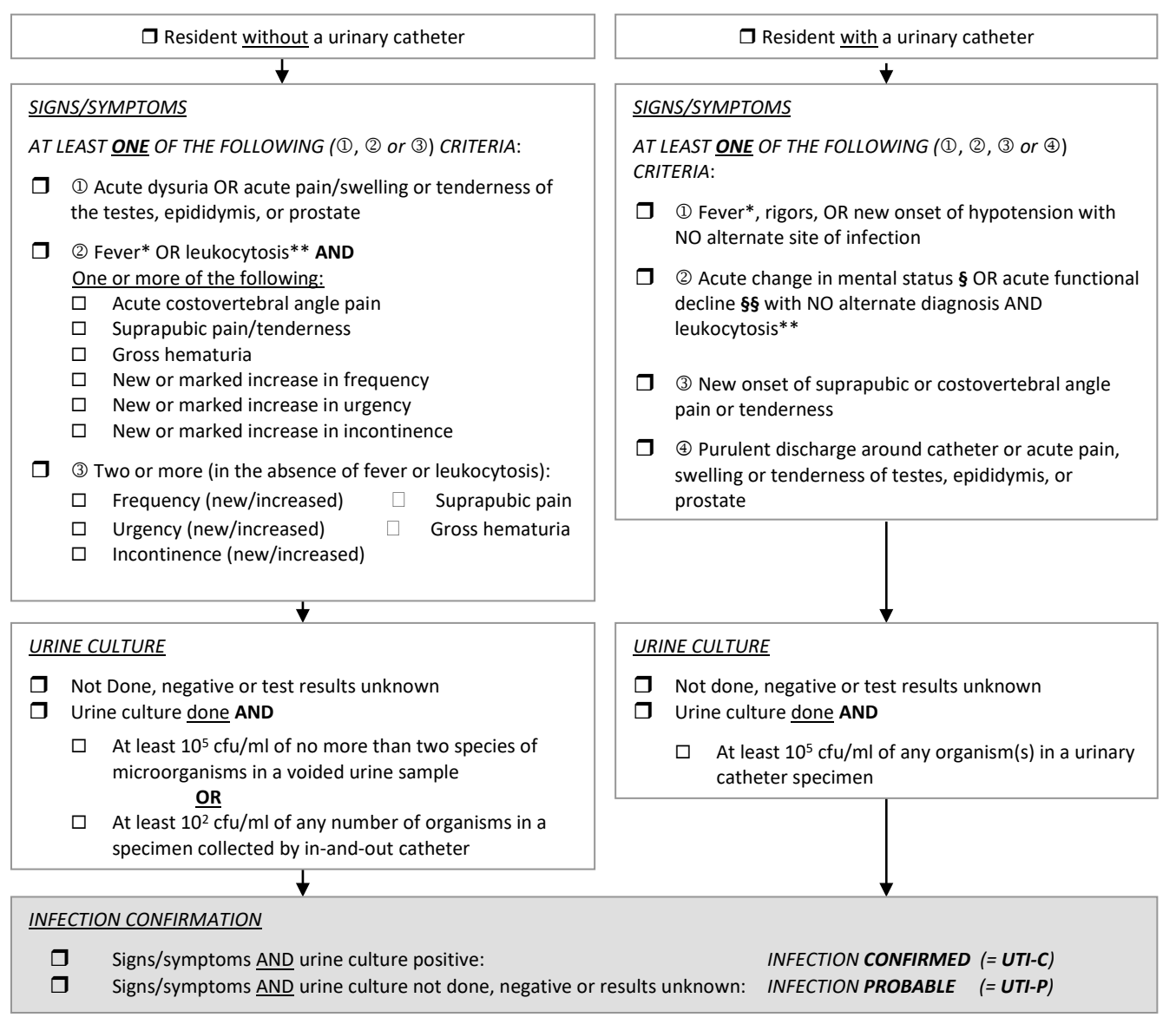
IMPORTANT REMARK:

All **active healthcare-associated infections** present on the day of the survey should be reported.

An infection is active when new or acutely worse signs/symptoms of the infection are present on the survey date OR signs/symptoms were present in the past and the resident is (still) receiving treatment for that infection on the survey date. The onset of symptoms should occur more than 48 hours (i.e. day three onwards) after the resident was (re-)admitted to the current LTCF OR the resident was diagnosed with COVID-19 and the onset of symptoms (or first positive test, if asymptomatic) occurs more than 48 hours (i.e. day three onwards) of the current admission. The presence of symptoms and signs in the two weeks (14 days) preceding the day of the PPS should be verified in order to determine whether the treated infection matches one of the case definitions.

- * **Fever:** 1) Single > 37.8°C oral/tympanic membrane or 2) Repeated > 37.2°C oral or > 37.5°C rectal or 3) > 1.1°C over baseline from any site (oral, tympanic, axillary)
- ** **Leukocytosis:** 1) Neutrophilia > 14 000 leukocytes/mm³ or 2) Left shift (>6% bands or ≥ 1 500 bands/mm³)
- § **Acute change in mental status from baseline:** Acute onset + fluctuating course + inattention AND either disorganised thinking or altered level of consciousness
- §§ **Acute functional decline:** New three-point increase in total ADL score (Range 0–28) from baseline based on seven ADL items (bed mobility, transfer, locomotion, dressing, toilet use, personal hygiene, eating) each scored from 0 (independent) to 4 (total dependence) OR increased dependency defined by scales other than ADL

URINARY TRACT INFECTIONS



RESPIRATORY TRACT INFECTIONS

COMMON COLD or PHARYNGITIS

AT LEAST **TWO** OF THE FOLLOWING CRITERIA:

- ☐ Runny nose or sneezing
- ☐ Stuffy nose (i.e. congestion)
- ☐ Sore throat or hoarseness or difficulty in swallowing
- ☐ Dry cough
- ☐ Swollen or tender glands in the neck (cervical lymphadenopathy)

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED (= COLD-C)**

FLU diagnosis can also be made outside the flu season

BOTH OF THE FOLLOWING CRITERIA MUST BE MET:

- ☐ Fever (for definition, see page 1*)
- AND**
- ☐ At least **three** of the following:
 - ☐ Chills
 - ☐ New headache or eye pain
 - ☐ Myalgias or body aches
 - ☐ Malaise or loss of appetite
 - ☐ Sore throat
 - ☐ New or increased dry cough

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED (= FLU-C)**

LOWER RESPIRATORY TRACT INFECTIONS

- ☐ Resident **with** POSITIVE thoracic imaging (e.g. chest X-ray, CT scan, ultrasound) for pneumonia or a new infiltrate

- ☐ Resident **without** POSITIVE thoracic imaging for pneumonia or a new infiltrate OR thoracic imaging not done

SIGNS/SYMPTOMS

BOTH OF THE FOLLOWING CRITERIA MUST BE MET:

- ☐ At least **one** of these respiratory signs or symptoms:
 - ☐ New or increased cough
 - ☐ New/increased sputum production
 - ☐ O₂ saturation < 94% or reduced >3% from baseline
 - ☐ Abnormal lung examination (new or changed)
 - ☐ Pleuritic chest pain
 - ☐ Respiratory rate ≥ 25 breaths/min
- AND**
- ☐ One or more constitutional signs/symptoms (fever, leukocytosis, confusion, acute functional decline; for definitions, see page 1 §§)

SIGNS/SYMPTOMS

BOTH OF THE FOLLOWING CRITERIA MUST BE MET:

- ☐ At least **two** of these respiratory signs or symptoms:
 - ☐ New or increased cough
 - ☐ New/increased sputum production
 - ☐ O₂ saturation < 94% or reduced >3% from baseline
 - ☐ Abnormal lung examination (new or changed)
 - ☐ Pleuritic chest pain
 - ☐ Respiratory rate ≥ 25 breaths/min
- AND**
- ☐ One or more constitutional signs/symptoms (fever, leukocytosis, confusion, acute functional decline; for definitions see page 1 §§)

Absence of other conditions such as chronic heart failure that could account for symptoms

INFECTION CONFIRMATION

- ☐ Signs/symptoms criteria met AND thoracic imaging positive: **PNEUMONIA CONFIRMED (= PNEU-C)**

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **OTHER LOWER RTI CONFIRMED (= LRTI-C)**

COVID-19 (SARS-CoV-2 INFECTION)

- ☐ The resident has documentation in the medical record of any laboratory confirmation test for COVID-19 (viral RNA target or antigenic detection from an oropharyngeal or nasal swab or any other appropriate clinical specimen).



- ☐ **Asymptomatic:** Resident has no signs or symptoms compatible with COVID-19.
- ☐ **Mild/Moderate:** Resident has any of the signs or symptoms compatible with COVID-19*, without need for oxygen therapy and oxygen saturation level $\geq 92\%$.
- ☐ **Severe:** Resident has signs or symptoms compatible with COVID-19* with need for oxygen therapy for shortness of breath due to COVID-19 and/or oxygen saturation level $<92\%$.



INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED** - Asymptomatic (= **COV-ASY**)
- ☐ Infection criteria fully met: **INFECTION CONFIRMED** - Mild/moderate (= **COV-MM**)
- ☐ Infection criteria fully met: **INFECTION CONFIRMED** - Severe (= **COV-SEV**)

* Signs and symptoms compatible with COVID-19:

Fever, cough, fatigue, shortness of breath, anorexia, myalgias, loss of smell (anosmia), loss of taste (ageusia). Other non-specific symptoms, such as sore throat, nasal congestion, headache, diarrhoea, nausea and vomiting, have also been reported. Additional neurological manifestations which have been reported include, dizziness, agitation, weakness, seizures, or findings suggestive of stroke including trouble with speech or vision, sensory loss, or problems with balance in standing or walking. Older people and immunosuppressed patients in particular may present with atypical symptoms such as, fatigue, reduced alertness, reduced mobility, diarrhoea, loss of appetite, confusion, and absence of fever. Symptoms such as dyspnoea (shortness of breath), fever, gastrointestinal (GI) symptoms or fatigue due to physiological adaptations in pregnant women, adverse pregnancy events, or other diseases such as malaria, may overlap with the symptoms of COVID-19. Children may not have reported fever or cough as frequently as adults.

Source: World Health Organization. Living guidance for clinical management of COVID-19. 23 November 2021.
Available at: <https://www.who.int/publications/i/item/WHO-2019-nCoV-clinical-2021-2>.

SKIN INFECTIONS

CELLULITIS/SOFT TISSUE/WOUND INFECTIONS*

ONE OF THE FOLLOWING (① or ②) CRITERIA MUST BE MET:

- ☐ ① Pus at a wound, skin, or soft tissue site
- ☐ ② Four or more new or increasing signs/symptoms at affected site:
 - ☐ Heat
 - ☐ Tenderness or pain
 - ☐ Redness
 - ☐ Serous drainage
 - ☐ Swelling
 - ☐ One constitutional sign/symptom (fever, leukocytosis, confusion, acute functional decline; for definitions, see page 1 §§)

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= SKIN-C)

SCABIES

BOTH OF THE FOLLOWING CRITERIA MUST BE MET:

- ☐ Maculopapular and/or itching rash
- AND**
- ☐ At least **one** of the following:
 - ☐ Physician diagnosis
 - ☐ Laboratory confirmation (positive scraping or biopsy)
 - ☐ Epidemiological linkage to a case of scabies with lab confirmation

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= SCAB-C)

When a resident presents signs/symptoms of a skin or wound infection on the day of the survey, it should be verified that these signs/symptoms of an infection are not the result of a prior surgery. Surgical site infections should be excluded from the survey if the onset of signs/symptoms took place within 30 days after surgery without an implant, or within three months (90 days) in case of surgery involving an implant.

HERPES SIMPLEX OR ZOSTER INFECTION

BOTH OF THE FOLLOWING CRITERIA MUST BE MET:

- ☐ A vesicular rash
- AND**
- ☐ Physician diagnosis or laboratory confirmation

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= HERP-C)

FUNGAL INFECTION

BOTH OF THE FOLLOWING CRITERIA MUST BE MET:

- ☐ Characteristic rash or skin lesions
- AND**
- ☐ Physician diagnosis or lab-confirmed fungal pathogen from scraping or biopsy

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= FUNG-C)

EYE, EAR, NOSE AND MOUTH INFECTIONS

CONJUNCTIVITIS

ONE OF THE FOLLOWING (①, ② or ③) CRITERIA MUST BE MET:

- ☐ ① Pus appearing from one or both eyes, present for at least 24 hours
- ☐ ② New or increased conjunctival erythema, with or without itching
- ☐ ③ New or increased conjunctival pain, present for at least 24 hours

Symptoms must not be due to allergy or trauma to the conjunctiva.

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= CONJ-C)

SINUSITIS

- ☐ Sinusitis diagnosed by physician

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= SINU-C)

EAR

ONE OF THE FOLLOWING (① or ②) CRITERIA MUST BE MET:

- ☐ ① Diagnosis by a physician of any ear infection
- ☐ ② New drainage from one or both ears
(non-purulent drainage must be accompanied by additional symptoms, such as ear pain or redness)

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= EAR-C)

ORAL CANDIDIASIS

BOTH THE FOLLOWING CRITERIA MUST BE MET:

- ☐ Presence of raised white patches on inflamed mucosa OR plaques on oral mucosa
- AND**
- ☐ Diagnosed by a dentist or physician

INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED**
(= ORAL-C)

GASTROINTESTINAL INFECTIONS

GASTROENTERITIS

ONE OF THE FOLLOWING (①, ② or ③) CRITERIA MUST BE MET:

- ☐ ① Diarrhoea, three or more liquid or watery stools above normal baseline for the resident in a 24-hour period
- ☐ ② Vomiting, two or more episodes in a 24-hour period
- ☐ ③ **Both** of the following:
 - ☐ Positive stool specimen for bacterial or viral pathogen**AND**
 - ☐ At least one of the following: nausea, vomiting, abdominal pain or tenderness, diarrhoea



INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED (= GE-C)**

CLOSTRIDIODES (CLOSTRIDIUM) DIFFICILE INFECTION

ONE OF THE FOLLOWING (①, ② or ③) CRITERIA MUST BE MET:

- ☐ ① Diarrhoeal stools or toxic megacolon **AND** a positive laboratory assay for *C. difficile* toxin A and/or B in stools, or a toxin-producing *C. difficile* organism detected in stool via culture or other means e.g. a positive PCR result
- ☐ ② Pseudomembranous colitis revealed by lower gastrointestinal endoscopy
- ☐ ③ Colonic histopathology characteristic of *C. difficile* infection (with or without diarrhoea) on a specimen obtained during endoscopy or colectomy



INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED (= CDI-C)**

BLOODSTREAM INFECTIONS

ONE OF THE FOLLOWING (① or ②) CRITERIA MUST BE MET:

- ☐ ① Two or more blood cultures positive for the same organism
- ☐ ② A single blood culture documented with an organism thought not to be a contaminant **AND** At least **one** of the following:
 - ☐ Fever (*for definition, see page 1*)
 - ☐ New hypothermia (<34.5°C, or does not register on the thermometer being used)
 - ☐ A drop in systolic blood pressure of >30 mm Hg from baseline
 - ☐ Worsening mental or functional status



INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED (= BSI-C)**

UNEXPLAINED FEVER

- ☐ The resident must have documentation in the medical record of fever (*for definition, see page 1*) on two or more occasions at least 12 hours apart in any three-day period, with no known infectious or non-infectious cause.



INFECTION CONFIRMATION

- ☐ Infection criteria fully met: **INFECTION CONFIRMED (= FUO-C)**

OTHER INFECTION(s)

Please specify (= OTHER)