Vaccine Safety Core Data Elements

Version 1, August 2021

Instructions for the investigator and questionnaire designer:

This document describes the CITF core data elements (CDE) that should be collected by CITF-funded vaccine safety projects. CITF based the questions and responses on national surveys, CDE for other CITF-funded projects, and the Adverse Event Following Immunization (AEFI) for COVID-19 immunization (https://www.canada.ca/en/public-health/services/immunization/reporting-adverse-events-following-immunization/user-guide-completion-submission-aefi-reports.html). These questions are based on the national form for Report Adverse Events Following Immunization (AEFI) v. Jan, 2020 with COVID-19 detail added March 18, 2021.

We recommend that the questionnaire be administered by trained research staff due to the knowledge of medical terminology needed to ascertain possible adverse events following COVID-19 immunization (pp. 10-19). The main AEFI questions use branching logic to skip the detailed response sections when no event was experienced. The detailed sections will likely only apply to a small number of study participants. Therefore, we recommend using questionnaire design and administration software such as REDCap or Lime Survey, not paper forms. If you need assistance with these software packages, please contact the CITF data manager.

If you are collecting vaccine safety data using self-administered questionnaires, please share the questionnaire with the CITF Data Management unit so that they can anticipate the change in format.

The responses to these CDE are the data you will be asked to be share with the CITF, where legally and ethically possible, once you have signed a data sharing agreement with the CITF and your data collection is complete. If you add sub-questions or additional precision to the CDE questions, you do not need to share the additional detail.

The CDE questions in red text or *instructions in italicized red text* should be answered by the investigator or interviewer, not directly posed to the study participant.

You should complete this module for each COVID-19 vaccine dose the participant received. That is, if you are only collecting vaccine safety data, the following 'Vaccination basics' questions should be added to the beginning the 'Vaccine safety' questions (Q40-43). If COVID-19 test and vaccination history module is used, skip to 'Vaccine safety' Q50.

Please note that completing this questionnaire does not replace official AEFI reporting. **If a participant responds YES to ANY of questions 51-55, please direct the participant to their health care provider or a health care professional on your study team to determine whether the signs or symptoms should be reported as an AEFI. If it is reportable and not already done for this episode, complete and submit the national AEFI (https://www.canada.ca/en/public-health/services/immunization/reporting-adverse-events-following-immunization.html or your provincial equivalent).**

Vaccination basics

| 00 | Participant unique identifier (same across modules and visits) |
|------|--|
| 01.a | Date of interview // |
| 40. | Have you been vaccinated against COVID-19? (Answer 'Yes' if you have received at least one dose of a COVID-19 vaccine) NO |
| 41. | How many doses have you received? ONE |

Repeat the following section for each dose (make this a repeatable instrument within visit e.g., baseline, if needed)

| Q # | CITF Adult General Vaccine CDE repeatable form |
|-------|--|
| 40.a. | This question is a screen and placeholder for an e- questionnaire repeatable form [e.g., a REDCap repeated instrument]. It is optional if not needed for your questionnaire design. |
| | You answered [Q40 response, if = '00, 98'] to "Have you been vaccinated against COVID-19?" |
| | Do you have a COVID-19 vaccine scheduled? |
| | NO |
| 41.a. | You answered that you have had [Q41 response, if Q40 = '01'] doses. For which dose are you completing this form? |
| | FIRST |

| Q # | CITF Adult General Vaccine CDE repeatable form |
|-----|---|
| 42. | When did you receive this dose of the COVID-19 vaccine? |
| | / / / / YR |
| | DON'T KNOW |
| 43. | Which vaccine did you receive? |
| | PFIZER AND BIONTECH mRNA01 MODERNA mRNA02 ASTRAZENECA OXFORD03 JOHNSON & JOHNSON (JANSSEN)04 OTHER09 (SPECIFY THE VACCINE) DON'T KNOW98 |

Vaccine safety

| Q # | CITF Adult Vaccine Safety CDE (repeatable form) v.1 |
|-----|--|
| 50. | If applicable (e.g. sex = female, age 14-55 years) |
| | a. Were you pregnant at the time of this COVID-19 vaccination? |
| | NO |
| | b. If YES, how many weeks gestation (or trimester)? |
| | 0-14 WEEKS (1ST TRIMESTER)01 15-28 WEEKS (2ND TRIMESTER)02 29-42 WEEKS (3RD TRIMESTER)03 DON'T KNOW |
| | c. Were you breastfeeding at the time of this COVID-19 vaccination? |
| | NO |

| Q # | CITF Adult Vaccine Safety CDE (repe | eatable | form) | v.1 |
|-------|---|----------|---------|------------|
| Signs | and symptoms after [this] COVID-19 v | accine: | | |
| 51.a. | Local reaction at or near vaccinate (e.g. swelling, pain, drainage) | ion site | e? | |
| | NO | b | | |
| 51.b. | day = 0 | | | |
| | DAYS | | | |
| F1 ~ | DON'T KNOW | | | |
| 51.c | Select the type of local reaction | YES | NO | DON'T KNOW |
| | 1. Infected abscess | 01 | 00 | 98 |
| | 2. Sterile abscess | 01 | 00 | 98 |
| | 3. Cellulitis | 01 | 00 | 98 |
| | 4. Nodule | 01 | 00 | 98 |
| | 5. Lymphadenitis | 01 | 00 | 98 |
| | Reaction stretches joint-to- joint | 01 | 00 | 98 |
| | 7. Reaction crosses joint(s) | 01 | 00 | 98 |
| | 8. Other (specify) | | 1 | |
| 51.d | For any local reaction indicated a and symptoms that apply | above, d | check a | all signs |
| | | YES | NO | DON'T KNOW |
| | 1. Swelling | 01 | 00 | 98 |
| | 2. Pain | 01 | 00 | 98 |
| | 3. Tenderness | 01 | 00 | 98 |
| | 4. Erythema | 01 | 00 | 98 |
| | 5. Warmth | 01 | 00 | 98 |
| | 6. Induration | 01 | 00 | 98 |
| | 7. Rash | 01 | 00 | 98 |
| | 8. Palpable fluctuance | 01 | 00 | 98 |
| | 9. Fluid collection shown by imaging technique (e.g. MRI, CT, ultrasound) | 01 | 00 | 98 |
| | 10. Spontaneous/surgical drainage | 01 | 00 | 98 |
| | 11. Microbial results | 01 | 00 | 98 |
| | 12. Lymphangitic streaking 13. Regional lymphadenopathy | | | |
| | Regronar rymphadenopatny | | | |

| Q # | CITF Adult Vaccine Safety CDE (repeatable form) v.1 | | | | |
|-------|--|---------|--------|----------------|--|
| 52.a. | Allergic or allergic-like events (| | | | |
| | NO | | | | |
| 52.b. | Days from immunization to onset of like symptom or sign (same day = 0 | | ergic | or allergic- | |
| | DAYS | | | | |
| | DON'T KNOW | | | | |
| 52.c | Select the type of allergic or all | ergic-l | ike re | action: | |
| | ANAPHYLAXIS01 OCULO-RESPIRATORY SYNDROME (ORS)02 OTHER ALLERGIC EVENTS03 | | | | |
| | For any reaction indicated above, that apply | check a | ll sig | n and symptoms | |
| 52.d | Skin / mucosal | | | | |
| | i. | | | | |
| | | YES | NO | DON'T KNOW | |
| | 1. Urticaria (hives) | 01 | 00 | 98 | |
| | 2. Erythema | 01 | 00 | 98 | |
| | 3. Pruritus | 01 | 00 | 98 | |
| | Paraesthesia (prickling or tingling) | 01 | 00 | 98 | |
| | 5. Flushing | 01 | 00 | 98 | |
| | 6. Other Rash | 01 | 00 | 98 | |
| | ii. Was the skin or mucosal reacti localized? | - | | | |
| | GENERALIZED | | | | |
| | iii. If localized, specify the site | | | | |
| | iv. Angioedema? | | | | |
| | NO00 → 53 YES01 → 52 DON'T KNOW98 → 53 | .b | | | |

| Q # | CITF Adult Vaccine Safety CDE (rep | eatable | form) | v.1 | | |
|-------|---|---|--|--|--|--|
| | v. Angioedema (swelling) visible? | | | | | |
| | VEO | | | 0.0 | | |
| | YES NO, PARTICIPANT REPORTED SENSATION | | | | | |
| | NO, FARICIPANI REFORIED SENSATION | OF SWE | пппе | •••• | | |
| | vi. Angioedema sites: | | | | | |
| | | YES | NO | DON'T KNOW | | |
| | 1. Tonque | 01 | 00 | 98 | | |
| | 2. Throat | 01 | 00 | 98 | | |
| | 3. Uvula | 01 | | 98 | | |
| | 4. Larynx | 01 | 00 | 98 | | |
| | 5. Lip | 01 | 00 | 98 | | |
| | 6. Eyelids | 01 | 00 | 98 | | |
| | 7. Eyes, red bilateral | 01 | 00 | 98 | | |
| | 8. Eye, red unilateral | 01 | 00 | 98 | | |
| | 9. Eye(s), itchy | 01 | 00 | 98 | | |
| | 10. Face | 01 | 00 | 98 | | |
| | 11. Limbs | 01 | 00 | 98 | | |
| | 12. Other, specify | | | | | |
| 52.e. | i. Cardio-vascular: | | | | | |
| | | YES | NO | DON'T KNOW | | |
| | 13. Measured hypotension | 01 | 00 | 98 | | |
| | 14. Decreased central pulse | 01 | 00 | 98 | | |
| | volume | | | | | |
| | 15. Capillary refill time >3 sec | 01 | 00 | 98 | | |
| | 16. Tachycardia | 01 | 00 | 98 | | |
| | 17. Decreased or loss of | 01 | 00 | 98 | | |
| | consciousness | | | | | |
| | ii. If 'Decreased or loss of consc | | | | | |
| | II. II Decicased of 1055 of conse | | e' du | ration | | |
| | | lousnes | s', du | ration | | |
| | minutes | lousnes | s', du | ration | | |
| | minutes | lousnes | s', du | ration | | |
| 52.f. | minutes Respiratory: | lousnes | s ', du | ration | | |
| 52.f. | | YES | s', du | DON'T KNOW | | |
| 52.f. | Respiratory: 1. Sneezing | YES 01 | NO 00 | DON'T KNOW 98 | | |
| 52.f. | Respiratory: | YES | NO 00 00 | DON'T KNOW 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice | YES 01 01 01 | NO 00 00 00 | DON'T KNOW 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure | YES 01 01 01 01 01 | NO 00 00 00 00 | DON'T KNOW 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor | YES 01 01 01 01 01 01 | NO 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing | YES 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough | YES 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough 8. Tachypnea | YES 01 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough 8. Tachypnea 9. Indrawing/retractions | YES 01 01 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough 8. Tachypnea 9. Indrawing/retractions 10. Grunting | YES 01 01 01 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough 8. Tachypnea 9. Indrawing/retractions 10. Grunting 11. Increased use of accessory | YES 01 01 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough 8. Tachypnea 9. Indrawing/retractions 10. Grunting 11. Increased use of accessory muscles | YES 01 01 01 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 98 98 | | |
| 52.f. | Respiratory: 1. Sneezing 2. Rhinorrhea 3. Hoarse voice 4. Sensation of throat closure 5. Stridor 6. Wheezing 7. Dry cough 8. Tachypnea 9. Indrawing/retractions 10. Grunting 11. Increased use of accessory | YES 01 01 01 01 01 01 01 01 01 01 01 | NO 00 00 00 00 00 00 00 00 00 00 00 | DON'T KNOW 98 98 98 98 98 98 98 98 98 98 98 98 98 | | |

| Q # | CITF Adult Vaccine Safety CDE (repe | eatable | form) | v.1 |
|-------|--|----------|---------|---------------|
| | 14. Difficulty swallowing | 01 | 00 | 98 |
| | 15. Difficulty breathing | 01 | 00 | 98 |
| | 16. Chest tightness | 01 | 00 | 98 |
| 52.g. | Gastrointestinal: | 1 | 1 | |
| - | | YES | NO | DON'T KNOW |
| | 1. Diarrhea | 01 | 00 | 98 |
| | 2. Abdominal pain | 01 | 00 | 98 |
| | 3. Nausea | 01 | 00 | 98 |
| | 4. Vomiting | 01 | 00 | 98 |
| 53.a. | Neurologic events (e.g., meningitis | s, para | lysis, | seizure) |
| 53.b. | NO | | urologi | ic symptom or |
| 53.c. | <pre>sign (same day = 0) DAYS DON'T KNOW Select the type of physician-diagr </pre> | nosed ne | eurolog | gic |
| | reactions | | | |
| | | YES | NO | DON'T KNOW |
| | 1. Meningitis | 01 | 00 | 98 |
| | 2. Encephalopathy/Encephalitis | 01 | 00 | 98 |
| | 3. Guillain-Barre Syndrome | 01 | 00 | 98 98 |
| | 4. Bell's Palsy 5. Other Paralysis | 01 | 00 | 98 |
| | 6. Myelitis/transverse myelitis | 01 | 00 | 98 |
| | 7. Subacute sclerosing | 01 | 00 | 98 |
| | panencephalitis | 01 | 00 | 90 |
| | 8. Other neurologic diagnosis | | | |
| | (specify) | | | |
| 53.d. | i. Seizure: | | | |
| | NO | t (53.d | | |
| | CLONIC | | | |

| Q # CITF Adult Vaccine Safety CDE (repe | eatable | form) | v.1 |
|--|--------------------------|--------|-------------|
| iii. Seizure details: | | | |
| | YES | NO | DON'T KNOW |
| 1. Sudden loss of consciousness | 01 | 00 | 98 |
| 2. Witnessed by healthcare | 01 | 00 | 98 |
| professional | | | |
| 3. Previous history of seizures | 01 | 00 | 98 |
| iv. If 'Previous history of seizure | es', tyj | pe: | |
| FEBRILE01 AFEBRILE02 UNKNOWN98 | | | |
| 53.e. Other neurologic signs and symptom | ns | | |
| | YES | NO | DON'T KNOW |
| Depressed/altered level of consciousness | 01 | 00 | 98 |
| 2. Lethargy | 01 | 00 | 98 |
| 3. Personality change lasting ≥ 24 hrs | 01 | 00 | 98 |
| 4. Focal or multifocal neurologic sign(s) | 01 | 00 | 98 |
| 5. Fever (≥38.0°C) | 01 | 00 | 98 |
| 6. Anaesthesia (numbness) | 01 | 00 | 98 |
| 7. Burning | 01 | 00 | 98 |
| 8. Formication | 01 | 00 | 98 |
| 9. Paraesthesia | 01 | 00 | 98 |
| 10. Other neurologic sign or symptom (specify) | 01 | 00 | 50 |
| 53.f Abnormal test results | | | |
| | YES | NO | DON'T KNOW |
| 1. CSF abnormality | 01 | 00 | 98 |
| 2. EEG abnormality | 01 | 00 | 98 |
| 3. EMG abnormality | 01 | 00 | 98 |
| 4. Neuroimaging abnormality | 01 | 00 | 98 |
| 5. Brain/spinal cord | 01 | 00 | 98 |
| histopathologic abnormality | | | |
| 54.a. Other serious or unexpected health | event? | | 1 |
| (e.g., arthritis, thrombocytopenia, NO00 → [in YES01 → 54. | , blood ternal | | _ |
| DON'T KNOW98 → [in | | branch | ning check] |

| Q # | CITF Adult Vaccine Safety CDE (repe | eatable | form) | v.1 |
|-------|---|---------|-------|------------|
| 54.b. | Days from immunization to onset of | 1st 'o | ther' | symptom or |
| | sign (same day = 0) | | | |
| | | | | |
| | DAYS | | | |
| | DON'T KNOW | | | |
| 54.c. | Other diagnoses (physician diagnos | sed) | | |
| | | YES | NO | DON'T KNOW |
| | 1. Intussusception | 01 | 00 | 98 |
| | 2. Kawasaki Disease | 01 | 00 | 98 |
| | 3. Thrombocytopenia | 01 | 00 | 98 |
| | 4. Other serious or unexpected | | | |
| | diagnoses (specify) | | | |
| | | | | |
| | | | | |
| | ii. If 'Thrombocytopenia', details | | 1 | |
| | | YES | NO | DON'T KNOW |
| | 1. Clinical evidence of bleeding | 01 | 00 | 98 |
| | specify | | | |
| | 2. Platelet count <150x10 ⁹ /L | 01 | 00 | 98 |
| | specify | | | |
| | 3. Petechial rash | 01 | 00 | 98 |
| | 4. Thrombosis | 01 | 00 | 98 |
| 54.d. | i. Other signs and symptoms | | | |
| | | YES | NO | DON'T KNOW |
| | 1. Syncope with injury | 01 | 00 | 98 |
| | 2. Arthritis | 01 | 00 | 98 |
| | 3. Fever ≥ 38.0°C (NOTE: report | 01 | 00 | 98 |
| | ONLY if fever occurs in | | | |
| | conjunction with another reportable event. For fever | | | |
| | in a neurological event, use | | | |
| | section 53.e.5) | | | |
| | 4. Parotitis (Parotid gland | 01 | 00 | 98 |
| | swelling with pain and/or | 01 | | |
| | tenderness | | | |
| | 5. Generalized Rash (Non- | 01 | 00 | 98 |
| | allergic) | | | |
| | 6. Localized Rash (Non- | 01 | 00 | 98 |
| | allergic) | | | |
| | Specify site: | | | |
| | 7. Severe vomiting (Severe | 01 | 00 | 98 |
| | enough to interfere with | | | |
| | daily routine) | | | |
| | 8. Severe diarrhea (Severe | 01 | 00 | 98 |
| | enough to interfere with | | | |
| | daily routine) | | | |
| | 9. Other serious or unexpected | | | |
| | event(s) (specify) | | | |

| Q # | CITF Adult Vaccine Safety CDE (repe | eatable | form) | v.1 | | |
|-----|--|--|--|---|--|--|
| | | | | | | |
| | | | | | | |
| | ii. If 'Arthritis' , details | | | | | |
| | | YES | NO | DON'T KNOW | | |
| | Joint redness | 01 | 00 | 98 | | |
| | Joint warm to touch | 01 | 00 | 98 | | |
| | Joint pain | 01 | 00 | 98 | | |
| | Joint swelling | 01 | 00 | 98 | | |
| | Inflammatory changes in synovial | 01 | 00 | 98 | | |
| | fluid | | | | | |
| 55. | COVID-19 Adverse Events of Special Please indicate if any of the foll by a physician. Signs and symptoms diagnosis of an AESI should be rep Details/definitions are available (https://www.canada.ca/en/public- health/services/immunization/repor following-immunization/user-guide- | owing h leadin ported a in the cting-ac complet | has been ng to t above. user <u>c</u> dverse- tion-su | en diagnosed che guide events- ubmission- | | |
| | aefi-reports.html [COVID-19 update | es under YES | way]). NO | DON'T KNOW | | |
| | 1. Vaccine-associated enhanced | - | - | | | |
| | disease | 01 | 00 | 98 | | |
| | Multisystem inflammatory syndrome (MIS) | 01 | 00 | 98 | | |
| | Acute respiratory distress syndrome | 01 | 00 | 98 | | |
| | 4. Acute cardiovascular injury (microangiopathy, heart failure, stress cardiomyopathy, coronary artery disease arrhythmia, myocarditis) | 01 | 00 | 98 | | |
| | 5. Coagulation disorder (thromboembolism, haemorrhage) | 01 | 00 | 98 | | |
| | 6. Acute kidney injury | 01 | 00 | 98 | | |
| | 7. Acute liver injury | 01 | 00 | 98 | | |
| | 8. Anosmia, ageusia | 01 | 00 | 98 | | |
| | 9. Chilblain-like lesions | 01 | 00 | 98 | | |
| | 10.Single organ cutaneous vasculitis | 01 | 00 | 98 | | |
| | 11.Erythema multiforme | 01 | 00 | 98 | | |
| | 12. Meningoencephalitis | 01 | 00 | 98 | | |
| | 13. Acute disseminated | 01 | 00 | 98 | | |
| | encephalomyelitis | | | | | |
| | 14. Subacute thyroiditis | 01 | 00 | 98 | | |
| | 15. Acute pancreatitis | 01 | 00 | 98 | | |

| Q # | CITF Adult Vaccine Safety CDE (repe | eatable form) v | r.1 | | | |
|------|---|-----------------|-----|--|--|--|
| | 16. Pancreatitis | 01 00 | 98 | | | |
| | 17. Rhabdomyolysis | 01 00 | 98 | | | |
| | 18. Acute aseptic arthritis | 01 00 | 98 | | | |
| | 19.0ther (specify) | | | | | |
| auto | If YES to ANY of questions 51-55: | | | | | |
| 56. | Highest impact of AEFI: (If more than one symptom, the most | t serious.) | | | | |
| | DID NOT INTERFERE WITH DAILY ACTIVE INTERFERED WITH BUT DID NOT PREVENT DAILY ACTIVITIES | r 01 02 | | | | |
| 57. | a. Outcome at time of report: | | | | | |
| | FULLY RECOVERED00NOT YET RECOVERED01PERMANENT DISABILITY/INCAPACITY02DEATH03DON'T KNOW98 | | | | | |
| | b. If 'DEATH', date | | | | | |
| | YR /DD | | | | | |
| 58. | Highest level of care obtained: | | | | | |
| | NONE TELEPHONE/VIRTUAL CONSULTATION WITH A HEALTH PROFESSIONAL NON-URGENT VISIT EMERGENCY VISIT REQUIRED HOSPITALIZATION RESULTED IN PROLONGATION OF EXISTIN HOSPITALIZATION DON'T KNOW | H | 98 | | | |