Encephalitis may be hard to distinguish from ADEM (criteria B & C are identical). If there is evidence of demyelination the case should be assessed for ADEM level of certainty (LOC) using the ADEM algorithm. If case meets level 3 encephalitis & ADEM classify as level 3A. If there is myelopathy, use the myelitis algorithm to assess LOC for myelitis. A1. Acute inflammation A. Brain histopathology done? YES **Level 1 Encephalitis** YES of CNS parenchyma NO C. Focal/Multifocal CNS Abnormalities: check all that apply C1. ≥1 focal cortical sign (≥1 of: aphasia/dysphasia, Review both boxes B AND C; check all that apply. alexia, agraphia, acalculia, agnosia, agraphesthesia, B OR C must = YES to be a case; can be both apraxia, aprosodia, asterognosia, cortical blindness, B. Encephalopathy: check all that apply: disconnection/neglect syndrome) **B1.** ≥1 of the following for > 24 hours C2. Cranial nerve dysfunction (≥1 abnormality for any ☐ Depressed level of consciousness of the 12 cranial nerves) □ Altered level of consciousness C3. Visual field defect present (e.g. central scotoma, □ Lethargy hemianopia, quadrantopia) □ Personality change C4. ≥1 primitive reflex present (Babinski sign, Hoffman's sign; glabellar, snout, sucking, rooting, or palmomental **B2.** \geq 1 of the following: reflex; palmar grasp) ☐ Decreased or absent response to **C5.** Motor weakness (arm +/or leg; uni- or bi-lateral) loud noise or painful stimuli **C6.** Sensory abnormalities ☐ Inconsistent or absent response to C7. Altered deep tendon reflexes (can be absent, other external stimuli decreased or increased) ☐ Decreased or absent eye contact **C8.** Cerebellar dysfunction (≥1 of: ataxia, dysmetria, ☐ Decreased arousability dysdiadochokinesis, cerebellar nystagmus, intention □ Decreased level of consciousness tremor) was associated with a seizure B = YES IF C = YES IF **B1** AND/OR **B2** criteria **NOT MET** B-1 & B-2 ≥1 of AND [none of C1 through C8] checked criteria **C1** both through C8 met Level 5: NOT a case of encephalitis checked (1 MET 0 of E1-4,F1 present E. Indicators of CNS inflammation: tick all that apply; each ticked box counts as 1 indicator. **E1.** Fever ≥ 38.0° Centigrade E2. CSF pleocytosis (>15 WBC/uL if < 2months old; >5 WBC/uL if \geq 2 months old) E3. EEG changes consistent with encephalitis \longrightarrow **E4. Head CT** shows acute inflammation or is consistent with encephalitis (including but not limited to: areas of hypodensity; contrast images demonstrating meningeal, parenchymal or gyral enhancement) **F1. MRI of brain** -shows diffuse or multifocal areas white matter lesions / demyelination (hyperintense signal on T2-weighted, diffusion-weighted image or fluid-attenuation inversion recovery(FLAIR) sequences) ≥2 of 1 of E1-4,F1 E1-4,F1 present present * Exclusion criterion for levels 2 and 3 Encephalitis (not

Level 3

Encephalitis*X1

Level 2

Encephalitis*X1

<u>applicable to level 1)</u>: **X1**. Other diagnosis for illness confirmed including neoplasm, toxic or metabolic

encephalopathy, trauma, vascular disorder