

# Drug Induced Delirium versus Toxic Encephalopathy

## ACDIS Radio – January 17, 2018

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- This presentation is designed to provide accurate and authoritative information in regard to the subject matter covered. The information includes both reporting and interpretation of materials in various publications, as well as interpretation of policies of various organizations. This information is subject to individual interpretation and to changes over time.
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# Learning Objectives

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- Differentiate between the manifestations and underlying causes of drug-induced delirium
- Compliantly apply CDI and ICD-10-CM principles

# Complete Documentation Altered Mental Status

- **Manifestation**
  - Dementia, delirium, psychosis, vegetative state, stupor, coma
  - Unresponsive does not have a code
- **Underlying cause**
  - Various encephalopathies – other structural diseases of the brain
  - Stroke, TIA, Alzheimer’s disease, Lewy-body dementia, encephalitis
- **Severity or specificity**
  - Correlates with the severity of the manifestation
  - Acute or chronic (acute delirium is a CC; delirium NOS is not)
- **Instigating cause**
  - Drug toxicity (declare if it is an overdose or if not properly taken)
  - Cerebral embolus due to atrial fibrillation
- **Consequences or complications**
  - Acute respiratory failure
  - SIADH leading to hyponatremia resulting in a metabolic encephalopathy

# DSM-V Definition of Delirium

## Delirium

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### Diagnostic Criteria

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- A. A disturbance in attention (i.e., reduced ability to direct, focus, sustain, and shift attention) and awareness (reduced orientation to the environment).
- B. The disturbance develops over a short period of time (usually hours to a few days), represents a change from baseline attention and awareness, and tends to fluctuate in severity during the course of a day.
- C. An additional disturbance in cognition (e.g., memory deficit, disorientation, language, visuospatial ability, or perception).
- D. The disturbances in Criteria A and C are not better explained by another preexisting, established, or evolving neurocognitive disorder and do not occur in the context of a severely reduced level of arousal, such as coma.
- E. There is evidence from the history, physical examination, or laboratory findings that the disturbance is a direct physiological consequence of another medical condition, substance intoxication or withdrawal (i.e., due to a drug of abuse or to a medication), or exposure to a toxin, or is due to multiple etiologies.

Source: DSM-V

# Medication-Inducted vs. Substance Intoxication Delirium

**Medication-induced delirium:** This diagnosis applies when the symptoms in Criteria A and C arise as a side effect of a medication taken as prescribed.

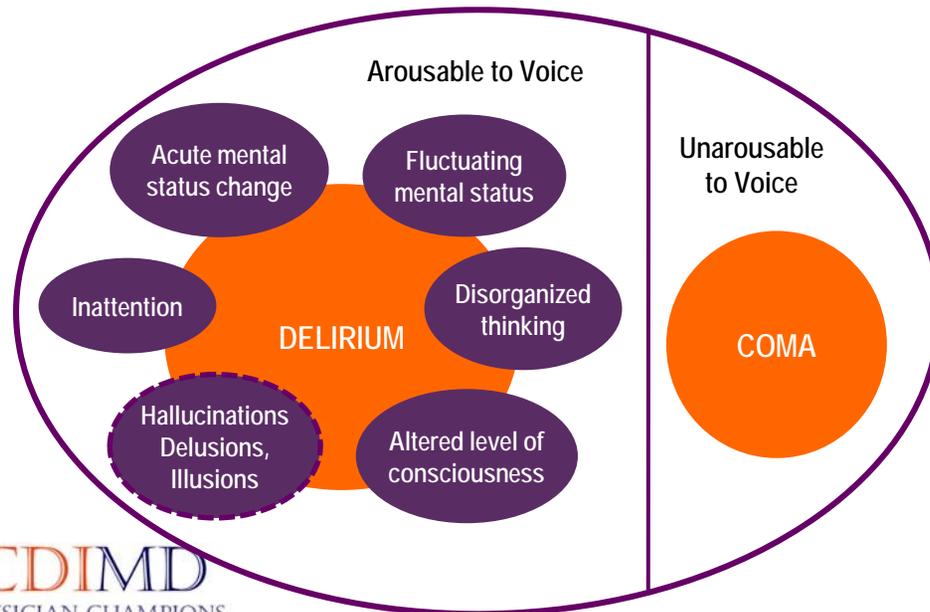
**Substance intoxication delirium:** This diagnosis should be made instead of substance intoxication when the symptoms in Criteria A and C predominate in the clinical picture and when they are sufficiently severe to warrant clinical attention.

- A challenge with DSM-5 is that it does not discuss the neurology term of encephalopathy
  - **NIH Definition** - Any *diffuse* disease of the brain that alters brain function or structure.

<https://www.ninds.nih.gov/Disorders/All-Disorders/Encephalopathy-Information-Page>

# Delirium vs. Encephalopathy

- **Delirium - Manifestation**
  - Acute change or fluctuation in mental status and inattention, accompanied by either disorganized thinking or an altered level of consciousness



- **Encephalopathy – Underlying Cause**
  - Global brain dysfunction
- **Dr. Kennedy’s opinion**
  - If the global brain dysfunction can be explained by a named brain disease or its exacerbation, then the term “encephalopathy” is integral
  - As such, the term “encephalopathy” is integral to defined neurodegenerative illnesses that tend to wax and wane.

# Delirium

## ICD-10-CM Index

### Delirium, delirious (acute or subacute) (not alcohol- or drug-induced) (with dementia) R41.0

- alcoholic (acute) (tremens) (withdrawal) F10.921
- - with intoxication F10.921
- - - in
- - - - abuse F10.121
- - - - dependence F10.221
- due to (secondary to)
- - alcohol
- - - intoxication F10.921
- - - - in
- - - - - abuse F10.121
- - - - - dependence F10.221
- - - withdrawal F10.231
- - amphetamine intoxication F15.921
- - - in
- - - - abuse F15.121
- - anxiolytic
- - - intoxication F13.921
- - - - in
- - - - - abuse F13.121
- - - - - dependence F13.221
- - - withdrawal F13.231
- - cannabis intoxication (acute) F12.921
- - - in
- - - - abuse F12.121
- - - - dependence F12.221
- - cocaine intoxication (acute) F14.921
- - - in
- - - - abuse F14.121
- - - - dependence F14.221
- - general medical condition F05
- - hallucinogen intoxication F16.921
- - - in
- - - - abuse F16.121
- - - - dependence F16.221

**Notice requirement for physicians to state what delirium is due to.**

# Delirium

## ICD-10-CM Index

### Delirium, delirious (acute or subacute) (not alcohol- or drug-induced) (with dementia) R41.0

- - hypnotic
- - - intoxication F13.921
- - - - in
- - - - - abuse F13.121
- - - - - dependence F13.221
- - - withdrawal F13.231
- - inhalant intoxication (acute) F18.921
- - - in
- - - - abuse F18.121
- - - - dependence F18.221
- - multiple etiologies F05
- - opioid intoxication (acute) F11.921
- - - in
- - - - abuse F11.121
- - - - dependence F11.221
- - other (or unknown) substance F19.921
- - phencyclidine intoxication (acute) F16.921
- - - in
- - - - abuse F16.121
- - - - dependence F16.221
- - psychoactive substance NEC intoxication (acute) F19.921
- - - in
- - - - abuse F19.121
- - - - dependence F19.221
- - sedative
- - - intoxication F13.921
- - - - in
- - - - - abuse F13.121
- - - - - dependence F13.221
- - - withdrawal F13.231
- - unknown etiology F05
- exhaustion F43.0
- hysterical F44.89
- postprocedural (postoperative) F05
- puerperal F05
- thyroid -see Thyrotoxicosis with thyroid storm
- traumatic -see Injury, intracranial
- tremens (alcohol-induced) F10.231
- - sedative-induced F13.231

Note that “other” goes to F19.921

# Medication/Drug Induced Delirium Index Points to F19.921

## F19.92 Other psychoactive substance use, unspecified with intoxication

**Excludes1:** other psychoactive substance use, unspecified with withdrawal (F19.93)

### F19.920 Other psychoactive substance use, unspecified with intoxication, uncomplicated

**F19.921 Other psychoactive substance use, unspecified with intoxication with delirium**  
Other (or unknown) substance-induced delirium

### F19.922 Other psychoactive substance use, unspecified with intoxication with perceptual disturbance

### F19.929 Other psychoactive substance use, unspecified with intoxication, unspecified

- Excludes1 note if there is:
  - Mild use disorder (drug abuse)
  - Moderate or severe use disorder (drug dependence)
- F19.921 may not clinically valid for substances is not known to be psychoactive
  - Examples – cancer chemotherapy, amantadine, Zantac, cimetidine, fluroquinolones, many others
  - Suggestion - See next slide

# F05 – Delirium due to known physiological condition

## **F05 Delirium due to known physiological condition**

- Acute or subacute brain syndrome
- Acute or subacute confusional state (nonalcoholic)
- Acute or subacute infective psychosis
- Acute or subacute organic reaction
- Acute or subacute psycho-organic syndrome
- Delirium of mixed etiology
- Delirium superimposed on dementia
- Sundowning

**Code first** the underlying physiological condition

**Excludes1:** delirium NOS (R41.0)

**Excludes2:** delirium tremens alcohol-induced or unspecified (F10.231, F10.921)

## **What's the underlying physiological condition?**

# Toxic Encephalopathy

## Clinical versus Coding Definitions

### Clinical Definition

- **Brain dysfunction caused by toxic exposure**

**Note:** The review cited below focuses on the most significant occupational causes of toxic encephalopathy, but does not address iatrogenic (pharmaceutical) causes or the neurotoxic effects of illicit recreational drugs or alcohol

Kim Y, Kim JW. Toxic Encephalopathy. Saf Health Work. 2012 Dec; 3(4): 243–256  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3521923/>

### Coding – ICD-10-CM Index to Diseases

#### **Encephalopathy (acute) G93.40**

- due to

- - **drugs - -see also Table of Drugs and Chemicals G92**

- metabolic G93.41

- - **drug induced G92**

- - **toxic G92**

- **toxic G92**

- - **metabolic G92**

#### **Jamaican**

- **neuropathy G92**

Leukoencephalopathy -see also  
Encephalopathy G93.49

- Binswanger's I67.3

- **heroin vapor G92**

# Toxic Encephalopathy Code

## G92 Toxic encephalopathy

Toxic encephalitis

Toxic metabolic encephalopathy

**Code first**, if applicable, drug induced (T36-T50)  
(T51-T65) to identify toxic agent

## T51 Toxic effect of alcohol

The appropriate 7th character is to be added to each code from category T51

A - initial encounter

D - subsequent encounter

S - sequela

### T51.0 Toxic effect of ethanol

Toxic effect of ethyl alcohol

**Excludes2:** acute alcohol intoxication or 'hangover' effects (F10.129, F10.229, F10.929)  
drunkenness (F10.129, F10.229, F10.929)  
pathological alcohol intoxication (F10.129, F10.229, F10.929)

# Coding Clinic Advice

## Toxic Encephalopathy 2<sup>o</sup> Cipro

- **Question:** A patient with dementia, who is confined to a nursing home, was admitted to the hospital after falling from his wheelchair.
  - The provider's final diagnostic statement listed, "Toxic encephalopathy due to ciprofloxacin."
  - When queried, the provider confirmed that the antibiotic had been properly administered.
- **Answer:** Yes. Since this is an adverse reaction to medication, assign
  - G92, Toxic encephalopathy, as the principal diagnosis.
  - T36.8X5A, Adverse effect of other systemic antibiotics, initial encounter, as an additional diagnosis.

Coding Clinic, 1<sup>st</sup> Quarter, 2017, page 39

# Coding Clinic Advice

## Toxic Encephalopathy 2<sup>o</sup> Lithium OD

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### Assign

- Code T43.592A, Poisoning by other antipsychotics and neuroleptics, intentional self harm, initial encounter, as the principal diagnosis.
- Code G92, Toxic encephalopathy, should be assigned as an additional diagnosis.

The code first note is intended to provide sequencing guidance when coding toxic effects, and does not preclude assigning code G92 along with poisoning codes.

**Coding Clinic, 1<sup>st</sup> Quarter, 2017, page 40**

# Free Resource Page

<http://www.cdimd.com/resources>

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### CDI-pertinent Process Resources

#### Physician Champion Job Descriptions and Resources

- [Mount Sinai Medical Center, Miami](#)

#### National CDI Process Industry Standards or Resources

- [2001 AHIMA Query Practice Brief - AHIMA members only](#)
- [2008 AHIMA Query Practice Brief - AHIMA members only](#)
- [2010 AHIMA CDI Practice Brief](#)
- [2010 AHIMA CDI Toolkit](#)
- [2013 AHIMA Sample Escalation Policy](#)
- [2014 AHIMA CDI Tool Kit - AHIMA members only](#)
- [2015 AHIMA Documentation Template Practice Brief - AHIMA Members Only](#)
- [2016 AHIMA CDI Tool Kit - AHIMA members only](#)
- [2016 AHIMA ICD-10-CM Query Practice Brief - AHIMA members](#)
- [2016 AHIMA ICD-10-PCS Query Practice Brief - AHIMA members](#)
- [2016 AHIMA Present on Admission Practice Brief - AHIMA members](#)
- [2016 AHIMA Clinical Validation Practice Briefs - AHIMA members](#)

### CDI-pertinent Physician - Clinical Resources

#### MDC 1 - Neurology

- [2013 Stroke Definition](#)
- [TIA ABCD2 Score - essential for IP medical necessity](#)
- [2013 - ICU delirium review](#)
- [2010 NIH Definition of Encephalopathy](#)
- [Toxic Encephalopathy Definition and Review](#)
- [Acute Toxic Metabolic Encephalopathy Definition](#)
- [Hepatic encephalopathy review](#)
- [ACDIS "Altered Mental Status" & Encephalopathy Review](#)
- [Adult Glasgow Coma Scale](#)
- [Pediatric Glasgow Coma Scale](#)
- [2017 - Concussion review](#)
- [Intractable \("poorly controlled"\) epilepsy definition](#)
- [Status epilepticus definition - Epilepsy Foundation](#)
- [2015 ILAE status epilepticus definition](#)

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Thank you.

Questions?

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