

CDC Stimulant Overdose (version 3)

Query purpose: To assist state, local, tribal, territorial, and federal public health practitioners in monitoring emergency department (ED) visits for suspected stimulant overdoses.

How it was developed: CDC scientists first started developing the definition using guidance from the Council of State and Territorial Epidemiologists and the Substance Abuse and Mental Health Services Administration. First, International Classification of Diseases, 10th Revision (ICD-10-CM) and 9th Revision Clinical Modification (ICD-9-CM), and Systematized Nomenclature of Medicine (SNOMED) diagnosis codes indicating an acute stimulant poisoning were identified; this was followed by identifying and adding overdose terms that could be presented in the chief complaint free text. Finally, the team identified stimulant drug terms indicating that a stimulant was involved in the overdose.

How it works: The Chief Complaint Discharge Diagnosis field is used to query both the diagnosis codes and chief complaint free text with exclusions (as necessary) to develop the syndrome definition.

- Automatic inclusion (yes):
 - If a diagnosis code indicating a stimulant poisoning is present, the ED visit is automatically included in the syndrome.
- Automatic inclusion (no):
 - If the ED visit does not include a diagnosis code for stimulant poisoning, then the visit is not automatically included.
 - The visit is captured only if it includes two components:
 - 1) chief complaint text indicating an overdose or poisoning and
 - 2) chief complaint text indicating stimulant involvement.
 - The list of exclusions is applied to the chief complaint text only when a discharge diagnosis code is not present for stimulant poisoning.

For consideration: With the opioid query, CDC identified several non-poisoning ICD-10-CM codes for inclusion in the syndrome definition (e.g., F11 codes). CDC also explored the inclusion of the stimulant-related F codes (i.e., F14 and F15) in this stimulant definition. However, our analysis showed that these codes were not identifying acute overdose visits and instead were being coded correctly as stimulant abuse. The team attempted to identify most drug names used for stimulants; however, it is likely that some drug names and slang terms should be added to the next version of the definition.

Table 1. Chief complaint and discharge diagnosis search terms for suspected stimulant overdose (version 3)

Variable	Automatic inclusion?	Specific terms
<i>Inclusions</i>		
Discharge Diagnosis – ICD-9-CM poisoning	Yes	969.70, 969.71, 969.72, 969.73, 969.79, 970.0, 970.81, 970.89, 970.9, E854.2, E854.3, E855.2 (also included codes with no period, e.g., “97080”)
Discharge Diagnosis – ICD-10-CM poisoning	Yes	T40.5X1A, T40.5X4A, T43.601A, T43.604A, T43.611A, T43.614A, T43.621A, T43.624A, T43.631A, T43.634A, T43.641A, T43.644A,

		T43.691A, T43.694A (also included codes with no period, e.g., "T405X1A")
Discharge Diagnosis – SNOMED	Yes	296321004, 441527004, 296290006, 61803000
Chief complaint – overdose term	No, include only if other stimulant-related terms are also present	Poisoning (poison) Overdose (overdose, overdoes, averdose, averdoes, over does, overose) Nodding off Snort Ingestion (ingest, inject) Intoxication (intoxic) Unresponsive (unresponsiv) Loss of consciousness (syncope, syncope) Shortness of breath (SOB), short of breath Altered mental status (AMS)
Chief complaint – stimulant term	No, include only if other overdose-related terms are also present	Speedball, Cocaine, Coke, Crack, Amphetamine (will catch methamphetamine), meth, Crystal meth, Lisdexamfetamine, Dextroamphetamine, Levoamphetamine, Biphetamine, Dexedrine, Adderal, Vyvanse, Concerta, Methylin, Ritalin, Cathinone, Bath salt, Stimulant, MDMA, Ecstasy, Molly
<i>Exclusions</i>		
Chief complaint	Exclude	See list below in ESSENCE code (most around molly and crack)

Table 2. ESSENCE query for suspected stimulant overdose (version 3)

(,^[/]969.7[01239][;/]^,or,^[/]9697[01239][;/]^,or,^[/]970.0^,or,^[/]9700[;/]^,or,^[/]970.8[19][;/]^,or,^[/]9708[19][;/]^,or,^[/]970.9[;/]^,or,^[/]9709[;/]^,or,^[/]E854.[23][;/]^,or,^[/]E854[23][;/]^,or,^[/]E855.2[;/]^,or,^[/]E8552[;/]^,or,^[/]T40.5X1A^,or,^[/]T405X1A^,or,^[/]T40.5X4A^,or,^[/]T405X4A^,or,^[/]T43.6[012349][14]A^,or,^[/]T436[01239][14]A^,or,^[/]296321004;^,or,^[/]441527004;^,or,^[/]296290006;^,or,^[/]61803000;^),or,(,(,^poison^,or,^verdo[se][es]^,or,^over dose^,or,^overose^,or,^nodding^,or,^ nod ^,or,^snort^,or,^in[g]est^,or,^intoxic^,or,^unresponsiv^,or,^loss of consciousness^,or,^syncop^,or,^shortness of breath^,or,^short of breath^,or,^altered mental status^),and,(,^speedball^,or,^speed ball^,or,^coc[ai][ia]ne^,or,^cocc[ai][ia]ne^,or,^cocane^,or,^cocanne^,or,^coke^,or,^crack^,or,^ meth ^,or,^amphetamine^,or,^c[ry][yr]stal meth^,or,^lisdexamfetamine^,or,^dextroamphetamine^,or,^levoamphetamine^,or,^biphetamine^,or,^dexedrine^,or,^a dderal^,or,^aderal^,or,^vyvanse^,or,^concerta^,or,^methylin^,or,^ritalin^,or,^cathinone^,or,^bath salt^,or,^bathsalt^,or,^stimulant^,or,^ MDMA ^,or,^e[sc][cs]ta[cs]y^,or,^e[xsc]ta[sc]y^,or,^ex[sc]ta[sc]y^,or,^ moly ^,or,^ moll[iy] ^),),andnot,(,^crackle^,or,^crackled^,or,^cracked^,or,^cracking^,or,^cracks^,or,^crackles^,or,^crackling^,or,^crackinling ^,or,^crackiling^,or,^cracker^,or,^crackers^,or,^crackels^,or,^crackly^,or,^mccracken^,or,^buttcrack^,or,^a crack^,or,^crack in^,or,^knee crack^,or,^shoulder crack^,or,^butt crack^,or,^ankle crack^,or,^callous crack^,or,^crack due to^,or,^pop crack^,or,^loud crack^,or,^it crack^,or,^heard crack^,or,^felt crack^,or,(,^rib^,and,^crack^),or,^fell crack^,or,^snap crack^,or,^growth plate^,or,^to crack of^,or,^crack sidewalk^,or,^sidewalk crack^,or,^tooth^,or,^teeth^,or,^hands cracke^,or,^heard something^,or,^nail^,or,^cracky^,or,^crack area^,or,^crack cast^,or,^back crack^,or,^crack of^,or,^crack his^,or,(,^lip^,and,^crack^),or,^my crack^,or,^glass crack^,or,(,^buttock^,and,^crack^),or,^crack on ^,or,^crack to ^,or,^foot crack^,or,^no loss of consciousness^,or,^denie[sd] loss of consciousness^,or,^negative loss of consciousness^,or,^denies any loss of consciousness^,or,^denies drug^,or,^deny drug^,or,^denied drug^,or,^denying drug^,or,^denies any drug^,or,^ with dra ^,or,^withdra^,or,^detoxification^,or,^detos^,or,^detoz^,or,^dtox^,or,^coker^,or,^coke bottle^,or,^coke can^,or,^coke case^,or,^case of coke^,or,(,^rum^,and,^coke^),or,^jack and coke^,or,^coke tea^,or,^coffee coke^,or,^delirium
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tremens coke^,or,^drink a coke^,or,^jack coke^,or,^dirnking coke^,or,^coke tab^,or,^scotch coke^,or,^drinking coke^,or,^aspirating on coke^,or,^coke colored^,or,^drank coke^,or,^cardiac-stimulant^,or,^cardiac stimulant^,or,^meth germantown^,or,^meth gmt^,or,^meth odist^,or,^meth obstet^,or,^meth group^,,)

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