

CDC All Stimulant Overdose v4 Parsed
Drug Overdose Surveillance and Epidemiology (DOSE) System Guidance
Syndromic Surveillance Definition Factsheet and Technical Brief

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Definition Purpose: To assist state, local, tribal, territorial, and federal public health practitioners in monitoring emergency department visits for suspected nonfatal stimulant-involved overdoses using syndromic surveillance data.

New or Revised Definition: Revision of CDC All Stimulant Overdose v3

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Definition Description: The CDC All Stimulant Overdose v4 Parsed syndrome definition was designed to be used to identify ED visits for suspected nonfatal stimulant-involved overdoses of unintentional or undetermined intent. The query relies on data in two fields from ED visit records to identify encounters that meet the definition criteria:

- (1) the chief complaint free text field, which is a processed version of the reported chief complaint and may include terms indicating a stimulant-involved overdose or poisoning, as well as relevant exclusion terms (e.g., terms indicating stimulant withdrawal without acute intoxication, etc., which would exclude ED visit records from this syndrome definition), and
- (2) the discharge diagnosis parsed field, which includes International Classification of Diseases, Clinical Modification, 9th Revision (ICD-9-CM),¹ International Classification of Diseases, Clinical Modification, 10th Revision (ICD-10-CM),² or Systematized Nomenclature of Medicine – Clinical Terms (SNOMED-CT)³ diagnosis codes, with descriptive code text removed, and which may indicate an acute stimulant-involved overdose or poisoning of unintentional or undetermined intent.

Within ESSENCE, the syndrome query is applied to the Chief Complaint Discharge Diagnosis (CCDD) Parsed field, which combines these two fields of interest.

¹ World Health Organization. International Classification of Diseases, Ninth Revision, Clinical Modification. World Health Organization; 1980.

² World Health Organization. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM). World Health Organization; 2015.

³ National Library of Medicine. SNOMED-CT. Accessed [Dec 5 2023].
<https://www.nlm.nih.gov/healthit/snomedct/index.html>

Use-Cases for Definition:

- Case-finding
- Trend monitoring
- Early outbreak detection

Justification for Development: The use of stimulants and stimulant-involved overdoses, including cocaine and methamphetamine, continue to rise in United States; stimulant-involved overdose deaths increased rapidly from 2012 to 2020.^{4,5} This definition was developed to help public health practitioners track and understand overall trends of nonfatal stimulant-involved overdoses treated in EDs in near real-time. These encompass stimulants that are illegal (e.g., cocaine, methamphetamine) as well as legal prescription medications (e.g., attention-deficit/hyperactivity disorder [ADHD] treatment).

Data Source During Development: ED visits

Development Methods: This revision was developed to serve three purposes: (1) Adapt the CDC All Stimulant Overdose v3 definition syntax to query the newly developed CCDD Parsed field, which removes extraneous text from the discharge diagnosis portion of CCDD, (2) nest the logic for CDC Cocaine Overdose v2 Parsed and CDC Methamphetamine Overdose v1 Parsed definitions within the CDC All Stimulant Overdose v4 Parsed definition to ensure capture of ED Visits for suspected stimulant-involved overdoses by the CDC Stimulant Overdose v4 Parsed definition, and (3) revise the query syntax to incorporate corrections to logic and other identified improvements. CDC NSSP staff used R code to update the syntax to meet CCDD Parsed field requirements. The CDC DOSE team reviewed the revisions and compared total visits captured by CCDD and CCDD Parsed versions of the definition, with a focus on diagnosis codes, to ensure correct restructuring.

The initial CDC All Stimulant Overdose definition⁶ development began with the DOSE team reviewing guidance from the United States Drug Enforcement Administration (DEA), Council of State and Territorial Epidemiologists (CSTE), and the Substance Abuse and Mental Health Services Administration (SAMHSA). First, ICD-9-CM, ICD-10-CM, and SNOMED-CT diagnosis codes indicating an acute stimulant poisoning were identified. Finally, overdose and stimulant terms that appeared in ED visit chief complaint text were iteratively added to the definition syntax and validated.

Validation Methods: Three methods were employed to validate this new definition.

- 1) CDC scientists from the NSSP team used R code to convert the syntax from (A) the previous Stimulant Overdose versions that queried the Chief Complaint Discharge Diagnosis (CCDD) field to (B) syntax that would effectively query the Chief Complaint Discharge Diagnosis (CCDD) Parsed field. These conversions focused on changes to diagnostic code formatting within the syntax. The

⁴ Hedegaard H, Miniño AM, Spencer MR, Warner M. Drug Overdose Deaths in the United States, 1999-2020. NCHS Data Brief. 2021 Dec;(426):1-8. PMID: 34978529.

⁵ Pickens CM, Jones CM, Guy GP Jr, Dailey Govoni T, Green JL. Associations between prescription stimulant use as prescribed, nonmedical use, and illicit stimulant use among adults evaluated for substance use treatment, 2017-2021. Drug Alcohol Depend Rep. 2023 Mar 30;7:100153. doi: 10.1016/j.dadr.2023.100153. PMID: 37123433; PMCID: PMC10133667.

⁶ CDC Stimulant Overdose v1 syndrome definition: <https://knowledgerepository.syndromicsurveillance.org/cdc-stimulants-v1>

DOSE team verified that the syntax converted correctly (i.e., did not eliminate codes or terms that were intended to capture stimulant-involved overdose).

- 2) The CDC DOSE team incorporated corrections and improvements to the syntax logic and piloted the draft definition by manually reviewing records that were captured after aforementioned conversion of syntax. This process was done iteratively with the proposed changes and the DOSE team met and discussed visit reviews and incorporated the inclusion and exclusion terms. Terms that were associated with ED visits classified as true suspected overdoses were retained.
- 3) The DOSE team evaluated the draft definition by comparing overdose counts and reviewing records that were captured before and after aforementioned conversion of syntax. Overall aggregate counts over time comparing CDC All Stimulant Overdose v3 and CDC All Stimulant Overdose v4 Parsed showed only minimal differences in counts, which were an anticipated outcome of the syntax conversion process.

Definition Fields and Structure: The CCDD Parsed 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:
 - If a diagnosis code (ICD-9-CM, ICD-10-CM, and/or SNOMED-CT) indicating a stimulant poisoning is present, the ED visit is automatically included in the syndrome.
 - The ED visit is automatically included in the syndrome definition if the ED visit meets one or more of the nested drug overdose definitions:
 - CDC Cocaine Overdose v2 Parsed
 - CDC Methamphetamine Overdose v1 Parsed
- Conditional inclusion:
 - If the ED visit does not include a diagnosis code for stimulant poisoning or overdose of unintentional or undetermined intent, then the visit is not automatically included. In these instances, the visit is captured only if it includes two components and no exclusion terms:
 - 1) chief complaint text indicating an overdose or poisoning **AND**
 - 2) chief complaint text indicating stimulant involvement **OR** the SNOMED-CT code for stimulant abuse.
 - The exclusion terms are applied to the chief complaint text only when a discharge diagnosis code is not present for stimulant poisoning.

For Consideration: With the separate opioid query, the DOSE team identified several non-poisoning ICD-10-CM codes for inclusion in the syndrome definition (e.g., F11 codes indicating opioid abuse, dependence, or use). Similarly, the team also explored the inclusion of the stimulant abuse, dependence, or use F codes (i.e., F14 and F15) in this stimulant definition during the initial syndrome development. However, our analysis showed that these codes were not identifying acute overdose visits and instead were being coded correctly as stimulant use/abuse/dependence. The team attempted to identify most drug names used for stimulants; however, it is likely that some additional drug names and slang terms will be added to a future version of the definition. Additionally, the CDC Methamphetamine Overdose v1 Parsed and CDC Cocaine Overdose v2 Parsed definitions are nested within the CDC All Stimulant Overdose v4 Parsed syndrome definition; thus, terms and names for cocaine and methamphetamine and specific overdose terms that included in those queries are not described here for the CDC All Stimulant Overdose v4 Parsed syndrome definition.

Limitations: The definition was developed to capture suspected nonfatal stimulant-involved overdoses treated in EDs. However, it is subject to both misclassification and under/overreporting for several reasons, including limited point-of-care confirmatory testing to identify the drug(s) involved in the overdose, and reliance on self-report, bystander reports, and/or clinical presentations to determine the drug(s) involved in an overdose. The codes provided in the discharge diagnosis field from the ED visit record do not necessarily represent the final diagnosis of a patient and should be considered preliminary. Additionally, some hospitals may enter all diagnosis codes from a patient’s entire medical history, including codes for previous stimulant-involved overdose visits; the definition may incorrectly capture such encounters that were not for a true stimulant-involved overdose and thus result in overreporting. It is not possible in syndromic data to determine the primary reason for a patient’s visit, as syndromic data lack a primary diagnosis field. Therefore, all terms and codes are considered equally (i.e., not in any priority) regardless of what order they are in the record. Finally, stimulant-involved overdoses may be more difficult to identify than opioid-involved overdoses and thus reported in chief complaints due to the diverse range of associated symptoms, including some that may overlap with cardiovascular health and mental health-involved ED visits. For example, someone with heart palpitations and stimulant use may have been treated at an ED for cardiac symptoms and used a prescription stimulant as directed. This scenario could be captured as a stimulant-involved overdose. Future studies where provider triage notes are available may help further validate the use of chief complaints and discharge diagnoses to identify nonfatal stimulant-involved overdose visits in syndromic data. The team attempted to identify all appropriate inclusion and exclusion terms to capture any suspected nonfatal stimulant-involved overdose while avoiding capturing encounters that were not for an acute stimulant-involved overdose or poisoning; however, it is possible that some of these encounters were erroneously captured, leading to overreporting.

Acknowledgements: The CDC DOSE team would like to acknowledge the contributions of CDC NSSP staff members Zach Stein, Michael Sheppard, and Mukesh Hamal in recoding the query to the CCDD Parsed field and reviewing the query revisions.

Detailed Definition Components

Table 1. Chief complaint terms and discharge diagnosis codes and concepts, All Stimulant Overdose v4 Parsed

Variable Type	Automatic inclusion?	Terms	Description
<i>Inclusions</i>			
<i>Discharge Diagnosis codes</i>			
ICD-9-CM ¹	Yes	96970	Poisoning by psychostimulant, unspecified
		96971	Poisoning by caffeine
		96972	Poisoning by amphetamines
		96973	Poisoning by methylphenidate
		96979	Poisoning by other psychostimulants
		9700	Poisoning by analeptics
		97081	Poisoning by cocaine
		97089	Poisoning by other central nervous system stimulants

		9709	Poisoning by unspecified central nervous system stimulant
		E8542	Accidental poisoning by psychostimulants
		E8543	Accidental poisoning by central nervous system stimulants
		E8552	Accidental poisoning by local anesthetics
ICD-10-CM ¹	Yes	T43601A	Poisoning by unspecified psychostimulants, accidental (unintentional) initial encounter
		T43604A	Poisoning by unspecified psychostimulants, undetermined initial encounter
		T43611A	Poisoning by caffeine, accidental (unintentional) initial encounter
		T43614A	Poisoning by caffeine, undetermined initial encounter
		T43621A	Poisoning by amphetamines, accidental (unintentional) initial encounter
		T43624A	Poisoning by amphetamines, undetermined initial encounter
		T43631A	Poisoning by methylphenidate, accidental (unintentional) initial encounter
		T43634A	Poisoning by methylphenidate, undetermined initial encounter
		T43641A	Poisoning by ecstasy, accidental (unintentional) initial encounter
		T43644A	Poisoning by ecstasy, undetermined initial encounter
		T43691A	Poisoning by other psychostimulants, accidental (unintentional) initial encounter
		T43694A	Poisoning by other psychostimulants, undetermined initial encounter
SNOMED-CT	Yes	296290006	Central nervous system stimulant overdose (disorder)
		61803000	Poisoning caused by central nervous system stimulant (disorder)
		296317006	Psychostimulant overdose (disorder)
		296291005	Amphetamine overdose
SNOMED-CT	Conditional, include only if other overdose-related terms are also present AND no exclusion terms	441527004	Stimulant abuse (disorder)
<i>Chief Complaint terms</i>			
Overdose-related terms	Conditional, include only if other stimulant-related terms are also present AND no exclusion terms	Palpitations, poisoning, overdose, snort, ingest, intoxication, altered mental status (and misspellings)	

Stimulant-related terms	Conditional, include only if other overdose-related terms are also present AND no exclusion terms	Amphetamine, lisadexamfetamine, dextroamphetamine, levoamphetamine, biphphetamine, Dexedrine, Adderal, Vyvanse, Concerta, methylin, Ritalin, cathinone, bath salt, stimulant, MDMA, ecstasy, molly (and misspellings)
Exclusions		
Chief complaint	Exclude if encounter captured from chief complaint terms only (i.e., exclusion terms are applied to the chief complaint text only when the automatic inclusion criteria are not met)	Cardiac stimulant, delirium tremens, phrases indicating denial of drug, terms indicating withdrawal or detoxification, common negations of overdose-related terms or stimulant-related terms (and misspellings)
Nested definitions		
Cocaine Overdose Definition	Yes	Example terms include speedball, cocaine, coke, crack, and misspellings. See technical brief for Cocaine Overdose v2 Parsed for the complete diagnostic codes and terms list.
Methamphetamine Overdose Definition	Yes	Example terms include methamphetamines, ice, speed, and misspellings, and other commonly used terms for methamphetamines. See technical brief for Methamphetamine Overdose v1 Parsed for the complete diagnostic codes and terms list.

¹ICD-9-CM and ICD-10-CM code punctuation is removed when querying the CCDD Parsed field.

Table 2. ESSENCE syntax, All Stimulant Overdose v4 Parsed

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(, (^;9697[01239];^,OR,^;9700;^,OR,^;9708[19];^,OR,^;9709;^,OR,^;E854[23];^,OR,^;E8552;^,OR,^;T436[012349][14]A^,OR,^;296290006;^,OR,^;61803000;^,OR,^;296317006;^,OR,^;296291005;^),OR,( (^, (^palp^,OR,^heart pap^,OR,^poison^,OR,^verdo[se][es]^,OR,^overose^,OR,^snort^,OR,^in[gj]est^,OR,^intoxic^,OR,^altered mental status^,OR,^numb^,OR,^diaphoretic^,OR,^racing^,OR,^numb^,OR,^chest pain^,ANDNOT, (^no chest pain^,OR,^denie[sd] chest pain^),OR,^tach[iy]^,OR,^not feeling well^,OR,^not right^),AND, (^amphetamine^,ANDNOT,^methamphetamine^,OR,^lisdexamfetamine^,OR,^dextroamphetamin e^,OR,^levoamphetamine^,OR,^biphphetamine^,OR,^dexedrine^,OR, (^, (^adderal^,OR,^aderal^),ANDNOT, (^off adderal^,OR,^off aderal^),),OR,^vyvanse^,OR,^concerta^,OR,^methylin^,OR,^ritalin^,OR,^cathinone^,OR, (^, (^bath salt^,OR,^bathsalt^),ANDNOT, (^denie[sd] bathsalt^,OR,^denie[ds] bath salt^),),OR,^stimulant^,ANDNOT, (^cardiac stimulant^,OR,^denie[ds] stimulant^,OR,^denie[ds] any stimulant^),OR,!MDMA!,ANDNOT, (^history MDMA^,OR,^deny MDMA^),OR,^e[sc][cs]ta[cs]y^,OR,^e[xsc]ta[sc]y^,OR,^ex[sc]ta[sc]y^,OR,!molly!,OR,!moll[iy]!,ANDNOT, (^docto r molly^,OR,^private molly^),OR,^;441527004;^),),ANDNOT, (^denie[sd] drug^,OR,^deny drug^,OR,^denying drug^,OR,^denie[sd] any drug^,OR,!with draw!,OR,^withdra^,OR,^deto[sxz]^,OR,^dtox^),),),OR, (^;97081;^,OR,^;T405X1A^,OR,^;T405X4A^,OR,^;29632 1004;^,OR,^;216583009;^,OR,^;290545007;^,OR,^;296325008;^,OR,^;9982009;^,OR, (^, (^, (^poison^,OR,^verdo[se][es]^,OR,^over dose^,OR,^overose^,OR,^snort^,ANDNOT, (^denie[sd] snort^,OR,^no snort^),OR,^in[gj]est^,OR,^intoxic^,OR,^altered mental status^,OR,^seiz^,ANDNOT, (^denie[sd] seiz^,OR,^no
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seiz^),OR,^high blood^,OR,^abdominal pain^,OR,^racing^,OR,^agitat^,OR,^aggitat^,OR,(,^heart pap^,OR,^palp^),ANDNOT,(,^denie[sd] heart palp^,OR,^no heart palp^,OR,^denie[sd] heart pap^,OR,^no heart pap^),OR,^cardi[ao]^,ANDNOT,(,^denie[sd] cardi[ao]^,OR,^no cardi[ao]^),OR,^heart attack^,OR,^myocard^,OR,^stroke^,OR,^tach[iy]^,OR,^chest pain^,ANDNOT,(,^no chest pain^,OR,^denie[sd] chest pain^),OR,^squeezing in chest^,OR,^chest tight^,OR,(,^chest pressure^,OR,^pressure in chest^),ANDNOT,(,^no chest pressure^,OR,^denie[sd] chest pressure^,OR,^denie[sd] pressure in chest^,OR,^no pressure in chest^),),AND,(,^speedball^,OR,^speed ball^,OR,^coc[ai][ia]ne^,OR,^cocc[ai][ia]ne^,OR,^cocane^,OR,^cocanne^,OR,!coke!,ANDNOT,(,^denie[ds] coke^,OR,^denie[ds] coc[ai][ia]ne^,OR,^coke top^,OR,^coke bottle^,OR,^coke can^,OR,^coke case^,OR,^case of coke^,OR,^bottle of coke^,OR,^bottles of coke^,OR,(,^rum^,AND,^coke^),OR,^jack and coke^,OR,^diet coke^,OR,^coke tea^,OR,^coffee coke^,OR,^delirium 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,^drank a coke^),OR,!crack!,ANDNOT,(,^a crack^,OR,^crack in^,OR,^knee crack^,OR,^shoulder crack^,OR,^tooth 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,^crack area^,OR,^crack cast^,OR,^back crack^,OR,^crack of^,OR,^crack his^,OR,(,^lip^,AND,^crack^),OR,^neck crack^,OR,^crack neck^,OR,^my crack^,OR,^glass crack^,OR,(,^buttock^,AND,^crack^),OR,!crack on!,OR,!crack to!,OR,^foot crack^),OR,^;F1412^,OR,^;F1422^,OR,^;F1492^),),ANDNOT,(,^denie[sd] drug^,OR,^deny drug^,OR,^denying drug^,OR,^denie[sd] any drug^,OR,!with draw!,OR,^withdra^,OR,^deto[sxz]^,OR,^dtox^),),OR,(,^;T4365[14]A^,OR,(,(,^;T5090[14]A^,OR,^;9697[029]; ^,OR,^;9700;^,OR,^;97089;^,OR,^;9709;^,OR,^;E854[23]^,OR,^;T436[029][14]A^,OR,^;29629000[56];^,OR,^;618 03000;^,OR,^abdominal pain^,OR,^agitat^,OR,^aggitat^,OR,^aggressive^,OR,^altered mental status^,OR,^arrhythmia^,OR,^bad reaction^,OR,^bad trip^,OR,^bizz^,OR,^bizar^,OR,^bugs^,OR,^chest pain^,ANDNOT,(,^denies chest pain^,OR,^no chest pain^),OR,^chest pressure^,OR,^chest tight^,OR,^combat^,OR,^delusion^,OR,^delirium^,ANDNOT,^delirium tremen^,OR,^delirum^,ANDNOT,^delirum tremen^,OR,^diaphoretic^,OR,^disoriented^,OR,^dizz^,OR,^erra[td]ic^,OR,^feels bad^,OR,^feels weird^,OR,^fidg^,OR,^flight of ideas^,OR,^formication^,OR,^hallucinat^,OR,^hearing voices^,OR,^heart attack^,OR,^heart pap^,OR,^heart racing^,OR,^high blood pressure^,OR,^hyperv verbal^,OR,^incoh^,OR,^in[gj]est^,OR,^intoxic^,OR,^lightheaded^,OR,^manic^,OR,^nause a^,OR,^not feeling well^,OR,^not right^,OR,^not sleeping^,OR,^numb^,OR,^verdo[se][es]^,OR,^overose^,OR,^over dose^,OR,^palp^,OR,^parano^,OR,^poison^,OR,^racing heart^,OR,^restless^,OR,^seeing snakes^,OR,^seeing things^,OR,^shak^,OR,^shot up^,OR,^shoot up^,OR,^shooting up^,OR,^shoots up^,OR,(,^shortness of breath^,OR,^short of breath^),ANDNOT,(,^denie[sd] short^,OR,^no short^),),OR,^snort^,OR,^seiz^,OR,^sores all over^,OR,^picking at skin^,OR,^scratching^,OR,^sycho^,OR,^tach[iy]^,OR,^tingl^,OR,^tight chest^,OR,^tremulous^,OR,!tripping!,OR,^trouble sleeping^,OR,^twitch^,or,^vomiting^,OR,^violent^,OR,^weakness^),AND,(,^desoxyn^,OR,(,!meth!,OR,^metha mphetamine^,OR,^on mth^),ANDNOT,(,^meth recovery^,OR,^clean from meth^,OR,^rsh on mth^,OR,^meth gas^,OR,^history of meth^,OR,^stopped smoking meth^,OR,^stopped meth^,OR,^stopped using meth^,OR,^no meth^,OR,^deny meth^,OR,^denie[sd] meth^,OR,^quit meth^,OR,^meth germ^,OR,^meth gmt^,OR,^meth odist^,OR,^meth obstet^,OR,^meth group^,OR,^meth south^,OR,^seen at meth^,OR,^meth gtown^,OR,^went to meth^,OR,^meth north^,OR,^meth univ^),),OR,(,!crank!,ANDNOT,(,^hand crank^,OR,^doctor crank^,OR,^using a crank^),),OR,(,^gram of ice^,OR,!on ice!,OR,!smoking ice!,OR,!smoked ice!,OR,!line of ice!,OR,!used ice!,OR,!using ice!,OR,!ingested ice!,OR,!ingesting ice!,OR,^admits to ice^,OR,!lice use!,OR,^in[gj]ect^ ice^),ANDNOT,(,^nose bleeding ice^,OR,^laying on ice^,OR,^bump on ice^,OR,^player on ice^,OR,^iceyhot^,OR,^using ice with no relief^,OR,^using ice with relief^,OR,^on ice with relief^,OR,^no ice used^,OR,^choked on ice^,OR,^ice heat^,OR,^spun around on ice^,OR,^hit face on ice^,OR,^fal on ice^,OR,^lost control on ice^,OR,^walking on ice^,OR,^de icer^,OR,^elevation ice^,OR,^using ice heat^,or,^landed on ice^,OR,^ice melt salt^,OR,^black ice^,OR,^chew^ice^,OR,^ice chip^,OR,^ice cube^,OR,^ice^f[ae]ll^,OR,^f[ae]ll^ice^,OR,^sli[pd]^ice^,OR,^spice^,OR,^appl^ice^,OR,^ice^appl^,OR,^ice

pack^,OR,^ice cream^,OR,^ice bath^,OR,^ice coffee^,OR,^ice to area^,OR,^doctor ice^,OR,^smirnoff
ice^,OR,^ice skat^,OR,^ice water^,OR,^ice cold^,OR,^pushed down on ice^,OR,^ice hockey^,OR,^head on
ice^,OR,^ice patch^,OR,^bag of ice^,OR,^ice machine^,OR,^dry ice^,OR,^ibuprofen^,OR,^vehicle on
ice^,)),OR,^overramping^,OR,(,!speed!,ANDNOT,(^driver speed^,OR,^city speed^,OR,^fast speed^,OR,^dr
speed^,OR,^fan speed^,OR,^residential speed^,OR,^slurred speed^,OR,^stand still speed^,OR,^unknown exact
speed^,OR,^speed up^,OR,^up to speed^,OR,^car speed^,OR,^speed limit^,OR,^marked speed^,OR,^medium
speed^,OR,^unknow speed^,OR,^normal speed^,OR,^changed speed^,OR,^full speed^,OR,^unkwon
speed^,OR,^hight speed^,OR,^highway
speed^,OR,^MPH^speed^,OR,^speed^heart^,OR,^speed^MPH^,OR,^speed sign^,OR,^low
speed^,OR,^moderate speed^,OR,^high speed^,OR,^unknown speed^,OR,^unsure of speed^,OR,^interstate
speed^,OR,^practice speed^,OR,^speed process up^,OR,^walking speed^,OR,^speed unk^,OR,^speed
bump^,OR,^rate of speed^,OR,^hwy speed^,OR,^unknown speed^,)),OR,(^tweak^,ANDNOT,(^tweak^ on
left^,OR,^tweak^ on right^,OR,^tweaked^,OR,^tweak^ it^,)),),ANDNOT,(^denie[sd] drug^,OR,^deny
drug^,OR,^denying drug^,OR,^denie[sd] any drug^,OR,^jail clearance^,OR,!with
draw!,OR,^withdra^,OR,^deto[xsz]^,OR,^dtox^,OR,^rehab^,OR,^wants refer^,)),)