# <u>CDC Pedestrian Motor Vehicle Traffic Injury v1</u> <u>Definition Factsheet & Technical Brief</u>

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<u>Definition Purpose</u>: The purpose of the CDC Pedestrian Motor Vehicle Traffic Injury v1 syndrome definition is to assist with detection of initial emergency department (ED) visits among pedestrians unintentionally injured on public roads in traffic-related crashes involving a motor vehicle. The syndrome definition can be used to monitor trends and might help identify situations and populations that could be well served by specific injury prevention strategies.

The query is now in the National Syndromic Surveillance Program (NSSP) BioSense Platform Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) as a Chief Complaint and Discharge Diagnosis (CC and DD) Category called "CDC Pedestrian Motor Vehicle Traffic Injury v1." The definition may be revised in the future as trends emerge and feedback is received.

New or Revised Definition: New

Date Added to ESSENCE: October 18, 2023

## **Definition Description**:

The CDC Pedestrian Motor Vehicle Traffic Injury v1 syndrome definition aims to identify emergency department visits involving pedestrians unintentionally injured on a public road in a crash involving a motor vehicle.

For this syndrome definition:

Pedestrian definition: A pedestrian is defined as any person

- on foot,
- walking,
- running,
- jogging,
- sitting or lying down,
- in a motorized or non-motorized wheelchair,
- in a baby carriage,
- on roller skates or inline skates,
- on a skateboard,
- on a non-motorized scooter,
- on a motorized mobility scooter designed to accommodate disability, or
- on skis, sleds, or ice skates.

**Motor vehicle definition:** A motor vehicle includes cars, pick-up trucks, vans, SUVs, heavy transport vehicles (i.e., tractor-trailers), buses, 2-wheeled vehicles (i.e., motorcycles), and 3-wheeled vehicles (i.e., 3-wheeled motorcycles).

**Public road definition:** A public road is defined as any road under the jurisdiction of and maintained by a public authority and open to public travel.

**Timing:** The syndrome definition aims to detect initial emergency department visits that could include visits among pedestrians injured in a crash that occurred minutes, hours, days, or weeks earlier.

### Types of ED visits the syndrome definition excludes:

- visits among people injured while using micro-mobility devices (e.g., e-scooters) and bicycles;
- visits among pedestrians injured in a collision with any conveyance that is not a motor vehicle (e.g., pedestrian hit by bicycle or e-scooter);
- visits due to motor vehicle crashes that occur in driveways, parking lots, and private roads (e.g., roads on industrial premises, farms, and roads in private communities);
- visits caused by motor vehicle crashes that are violence- or suicide-related; and
- subsequent or sequela visits for the initial traffic-related crash.

#### Use-Cases for Definition:

- □ Case-finding
- ⊠ Trend monitoring
- ⊠ Early outbreak detection

### Justification for New Version:

In 2021, nearly 8,000 pedestrians were killed on our nation's roads in crashes involving a motor vehicle, and over 120,226 pedestrian injury-related emergency department visits occurred.<sup>1</sup> Pedestrian deaths in the United States have increased for more than a decade.<sup>2</sup> The number of pedestrians killed in 2021 was the highest in 40 years and represents a 14% increase since 2020, one of the largest single-year jumps in decades.<sup>1</sup> Traditional surveillance systems monitoring pedestrian motor vehicle traffic deaths and injuries typically have a time lag of at least 1–2 years between data collection and availability. More timely and comprehensive data on these injuries at the national, state, and local levels are needed to help improve pedestrian safety. A consistent and validated syndrome used across localities to detect near real-time emergency department visits among pedestrians injured in traffic-related crashes involving a motor vehicle can inform more timely prevention efforts.

- Centers for Disease Control and Prevention. WISQARS (Web-based Injury Statistics Query and Reporting System). Atlanta, GA: US Department of Health and Human Services, CDC; 2015. Available at <u>https://www.cdc.gov/injury/wisqars/index.html</u> Accessed 15 June 2023.
- 2. National Highway Traffic Safety Administration. Traffic Safety Facts: Pedestrians. Washington, DC: US Department of Transportation, NHTSA; 2022. Available at <a href="https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813310">https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813310</a>

#### Data Source During Development: Emergency department visits

#### Development Methods:

Syndrome definition development was a collaboration among scientists from the Centers for Disease Control and Prevention's National Syndromic Surveillance Program; Division of Injury Prevention; Division of Nutrition, Physical Activity, and Obesity; and state and local health departments.

Syndrome definition development included identifying relevant discharge diagnoses and chief complaint keywords.

#### Discharge diagnoses:

First, International Classification of Diseases, 9th and 10th Revisions, Clinical Modification codes (ICD-9-CM and ICD-10-CM), were identified as potential discharge diagnosis codes. To identify appropriate ICD-9-CM and ICD-10-CM codes for pedestrian motor vehicle traffic injuries, the team reviewed and considered codes currently used or recommended for pedestrian injury

surveillance. These included (but were not limited to) codes used in surveillance by the National Highway Traffic Safety Administration, by the Centers for Disease Control and Prevention, and recommended in the *Consensus Recommendations for Pedestrian Injury Surveillance* by the Safe States Alliance. Examples of these potential pedestrian injury codes can be found here:

- <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813310</u>
- <a href="https://www.cdc.gov/nchs/data/ice/icd10">https://www.cdc.gov/nchs/data/ice/icd10</a> transcode.pdf
- <u>https://pedevalguide.safestates.org/wp-content/uploads/2020/07/Consensus-Recommendations-for-Pedestrian-Injury-Surveillance-ISW8.pdf</u>

The ICD-9-CM and ICD-10-CM codes chosen for the syndrome definition align with how the Centers for Disease Control and Prevention defines pedestrian injury in their surveillance systems for fatal and nonfatal injury (<u>https://www.cdc.gov/injury/wisqars/index.html</u>), which are also similar to the Safe States Alliance's recommendations. The National Highway Traffic Safety Administration currently uses a narrower definition of pedestrian (i.e., any person on foot, walking, running, jogging, sitting, or lying down) than this syndrome definition.

ICD-10-CM codes chosen for the syndrome definition can differentiate between pedestrians injured while on foot, on roller blades or inline skates, on skateboards, or on other conveyance. Several types of pedestrians are grouped into the "other conveyance" category, including people using wheelchairs or motorized mobility scooters designed to accommodate disability, babies in strollers, and people on skis, sleds, ice skates, or non-motorized scooters.

Second, several team members independently searched for relevant SNOMED codes

(https://browser.ihtsdotools.org/?perspective=full&conceptId1=214391003&edition=MAIN/2022-10-

<u>31&release=&languages=en</u>) using keywords (e.g., pedestrian). Selected SNOMED codes were collaboratively reviewed for final inclusion based on relevance to the team's pedestrian injury definition.

## Chief complaint keywords:

First, the team used the ESSENCE text analysis function to generate common words used in chief complaints for emergency department visits that involved the previously selected ICD-9-CM and ICD-10-CM codes. Words with the highest frequency of occurrence in visits were identified and selected based on relevance to the syndrome definition (e.g., "a" was not relevant, but "pedestrian" was).

Second, queries using the chief complaint field for each keyword term(s) selected were conducted, and three CDC team members independently reviewed 100 randomly selected visits from 2021 for each query to determine the positive predictive value of the visits. After each query review, findings from the three team members were compared, interrater reliability was calculated, improved keywords were created, and then the query was run again. This process was iteratively repeated until selected keywords and keyword pairings generated visits with high positive predictive values and interrater reliability (e.g., both  $\geq$ 90%).

## Exclusion discharge diagnosis codes and chief complaint keywords:

The CDC team identified ICD-9-CM and ICD-10-CM codes and chief complaint keywords corresponding to pedestrian-related ED visits that should be excluded by the syndrome definition. For example, the ICD-10-CM code V03.13, which represents a diagnosis for a person injured while using a micro-mobility conveyance (e.g., e-scooter), was listed as an exclusion discharge diagnosis code. ICD-10-CM codes and chief complaint keywords related to non-traffic-related crashes (e.g., occurring in private driveway or residence) and assault or self-harm related crashes were also excluded. Additionally, the syndrome definition aims to exclude visits where the pedestrian injury occurred "months ago," "years ago," or "last year" but otherwise, does not address the timing between the injury and the initial visit.

## Validation Methods:

To validate the syndrome definition, collaborators from five state and local jurisdictions examined state or local-level data on visits that occurred during 2022 that were detected by the CDC Pedestrian Motor Vehicle Traffic Injury v1 syndrome definition. The CDC team simultaneously examined national-level data on 100 randomly selected visits that occurred during 2022 using the syndrome definition. Visits were classified as true or false positive visits and "unknown" visits. The discharge

diagnosis, chief complaint keywords, and triage notes (when available) fields were used to conduct the validation. Reviewers examined each visit and compared it to the definition description and selected ICD codes and chief complaint keywords. The review process was iterative: the syndrome definition was edited, and the review process was repeated until reviewer recommendations were incorporated. The positive predictive value of the syndrome definition was calculated for the final review by summing the number of "true" visits for pedestrian injury across reviewers divided by the total number of ED visits examined across reviewers.

## Validation Results:

Of visits identified by the final iteration of the CDC Pedestrian Motor Vehicle Traffic Injury v1 syndrome definition, 96% of visits reviewed by the CDC team were classified as true initial ED visits among pedestrians unintentionally injured in traffic-related crashes involving a motor vehicle that occurred on public roads.

## Definition Fields and Structure:

The Chief Complaint Discharge Diagnosis (CCDD) field is used to query both the discharge diagnosis codes and chief complaint free text, with exclusions, to identify emergency department visits.

The syndrome definition identifies any visit with chief complaint keyword(s) or discharge diagnosis code(s) indicating visits involving pedestrians unintentionally injured on a public road in a crash involving a motor vehicle (see Table 1, "inclusions"). Visits must not include certain chief complaint keyword(s) or discharge diagnosis code(s) (see Table 1, "exclusions").

## Limitations:

This syndrome definition has limitations, including:

- Some false positive visits may be detected, though infrequently, by the syndrome definition.
- Queries for earlier time periods when ICD-9-CM codes were predominantly used (i.e., 2015 and earlier) will not be directly comparable to queries for later years because ICD-9-CM codes do not distinguish between initial emergency department visit encounters and subsequent or sequela visits.

# **Detailed Definition Components:**

**Table 1.** Inclusion and exclusion chief complaint terms and discharge diagnosis codes for CDC Pedestrian Motor Vehicle TrafficInjury v1

Variable Type	Terms	Description			
	1	Inclusions			
Chief Complaint	struck by [a] car/struck by [a] vehicle/struck by [a] bus + ped ("ped" must be standalone word)				
Keywords	struck by [a] car/struck by [a] vehicle/struck by [a] bus + pedestrian				
	struck by [a] car/struck by [a] vehicle/struck by [a] bus + pt ("pt" must be standalone word)				
	struck by [a] car/struck by [a] vehicle/struck by [a] bus + patient				
	hit by [a]car/hit by [a] vehicle/hit by [a] bus + ped ("ped" must be standalone word)				
	hit by [a] car/hit by [a] vehicle/hit by [a] bus + pedestrian				
	hit by [a] car/hit by [a] vehicle/hit by [a] bus + pt ("pt" must be standalone word)				
	hit by [a] car/hit by [a] vehicle/hit by [a] bus + patient				
	got ran/run over + ped + vehicle/car/bus ("ped", "car", and "bus" must be standalone words)				
	got ran/run over + pedestrian + vehicle/car/bus ("car" and "bus" must be standalone words				
	got ran/run over + pt + vehicle/car/bus ("pt", "car", and "bus" must be standalone words)				
	got ran/run over + patient + vehicle/car/bus ("car" and "bus" must be standalone words)				
	ran/run over by + ped + vehicle/car/bus ("ped", "car", and "bus" must be standalone words)				
	ran/run over by + pedestrian + vehicle/car/bus ("car" and "bus" must be standalone words)				
	ran/run over by + pt + vehicle/car/bus ("pt", "car", and "bus" must be standalone words)				
	ran/run over by + patient + vehicle/car/bus ("car" and "bus" must be standalone words)				
	ped[estrian] vs/vss/versus car				
	ped[-]car ("ped" must be a standalone word)				
	car vs/vss/versus ped				
	car[-]ped				
	ped[estrian] vs/vss/versus bus ped[- ]bus ("ped" must be a standalone word)				
	bus vs/vss/versus ped bus[-]ped				
	ped[estrian] vs/vss/versus vehicle				
	ped[-]vehicle ("ped" must be a standalone word)				
	vehicle vs/vss/versus ped				
	vehicle[-]ped				
	ped[estrian] vs/vss/versus auto				
	ped[- ]auto ("ped" must be a standalone word)				
	auto vs/vss/versus ped				
	auto[-]ped				
	ped[estrian] vs/vss/versus MV				
	ped[-]MV ("ped" must be a standalone word)				
	ped[estrian] vs/vss/versus motor vehicle				
	ped[-]motor vehicle ("ped" must be a standalone word)				
	mv vs/vss/versus ped				
	mv[-]ped				
	mvc vs/vss/versus ped				
	mvc[-]ped				
	motor vehicle vs/vss/versus ped				
	motor vehicle[-]ped				
	motor vehicle crash vs/vss/versus ped				
	motor vehicle crash[-]ped				
	motor vehicle collision vs/vss/versus ped				

	motor vehicle collision[- ]ped				
	pedestrian struck				
Discharge	Pedestrian injured in collision with two- or three-wheeled motor vehicle, traffic related, initial				
Diagnosis:	encounter				
ICD-10-CM	V02.10XA	Pedestrian on foot			
	V02.11XA	Pedestrian on roller skates			
	V02.12XA	Pedestrian on skateboard			
	V02.19XA	Pedestrian on other conveyance that is not a micro-mobility conveyance			
		jured in collision with two- or three-wheeled motor vehicle, unspecified if traffic related			
	initial encounter				
	V02.90XA	Pedestrian on foot			
	V02.91XA	Pedestrian on roller skates			
	V02.92XA	Pedestrian on skateboard			
	V02.99XA	Pedestrian on other conveyance that is not a micro-mobility conveyance			
	Pedestrian injured in collision with car, pick-up truck, or van, traffic related, initial encounter				
	V03.10XA	Pedestrian on foot			
	V03.11XA	Pedestrian on roller skates			
	V03.12XA	Pedestrian on skateboard			
	V03.19XA	Pedestrian on other conveyance that is not a micro-mobility conveyance			
		jured in collision with car, pick-up truck, or van, unspecified if traffic related, initial			
	encounter				
	V03.90XA	Pedestrian on foot			
	V03.91XA	Pedestrian on roller skates			
	V03.91XA	Pedestrian on skateboard			
	V03.92XA				
		Pedestrian on other conveyance that is not a micro-mobility conveyance			
	Pedestrian injured in collision with heavy transport vehicle or bus, traffic related, initial encounterV04.10XAPedestrian on foot				
	V04.10XA				
	V04.11XA	Pedestrian on roller skates			
	V04.12XA	Pedestrian on skateboard			
	V04.19XA	Pedestrian on other conveyance that is not a micro-mobility conveyance			
	Pedestrian injured in collision with heavy transport vehicle or bus, unspecified if traffic related, initia				
	encounter				
	V04.90XA	Pedestrian on foot			
	V04.91XA	Pedestrian on roller skates			
	V04.92XA	Pedestrian on skateboard			
	V04.99XA	Pedestrian on other conveyance that is not a micro-mobility conveyance			
	Pedestrian in	jured, traffic related, initial encounter			
	V09.20XA	Pedestrian injury involves unspecified motor vehicles			
	V09.21XA	Pedestrian injury involves a military vehicle			
	V09.29XA	Pedestrian injury involves other motor vehicles			
	V09.3XXA	Pedestrian injured in unspecified traffic accident			
Discharge	E811.7	Motor vehicle traffic accident involving re-entrant collision with another motor vehicle			
Diagnosis:		injuring pedestrian			
ICD-9-CM	E812.7	Other motor vehicle traffic accident involving collision with motor vehicle injuring			
		pedestrian			
	E813.7	Motor vehicle traffic accident involving collision with other vehicle injuring pedestrian			
	E814.7	Motor vehicle traffic accident involving collision with pedestrian injuring pedestrian			
	E815.7 E816.7	Other motor vehicle traffic accident involving collision on the highway injuring			
		pedestrian			
		Motor vehicle traffic accident due to loss of control, without collision on the highway,			
		injuring pedestrian			
	E817.7	Noncollision motor vehicle traffic accident while boarding or alighting injuring pedestria			

	E819.7	Motor vehicle traffic accident of unspecified nature injuring pedestrian		
Discharge	1015.7	Motor vehicle traffic accident involving collision with another motor vehicle, parked,		
Diagnosis: SNOMED concepts	214089004	pedestrian injured		
		Motor vehicle traffic accident involving collision with another motor vehicle, stopped,		
	214101002	pedestrian injured		
		Motor vehicle traffic accident involving collision with another motor vehicle, stalled,		
	214112002	pedestrian injured		
		Motor vehicle traffic accident involving collision with another motor vehicle, disabled,		
	214123003	pedestrian injured		
	214134000	Motor vehicle traffic accident involving collision with another motor vehicle, abandoned		
		on highway, pedestrian injured		
		Motor vehicle traffic accident involving pedestrian dragged by motor vehicle, pedestrian		
	214215006	injured		
		Motor vehicle traffic accident involving pedestrian hit by motor vehicle, pedestrian		
	214227009	injured		
	214230002	Pedestrian run over by motor vehicle		
	24 420 700 4	Motor vehicle traffic accident due to motor vehicle going out of control due to driver		
	214397004	inattention, without collision on the highway, pedestrian injured		
	32906002	Victim, pedestrian in vehicular and/or traffic accident		
		Exclusions		
	motorcyclist/	motorcycle/moped/mo-ped		
	parking lot/parking spot			
	driveway			
		cooter/e scooter		
	a[n] electric s			
		picycling/cyclist		
	months ago/months prior/mos ago/mos prior			
	year[s] ago/year[s] prior/last year/yrs ago			
	assault/car jack/theft/battery			
	trying to get hit/tried to get hit/try to get hit/plan to get hit			
	mental health/suicidal/suicide			
	almost hit/almost been hit/was not hit			
	driver/passenger			
	flipped/stopped/tipped/tripped/dropped			
	cart ("cart" must be a standalone word)			
	hit by the car door/hit by [a] car door/struck by [a] car door			
	private residence			
	on the bus/on a bus			
Discharge	V02.00,	Pedestrian injured in collision with two- or three-wheeled motor vehicle in nontraffic		
Diagnosis: ICD-	V02.01,	accident		
10-CM	V02.02,			
	V02.03,			
	V02.09			
	V02.13	Person on standing micro-mobility conveyance injured in collision with two- or three-		
		wheeled motor vehicle in traffic accident		
	V02.93	Person on standing micro-mobility conveyance injured in collision with two- or three-		
		wheeled motor vehicle, unspecified whether traffic or nontraffic accident		
	V03.00,	Pedestrian injured in collision with car, pick-up truck, or van in nontraffic accident		
	V03.01,			
	V03.02,			
	V03.03,			
	V03.09			

V03.13	Person on standing micro-mobility conveyance injured in collision with car, pick-up truck,
	or van in traffic accident
V03.93	Person on standing micro-mobility conveyance injured in collision with car, pick-up truck, or van, unspecified whether traffic or nontraffic accident
V04.00,	Pedestrian injured in collision with heavy transport vehicle or bus in nontraffic accident
V04.01,	
V04.02,	
V04.03,	
V04.09	
V04.13	Person on standing micro-mobility conveyance injured in collision with heavy transport vehicle or bus in traffic accident
V04.93	Person on standing micro-mobility conveyance injured in collision with heavy transport vehicle or bus, unspecified whether traffic or nontraffic accident
V00	Pedestrian injured in collision with another person [e.g., another pedestrian or a person
	on standing micro-mobility conveyance]
V01	Pedestrian injured in collision with pedal cycle
V05	Pedestrian injured in collision with railway train or railway vehicle
V06	Pedestrian injured in collision with other nonmotor vehicle
V09.0	Pedestrian injured in nontraffic accident involving other and unspecified motor vehicles
V09.1	Pedestrian injured in unspecified nontraffic accident
V10-V20	Injuries occurring among pedal cycle riders and motorcycle riders
V30-V70	Injuries occurring among occupants of cars, pick-up trucks, vans, three-wheeled motor
	vehicles, heavy transport vehicles, and buses
V80-V86	Other land transport accidents (including injuries among occupants of trains, construction vehicles, and off-road motor vehicles)
V87.0-V87.6	Person injured in traffic crash involving two vehicles or a crash between a vehicle and
V07.0 <sup>-</sup> V07.0	train
V87.8-V87.9	Person injured in other specified noncollision transport accident or accident involving nonmotor vehicle
V88	Nontraffic accident of specific type but victim's mode of transport unknown
V89.0, V89.1	Person injured in unspecified motor- or nonmotor-vehicle accident, nontraffic
V89.3	Person injured in unspecified nonmotor vehicle accident, traffic
V89.9	Person injured in unspecified vehicle accident
V90	Water transport accidents
X81	Intentional self-harm by jumping or lying in front of moving object
X82	Intentional self-harm by crashing of motor vehicle
X83	Intentional self-harm by other specified means
Y02	Assault by pushing or placing victim in front of moving object
Y03	Assault by crashing of motor vehicle
Y93.55	External cause of morbidity activity code indicating person was bike riding at time of injury
Y92.008	Injury place of occurrence unspecified private residence
Y92.009	Injury place of occurrence was a private residence
Y92.014	Injury place of occurrence was a private residence
Y92.015	Injury place of occurrence was a private driveway to a single-family house
Y92.194	Injury place of occurrence was a private galage of a single-family house
Y92.481	Injury place of occurrence was parking lot
Y92.524	Injury place of occurrence was gas station
Y92.838	Injury place of occurrence was recreation area
Y31-Y33	Intent of injury cannot be determined and injury was caused by either running into moving object or crashing motor vehicle
R45.85	Homicidal and suicidal ideations

## Table 2. ESSENCE syntax, CDC Pedestrian Motor Vehicle Traffic Injury v1

(,(,(,^struck by car^,or,^struck by a car^,or,^struck by vehicle^,or,^struck by a vehicle^,or,^struck by bus^,or,^struck by a bus^,or,^hit by car^,or,^hit by a car^,or,^hit by vehicle^,or,^hit by a vehicle^,or,^hit by bus^,or,^hit by a bus^,),AND,(,!ped!,or,^pedestrian^,or,!pt!,or,^patient^,),),or,(,(,^got r[au]n over^,or,^r[au]n over by^,),AND,(,!ped!,or,^pedestrian^,or,!pt!,or,^patient^,),AND,(,^vehicle^,or,!car!,or,!bus!,),),OR,(,^ped vs car^,or,^pedestrian vs car^,or,^ped vss car^,or,^pedestrian vss car^,or,^ped versus car^,or,^pedestrian versus car^,or,^car[-]ped^,or,^car vs ped^,or,^car vss ped^,or,^car versus ped^,or,^ ped[-]car^,or,^ped vs bus^,or,^pedestrian vs bus^,or,^ped vss bus^,or,^pedestrian vss bus^,or,^ped versus bus^,or,^pedestrian versus bus^,or,^bus[- ]ped^,or,^bus vs ped^,or,^bus vss ped^,or,^bus versus ped^,or,^ ped[- ]bus^,or,^ped vs vehicle^,or,^pedestrian vs vehicle^,or,^ped vss vehicle^,or,^pedestrian vss vehicle^,or,^ped versus vehicle^,or,^pedestrian versus vehicle^,or,^vehicle[-]ped^,or,^vehicle vs ped^,or,^vehicle vss ped^,or,^vehicle versus ped^,or,^ ped[- ]vehicle^,or,^ped vs auto^,or,^pedestrian vs auto^,or,^ped vss auto^,or,^pedestrian vss auto^,or,^ped versus auto^,or,^pedestrian versus auto^,or,^pedestrian struck^,or,^auto[-]ped^,or,^auto vs ped^,or,^auto vss ped^,or,^auto versus ped^,or,^ ped[-]auto^,or,^ped vs mv^,or,^pedestrian vs mv^,or,^ped vss mv^,or,^pedestrian vss mv^,or,^ped versus mv^,or,^pedestrian versus mv^,or,^ped vs motor vehicle^,or,^pedestrian vs motor vehicle^,or,^ped vss motor vehicle^,or,^pedestrian vss motor vehicle^,or,^ped versus motor vehicle^,or,^pedestrian versus motor vehicle^,or,^motor vehicle[- ]ped^,or,^mv vs ped^,or,^mv vss ped^,or,^mv versus ped^,or,^mv[-]ped^,or,^mvc vs ped^,or,^mvc vss ped^,or,^mvc versus ped^,or,^mvc[-]ped^,or,^ ped[-]mv^,or,^motor vehicle vs ped^,or,^motor vehicle vss ped^,or,^motor vehicle versus ped^,or,^ ped[-]motor vehicle^,or,^motor vehicle crash vs ped^,or,^motor vehicle crash vss ped^,or,^motor vehicle crash versus ped^,or,^motor vehicle crash[-]ped^,or,^motor vehicle collision vs ped^,or,^motor vehicle collision vss ped^,or,^motor vehicle collision versus ped^,or,^motor vehicle collision[-]ped^,or,^his electric scooter^,or,^her electric scooter^,),OR,(,^[;/ ]V0[234].[19][0129][X0-9]A^,or,^[;/ ]V0[234][19][0129][X0-9]A^,or,^[;/ ]V09.2[019][X0-9]A^,or,^[;/ ]V092[019][X0-9]A^,or,^[;/ ]V09.3[X0-9][X0-9]A^,or,^[;/ ]V093[X0-9][X0-9]A^,or,^[;/ ]E81[0-9].7^,or,^[;/ ]E81[0-9]7^,or,^[;/ ]214089004^,or,^[;/ ]214101002^,or,^[;/ ]214112002^,or,^[;/ ]214123003^,or,^[;/ ]214134000^,or,^[;/ ]214215006^,or,^[;/ ]214227009^,or,^[;/ ]214230002^,or,^[;/ ]214397004^,or,^[;/ ]32906002^,),), ANDNOT,(,^[;/ ]V[1-7][0-9]^,or,^[;/ ]V8[0-6]^,or,^[;/ ]V87.[0-6]^,or,^[;/ ]V87[0-6]^,or,^[;/ ]V87.[8-9]^,or,^[;/ ]V87[8-9]^,or,^[;/ ]V89.[0139]^,or,^[;/ ]V89[0139]^,or,^[;/ ]V9[X0-9]^,or,^[;/ ]V0[01]^,or,^[;/ ]V0[234].0[01239]^,or,^[;/ ]V0[234]0[01239]^,or,^[;/ ]V0[234].[19]3^,or,^[;/ ]V0[234][19]3^,or,^[;/ ]V0[56]^,or,^[;/ ]V09.[01]^,or,^[;/ ]V09[01]^,or,^[;/ ]X8[123]^,or,^[;/ ]Y0[23]^,or,^[;/ ]Y3[123]^,or,^[;/ ]Y92.009^,or,^[;/ ]Y92009^,or,^[;/ ]Y92.01[45]^,or,^[;/ ]Y9201[45]^,or,^[;/ ]Y92.194^,or,^[;/ ]Y92194^,or,^[;/ ]Y92.481^,or,^[;/ ]Y92481^,or,^[;/ ]Y92.838^,or,^[;/ ]Y92838^,or,^[;/ ]Y92.524^,or,^[;/ ]Y92524^,or,^[;/ ]Y92.008^,or,^[;/ ]Y92008^,or,^[;/ ]Y93.55^,or,^[;/ ]Y9355^,or,^[;/ ]R45.85^,or,^[;/ ]R4585^,or,^motorcyclist^,or,^motorcycle^,or,^moped^,or,^mo-ped^,or,^parking lot^,or,^driveway^,or,^parking spot^,or,^e-scooter^,or,^escooter^,or,^e scooter^,or,^a electric scooter^,or,^an electric scooter^,or,^bicycle^,or,^bike^,or,^bicycling^,or,^cyclist^,or,^months ago^,or,^months prior^,or,^mos ago^,or,^mos prior^,or,^years ago^,or,^year ago^,or,^years prior^,or,^year prior^,or,^yrs ago^,or,^last year^,or,^assault^,or,^battery^,or,^car jack^,or,^theft^,or,^trying to get hit^,or,^tried to get hit^,or,^try to get hit^,or,^plan to get hit^,or,^mental health^,or,^suicidal^,or,^suicide^,or,^almost hit^,or,^almost been hit^,or,^was not hit^,or,^driver^,or,^passenger^,or,^flipped^,or,^stopped^,or,^tipped^,or,^tripped^,or,^dropped^,or,^ cart ^,or,^hit by the car door^,or,^hit by a car door^,or,^hit by car door^,or,^struck by car door^,or,^struck by a car door^,or,^private residence^,or,^on the bus^,or,^on a bus^,)