Supplementary Tables

Table S1a – WCIO to OIICS Crosswalks- Part of Body

Category digit
11 Skull
12 Brain
13 Ear(s)
13 Ear(s)
15 Nose I. Head 1 Head 1 Head 17 Mouth I. Head 1 Head 18 Soft Tissue I. Head 1 Head 19 Facial Bones I. Head 1 Head 19 Facial Bones I. Head 1 Head 19 Facial Bones II. Head 1 Head 20 Multiple Neck Injury III. Neck 2 Neck 2 Neck 21 Vertebrae III. Neck 2 Neck 2 Neck 22 Disc III. Neck 2 Neck 2 Neck 23 Spinal Cord III. Neck 2 Neck 2 Neck 24 Larynx III. Neck 2 Neck 25 Soft Tissue III. Neck 2 Neck 25 Soft Tissue III. Neck 2 Neck 26 Trachea III. Neck 2 Neck 20 Neck 26 Trachea III. Neck 2 Neck 20 Neck 21 Upper Extremities 31 Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 34 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper Extremities 4 Upper Extremities 4 Upper Extremities 30 Multiple Trunk 3 Trunk
15 Nose I. Head 1 Head 1 Head 17 Mouth I. Head 1 Head 18 Soft Tissue I. Head 1 Head 19 Facial Bones I. Head 1 Head 19 Facial Bones I. Head 1 Head 19 Facial Bones II. Head 1 Head 20 Multiple Neck Injury III. Neck 2 Neck 2 Neck 21 Vertebrae III. Neck 2 Neck 2 Neck 22 Disc III. Neck 2 Neck 2 Neck 23 Spinal Cord III. Neck 2 Neck 2 Neck 24 Larynx III. Neck 2 Neck 25 Soft Tissue III. Neck 2 Neck 25 Soft Tissue III. Neck 2 Neck 26 Trachea III. Neck 2 Neck 20 Neck 26 Trachea III. Neck 2 Neck 20 Neck 21 Upper Extremities 31 Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 34 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper Extremities 4 Upper extremities 30 Multiple Trunk III. Upper Extremities 4 Upper Extremities 4 Upper Extremities 4 Upper Extremities 30 Multiple Trunk 3 Trunk
17 Mouth I. Head 1 Head 20 Multiple Neck Injury II. Neck 2 Neck 21 Vertebrae II. Neck 2 Neck 22 Disc II. Neck 2 Neck 23 Spinal Cord II. Neck 2 Neck 24 Larynx II. Neck 2 Neck 25 Soft Tissue II. Neck 2 Neck 26 Trachea II. Neck 2 Neck 30 Multiple Upper Extremities III. Upper Extremities 31 Upper Arm III. Upper Extremities 31 Upper Arm III. Upper Extremities 32 Elbow III. Upper Extremities 34 Upper extremities 34 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities
18 Soft Tissue I. Head 1 Head 19 Facial Bones I. Head 1 Head 20 Multiple Neck Injury II. Neck 2 Neck 21 Vertebrae II. Neck 2 Neck 22 Disc II. Neck 2 Neck 23 Spinal Cord II. Neck 2 Neck 24 Larynx II. Neck 2 Neck 25 Soft Tissue II. Neck 2 Neck 26 Trachea II. Neck 2 Neck 30 Multiple Upper Extremities III. Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 34 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 30 Upper Extremities 4 Upper Extremities 4 Upper Extremiti
18 Soft Tissue I. Head 1 Head 19 Facial Bones I. Head 1 Head 20 Multiple Neck Injury II. Neck 2 Neck 21 Vertebrae II. Neck 2 Neck 22 Disc II. Neck 2 Neck 23 Spinal Cord II. Neck 2 Neck 24 Larynx II. Neck 2 Neck 25 Soft Tissue II. Neck 2 Neck 26 Trachea II. Neck 2 Neck 30 Multiple Upper Extremities III. Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 34 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 30 Uv. Trunk 3 Trunk
20 Multiple Neck Injury II. Neck 21 Vertebrae III. Neck 22 Disc III. Neck 22 Disc III. Neck 23 Spinal Cord III. Neck 21 Neck 23 Spinal Cord III. Neck 21 Neck 24 Larynx III. Neck 22 Neck 25 Soft Tissue III. Neck 25 Soft Tissue III. Neck 26 Trachea III. Neck 27 Neck 28 Neck 29 Neck 20 Neck 20 Neck 20 Neck 21 Neck 21 Neck 22 Neck 30 Multiple Upper Extremities III. Upper Extremities 31 Upper Arm III. Upper Extremities 31 Upper Extremities 32 Elbow III. Upper Extremities 33 Lower Arm III. Upper Extremities 34 Upper extremities 34 Upper extremities 35 Hand III. Upper Extremities 36 Finger(s) III. Upper Extremities 40 Upper extremities 41 Upper extremities 41 Upper extremities 42 Upper extremities 43 Upper extremities 43 Upper extremities 44 Upper extremities 45 Upper extremities 47 Upper extremities 48 Upper extremities 48 Upper extremities 48 Upper extremities 49 Upper extremities 40 Multiple Trunk III. Upper Extremities 40 Upper extremities 40 Multiple Trunk III. Upper Extremities 40 Upper extremities
21 Vertebrae II. Neck 2 Neck 22 Disc II. Neck 2 Neck 23 Spinal Cord II. Neck 2 Neck 24 Larynx II. Neck 2 Neck 25 Soft Tissue II. Neck 2 Neck 26 Trachea II. Neck 2 Neck 30 Multiple Upper Extremities III. Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 40 Multiple Trunk III. Upper Extremities 4 Upper extremities
22 Disc II. Neck 2 Neck 23 Spinal Cord II. Neck 2 Neck 24 Larynx II. Neck 2 Neck 25 Soft Tissue II. Neck 2 Neck 26 Trachea II. Neck 2 Neck 30 Multiple Upper Extremities III. Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 40 Multiple Trunk IV. Trunk 3 Trunk
23 Spinal Cord II. Neck 24 Larynx II. Neck 25 Soft Tissue II. Neck 26 Trachea II. Neck 30 Multiple Upper Extremities III. Upper Extremities III. Upper Extremities III. Upper Extremities III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities III. Upper Extremities 4 Upper extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 4 Upper extremities 4 Upper extremities 54 Upper extremities 15 Hand III. Upper Extremities 4 Upper extremities 4 Upper extremities 4 Upper extremities 16 Finger(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 17 Thumb III. Upper Extremities 4 Upper extremities 4 Upper extremities 4 Upper extremities III. Upper Extremities
24 LarynxII. Neck2 Neck25 Soft TissueII. Neck2 Neck26 TracheaII. Neck2 Neck30 Multiple Upper ExtremitiesIII. Upper Extremities4 Upper extremities31 Upper ArmIII. Upper Extremities4 Upper extremities32 ElbowIII. Upper Extremities4 Upper extremities33 Lower ArmIII. Upper Extremities4 Upper extremities34 WristIII. Upper Extremities4 Upper extremities35 HandIII. Upper Extremities4 Upper extremities36 Finger(s)III. Upper Extremities4 Upper extremities37 ThumbIII. Upper Extremities4 Upper extremities38 Shoulder(s)III. Upper Extremities4 Upper extremities39 Wrist(s) & Hand(s)III. Upper Extremities4 Upper extremities40 Multiple TrunkIV. Trunk3 Trunk
24 LarynxII. Neck2 Neck25 Soft TissueII. Neck2 Neck26 TracheaII. Neck2 Neck30 Multiple Upper ExtremitiesIII. Upper Extremities4 Upper extremities31 Upper ArmIII. Upper Extremities4 Upper extremities32 ElbowIII. Upper Extremities4 Upper extremities33 Lower ArmIII. Upper Extremities4 Upper extremities34 WristIII. Upper Extremities4 Upper extremities35 HandIII. Upper Extremities4 Upper extremities36 Finger(s)III. Upper Extremities4 Upper extremities37 ThumbIII. Upper Extremities4 Upper extremities38 Shoulder(s)III. Upper Extremities4 Upper extremities39 Wrist(s) & Hand(s)III. Upper Extremities4 Upper extremities40 Multiple TrunkIV. Trunk3 Trunk
25 Soft Tissue II. Neck 2 Neck 26 Trachea II. Neck 2 Neck 30 Multiple Upper Extremities III. Upper Extremities 4 Upper extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 40 Multiple Trunk IV. Trunk 3 Trunk
30 Multiple Upper Extremities 31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 38 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities
31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 59 Wrist(s) & Trunk 50 Trunk 50 Trunk
31 Upper Arm III. Upper Extremities 4 Upper extremities 32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities 59 Wrist(s) & Trunk 50 Trunk 50 Trunk
32 Elbow III. Upper Extremities 4 Upper extremities 33 Lower Arm III. Upper Extremities 4 Upper extremities 34 Wrist III. Upper Extremities 4 Upper extremities 35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 40 Multiple Trunk IV. Trunk 3 Trunk
34 WristIII. Upper Extremities4 Upper extremities35 HandIII. Upper Extremities4 Upper extremities36 Finger(s)III. Upper Extremities4 Upper extremities37 ThumbIII. Upper Extremities4 Upper extremities38 Shoulder(s)III. Upper Extremities4 Upper extremities39 Wrist(s) & Hand(s)III. Upper Extremities4 Upper extremities40 Multiple TrunkIV. Trunk3 Trunk
35 Hand III. Upper Extremities 4 Upper extremities 36 Finger(s) III. Upper Extremities 4 Upper extremities 37 Thumb III. Upper Extremities 4 Upper extremities 38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 40 Multiple Trunk IV. Trunk 3 Trunk
36 Finger(s)III. Upper Extremities4 Upper extremities37 ThumbIII. Upper Extremities4 Upper extremities38 Shoulder(s)III. Upper Extremities4 Upper extremities39 Wrist(s) & Hand(s)III. Upper Extremities4 Upper extremities40 Multiple TrunkIV. Trunk3 Trunk
37 ThumbIII. Upper Extremities4 Upper extremities38 Shoulder(s)III. Upper Extremities4 Upper extremities39 Wrist(s) & Hand(s)III. Upper Extremities4 Upper extremities40 Multiple TrunkIV. Trunk3 Trunk
38 Shoulder(s) III. Upper Extremities 4 Upper extremities 39 Wrist(s) & Hand(s) III. Upper Extremities 4 Upper extremities 4 Upper extremities V. Trunk 3 Trunk
38 Shoulder(s)III. Upper Extremities4 Upper extremities39 Wrist(s) & Hand(s)III. Upper Extremities4 Upper extremities40 Multiple TrunkIV. Trunk3 Trunk
40 Multiple Trunk IV. Trunk 3 Trunk
41 Upper Back Area IV. Trunk 3 Trunk
42 Lower Back Area IV. Trunk 3 Trunk
43 Disc IV. Trunk 3 Trunk
44 Chest IV. Trunk 3 Trunk
45 Sacrum and Coccyx IV. Trunk 3 Trunk
46 Pelvis IV. Trunk 3 Trunk
47 Spinal Cord IV. Trunk 3 Trunk
48 Internal Organs IV. Trunk 3 Trunk
49 Heart IV. Trunk 3 Trunk
50 Multiple Lower Extremities Any combination of 51-58 V. Lower Extremities 5 Lower extremities
51 Hip V. Lower Extremities 3 Trunk
52 Upper Leg V. Lower Extremities 5 Lower extremities
53 Knee V. Lower Extremities 5 Lower extremities
54 Lower Leg V. Lower Extremities 5 Lower extremities
55 Ankle V. Lower Extremities 5 Lower extremities
56 Foot V. Lower Extremities 5 Lower extremities
57 Toes V. Lower Extremities 5 Lower extremities
v. Lower Extremities 5 Lower extremities
58 Great Toe V. Lower Extremities 5 Lower extremities 5 Lower extremities

61 Abdomen	IV. Trunk	3 Trunk
62 Buttocks	IV. Trunk	3 Trunk
63 Lumbar and/or Sacral Vertebrae (Vertebra NOC Trunk)	IV. Trunk	3 Trunk
64 Artificial Appliance	VI. Multiple Body Parts	9 Other body parts
65 Insufficient Info to Properly Identify—Unclassified	VI. Multiple Body Parts	9999 non-Classifiable
66 No Physical Injury	VI. Multiple Body Parts	6 Body systems
90 Multiple Body Parts (Including Body Systems and Body Parts)	VI. Multiple Body Parts	8 Multiple body parts
91 Body Systems and Multiple Body Systems	VI. Multiple Body Parts	6 Body systems
99 Whole Body	VI. Multiple Body Parts	6 Body systems



Table S1b – WCIO to OIICS Crosswalks- Nature of Injury

WCIO Nature of injury (2-digit)	WCIO Nature of injury	OIICS Nature of injury
	(category)	(2-digit category)
01 No Physical Injury	I. Specific Injury	No Physical Injury (includes symptoms, contact lenses, artificial appliance, syncope)
02 Amputation	I. Specific Injury	Open wounds
03 Angina Pectoris	I. Specific Injury	Circulatory system diseases
04 Burn	I. Specific Injury	Burns and corrosions
07 Concussion	I. Specific Injury	Intracranial injuries
10 Contusion	I. Specific Injury	Surface wounds and bruises
13 Crushing	I. Specific Injury	Other traumatic injuries and disorders
16 Dislocation	I. Specific Injury	Traumatic injuries to muscles, tendons, ligaments, joints, etc
19 Electric Shock	I. Specific Injury	Other traumatic injuries and disorders
22 Enucleation	I. Specific Injury	Open wounds
25 Foreign Body	I. Specific Injury	Surface wounds and bruises
28 Fracture	I. Specific Injury	Traumatic injuries to bones, nerves, spinal cord
30 Freezing	I. Specific Injury	Effects of environmental conditions
31 Hearing Loss or Impairment	I. Specific Injury	Nervous system and sense organs diseases
32 Heat Prostration	I. Specific Injury	Effects of environmental conditions
34 Hernia	I. Specific Injury	Traumatic injuries to muscles tendons, ligaments, joints, et
36 Infection	I. Specific Injury	Infections (contagious, bacterial, etc.)
37 Inflammation	I. Specific Injury	All Other Specific Injuries, Not elsewhere classified
40 Laceration	I. Specific Injury	Open wounds
41 Myocardial Infarction	I. Specific Injury	Circulatory system diseases
42 Poisoning—General (NOT OD or Cumulative Injury)	I. Specific Injury	Poisoning (systemic, absorption of toxic substance
43 Puncture	I. Specific Injury	Open wounds
46 Rupture	I. Specific Injury	Traumatic injuries to muscles tendons, ligaments, joints, et
47 Severance	I. Specific Injury	Open wounds
49 Sprain or Tear	I. Specific Injury	Traumatic injuries to muscles tendons, ligaments, joints, et
52 Strain or Tear	I. Specific Injury	Traumatic injuries to muscles tendons, ligaments, joints, et
53 Syncope	I. Specific Injury	No Physical Injury (includes symptoms, contact lenses, artificial appliance, syncope)
54 Asphyxiation	I. Specific Injury	Other traumatic injuries and disorders
55 Vascular	I. Specific Injury	Circulatory system diseases
58 Vision Loss	I. Specific Injury	No Physical Injury (includes symptoms, contact lenses, artificial appliance, syncope)
59 All Other Specific Injuries, NOC	I. Specific Injury	All Other Specific Injuries, No elsewhere classified
60 Dust Disease, NOC	II. Occupational Disease or Cumulative Injury	Respiratory system diseases
61 Asbestosis	II. Occupational Disease or Cumulative Injury	Respiratory system diseases
62 Black Lung	II. Occupational Disease or	Respiratory system diseases

	Cumulative Injury	
63 Byssinosis	II. Occupational Disease or Cumulative Injury	Respiratory system diseases
64 Silicosis	II. Occupational Disease or Cumulative Injury	Respiratory system diseases
65 Respiratory Disorders	II. Occupational Disease or Cumulative Injury	Respiratory system diseases
66 Poisoning—Chemical (Other Than Metals)	II. Occupational Disease or Cumulative Injury	Poisoning (systemic, absorption of toxic substances)
67 Poisoning—Metal	II. Occupational Disease or Cumulative Injury	Poisoning (systemic, absorption of toxic substances)
68 Dermatitis	II. Occupational Disease or Cumulative Injury	Other traumatic injuries and disorders
69 Mental Disorder	II. Occupational Disease or Cumulative Injury	Mental disorders and syndromes
70 Radiation	II. Occupational Disease or Cumulative Injury	Other disease/cumulative injury
71 All Other Occupational Disease Injury, NOC	II. Occupational Disease or Cumulative Injury	Other disease/cumulative injury
72 Loss of Hearing	II. Occupational Disease or Cumulative Injury	Nervous system and sense organs diseases
73 Contagious Disease	II. Occupational Disease or Cumulative Injury	Infections (contagious, bacterial, etc.)
74 Cancer	II. Occupational Disease or Cumulative Injury	Malignant neoplasms and tumors (cancers, carcinomas, sarcomas)
75 AIDS	II. Occupational Disease or Cumulative Injury	32 Viral diseases
76 VDT-Related Disease	II. Occupational Disease or Cumulative Injury	Other disease/cumulative injury
77 Mental Stress	II. Occupational Disease or Cumulative Injury	Mental disorders and syndromes
78 Carpal Tunnel Syndrome	II. Occupational Disease or Cumulative Injury	Carpal tunnel syndrome
79 Hepatitis C	II. Occupational Disease or Cumulative Injury	Viral diseases
80 All Other Cumulative Injury, NOC	II. Occupational Disease or Cumulative Injury	Other disease/cumulative injury
90 Multiple Physical Injuries Only	III. Multiple Injuries	Multiple Physical Injuries
91 Multiple Injuries Including Both Physical and Psychological	III. Multiple Injuries	Multiple Physical Injuries

Table S1c – WCIO to OIICS Crosswalks- Cause of Injury

WCIO Cause of injury (2-digit)	WCIO Cause of injury (category)	OIICS Nature of injury
Wello cause of injury (2-uight)	vvcio cause of injury (category)	(1-digit category)
01 Chemicals	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
02 Hot Objects or Substances	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
03 Temperature Extremes	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
04 Fire or Flame	I. Burn or Scald—Heat or Cold Exposures	3 Fires and explosions
05 Steam or Hot Fluids	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
06 Dust, Gases, Fumes, or Vapors	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
07 Welding Operation	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
08 Radiation	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
09 Contact With, NOC	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
10 Machine or Machinery	II. Caught In, Under, or Between	6 Contact with objects and equipment
11 Cold Objects or Substances	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
12 Object Handled	II. Caught In, Under, or Between	6 Contact with objects and equipment
13 Caught In, Under, or Between, NOC	II. Caught In, Under, or Between	6 Contact with objects and equipment
14 Abnormal Air Pressure	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
15 Broken Glass	III. Cut, Puncture, Scrape—Injured By	6 Contact with objects and equipment
16 Hand Tool, Utensil; Not Powered	III. Cut, Puncture, Scrape—Injured By	6 Contact with objects and equipment
17 Object Being Lifted or Handled	III. Cut, Puncture, Scrape—Injured By	6 Contact with objects and equipment
18 Powered Hand Tool, Appliance	III. Cut, Puncture, Scrape—Injured By	6 Contact with objects and equipment
19 Cut, Puncture, Scrape, NOC	III. Cut, Puncture, Scrape—Injured By	6 Contact with objects and equipment
20 Collapsing Materials (Slides of Earth)	II. Caught In, Under, or Between	6 Contact with objects and equipment
25 From Different Level (Elevation)	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
26 From Ladder or Scaffolding	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
27 From Liquid or Grease Spills	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
28 Into Openings	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
29 On Same Level	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
30 Slipped, Did Not Fall	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
31 Fall, Slip, or Trip, NOC	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
32 On Ice or Snow	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
33 On Stairs	IV. Fall, Slip, or Trip Injury	4 Falls, slips, trips
40 Crash of Water Vehicle	V. Motor Vehicle	2 Transportation incidents
41 Crash of Rail Vehicle	V. Motor Vehicle	2 Transportation incidents
45 Collision or Sideswipe With Another Vehicle	V. Motor Vehicle	2 Transportation incidents
46 Collision With a Fixed Object	V. Motor Vehicle	2 Transportation incidents
47 Crash of Airplane	V. Motor Vehicle	2 Transportation incidents
48 Vehicle Upset Overturned or Jackknifed	V. Motor Vehicle	2 Transportation incidents
50 Motor Vehicle, NOC	V. Motor Vehicle	2 Transportation incidents
52 Continual Noise	VI. Strain or Injury By	5 Exposure to harmful substances or environments
53 Twisting	VI. Strain or Injury By	7 Overexertion and bodily reaction
54 Jumping or Leaping	VI. Strain or Injury By	7 Overexertion and bodily reaction
55 Holding or Carrying	VI. Strain or Injury By	7 Overexertion and bodily reaction
56 Lifting	VI. Strain or Injury By	7 Overexertion and bodily reaction
57 Pushing or Pulling	VI. Strain or Injury By	7 Overexertion and bodily reaction
58 Reaching	VI. Strain or Injury By	7 Overexertion and bodily reaction
59 Using Tool or Machinery	VI. Strain or Injury By	7 Overexertion and bodily reaction
60 Strain or Injury by, NOC	VI. Strain or Injury By	7 Overexertion and bodily reaction
61 Wielding or Throwing	VI. Strain or Injury By	7 Overexertion and bodily reaction
65 Moving Part of Machine	VII. Striking Against or Stepping On	6 Contact with objects and equipment
66 Object Being Lifted or Handled	VII. Striking Against or Stepping On	6 Contact with objects and equipment
67 Sanding, Scraping, Cleaning Operation	VII. Striking Against or Stepping On	6 Contact with objects and equipment
68 Stationary Object	VII. Striking Against or Stepping On	6 Contact with objects and equipment
69 Stepping on Sharp Object	VII. Striking Against or Stepping On	6 Contact with objects and equipment
os stehbilik ou sharb object	vii. Striking Against of Stepping Off	o contact with objects and equipment

70 Striking Against or Stepping On, NOC	VII. Striking Against or Stepping On	6 Contact with objects and equipment
74 Fellow Worker, Patient or Other Person	VII. Struck or Injured By	1 Violence and other injuries by persons or animals
75 Falling or Flying Object	VII. Struck or Injured By	6 Contact with objects and equipment
76 Hand Tool or Machine in Use	VII. Struck or Injured By	6 Contact with objects and equipment
77 Motor Vehicle	VII. Struck or Injured By	2 Transportation incidents
78 Moving Parts of Machine	VII. Struck or Injured By	6 Contact with objects and equipment
79 Object Being Lifted or Handled	VII. Struck or Injured By	6 Contact with objects and equipment
80 Object Handled by Others	VII. Struck or Injured By	6 Contact with objects and equipment
81 Struck or Injured, NOC	VII. Struck or Injured By	6 Contact with objects and equipment
82 Absorption, Ingestion or Inhalation, NOC	X. Miscellaneous Causes	5 Exposure to harmful substances or environments
84 Electrical Current	I. Burn or Scald—Heat or Cold Exposures	5 Exposure to harmful substances or environments
85 Animal or Insect	VII. Struck or Injured By	1 Violence and other injuries by persons or animals
86 Explosion or Flare Back	VII. Struck or Injured By	3 Fires and explosions
87 Foreign Matter (Body) in Eye(s)	X. Miscellaneous Causes	6 Contact with objects and equipment
88 Natural Disasters	X. Miscellaneous Causes	88 Natural Disasters
89 Person in Act of a Crime	X. Miscellaneous Causes	1 Violence and other injuries by persons or animals
90 Other Than Physical Cause of Injury	X. Miscellaneous Causes	5 Exposure to harmful substances or environments
91 Mold	X. Miscellaneous Causes	5 Exposure to harmful substances or environments
93 Gunshot	X. Miscellaneous Causes	1 Violence and other injuries by persons or animals
94 Repetitive Motion	IX. Rubbed or Abraded By	7 Overexertion and bodily reaction
95 Rubbed or Abraded, NOC	IX. Rubbed or Abraded By	6 Contact with objects and equipment
96 Terrorism	X. Miscellaneous Causes	1 Violence and other injuries by persons or animals
97 Repetitive Motion	VI. Strain or Injury By	7 Overexertion and bodily reaction
98 Cumulative, NOC	X. Miscellaneous Causes	7 Overexertion and bodily reaction
99 Other—Miscellaneous, NOC	X. Miscellaneous Causes	99 Other—Miscellaneous, NOC

Table S2a – Aggregated state level total payroll, employee counts, claim count, and claim rates for NCCI and MSHA data, 2012-2019

	Payroll (NCCI) 2012-2019	Estimated employee count (from NCCI payroll)	MSHA FTE	NCCI claim count	MSHA reportable count	NCCI claim rate	MSHA rate
Alaska	\$1,776,429,416	27,807	21,064	932	474	3.35	2.25
Alabama	\$2,034,893,041	40,403	55,421	2,274	1,740	5.63	3.14
Arkansas	\$663,726,738	18,924	19,137	766	453	4.05	2.37
Arizona	\$2,658,070,022	54,444	85,062	2,418	1,968	4.44	2.31
Colorado	\$2,897,490,507	49,829	36,082	2,709	1,095	5.44	3.04
Connecticut	\$429,236,581	9,310	4,147	425	65	4.56	1.57
Florida	\$1,727,084,024	42,341	35,243	1,636	717	3.86	2.03
Georgia	\$1,030,218,282	24,788	37,741	862	606	3.48	1.61
Hawaii	\$146,560,443	1,852	2,357	166	55	8.96	2.33
lowa	\$987,765,854	26,085	18,006	1,026	558	3.93	3.1
Idaho	\$852,136,343	17,756	12,299	1,190	392	6.70	3.19
Illinois	\$3,244,134,748	60,974	53,599	4,629	2,241	7.59	4.18
Kansas	\$468,112,777	12,442	10,080	615	304	4.94	3.02
Kentucky	\$3,134,354,665	67,482	104,172	8,976	4,170	13.30	4.00
Louisiana	\$717,983,841	17,085	18,398	482	367	2.82	2.00
Maryland	\$661,066,227	16,012	10,972	678	273	4.23	2.49
Maine	\$199,493,234	4,768	3,846	388	68	8.14	1.77
Missouri	\$1,767,358,951	43,420	41,079	1,904	1,303	4.39	3.17
Mississippi	\$459,468,498	11,797	8,909	305	135	2.59	1.52
Montana	\$1,371,280,830	24,037	31,264	1,386	819	5.77	2.62
Nebraska	\$371,952,104	9,789	7,155	421	151	4.30	2.11
New Hampshire	\$222,633,068	5,367	3,167	396	117	7.38	3.69
New Mexico	\$1,202,107,256	22,575	33,237	1,060	816	4.70	2.46
Nevada	\$2,749,887,083	43,209	99,609	2,621	1,741	6.07	1.75
Oklahoma	\$925,782,422	26,165	23,090	906	676	3.46	2.93
Oregon	\$642,092,373	15,538	9,575	894	289	5.75	3.02
Rhode Island	\$126,944,692	2,752	1,316	120	17	4.36	1.29
South Carolina	\$515,802,994	11,778	12,132	312	286	2.65	2.36
South Dakota	\$340,613,715	9,398	6,940	580	335	6.17	4.83
Tennessee	\$767,590,957	20,123	26,139	897	611	4.46	2.34
Texas	\$28,845,860,042	758,216	123,458	7,935	2,608	1.05	2.11
Utah	\$2,479,916,472	44,937	38,610	1,990	811	4.43	2.1
Virginia	\$2,329,851,845	53,748	50,340	2,663	1,809	4.95	3.59
Vermont	\$308,770,016	7,112	5,791	412	137	5.79	2.37
West Virginia	\$6,054,693,075	115,143	156,788	10,224	7,540	8.88	4.81
Total	\$75,124,859,230	1,717,408	1,206,225	65,220	35,747	3.80	2.96

Table S2b – Aggregated state level claim counts, costs*, and claim rates** by claim severity type, 2012-2019.

		Medical	-Only Clair	ns			Lost-Ti	me Non-Fata	l Claims				Lost-Tin	ne Fatal Cl	aims	
State	Count	Wage adjusted claim rate**	Medical cost	Mean Claim Cost*** 2012- 2015	Count	Wage adjusted claim rate**	Mean Claim Cost*** 2012- 2015	Indemnity cost	Medical cost	Total incurred cost	Count	Wage adjusted claim rate**	Mean Claim Cost*** 2012-2015	Indemnity cost	Medical cost	Total incurred cost
Alaska	611	2.20	\$1,728,910	\$3,150	319	1.15	\$79,492	\$12,930,140	\$16,353,803	\$29,283,943	NR	NR	NR	NR	NR	NR
Alabama	1310	3.24	\$3,624,974	\$2,621	954	2.36	\$68,839	\$27,492,288	\$34,057,373	\$61,549,661	10	0.02	\$260,040	\$1,886,208	\$574,199	\$2,460,406
Arkansas	588	3.11	\$796,411	\$1,490	174	0.92	\$59,690	\$4,020,945	\$5,006,725	\$9,027,670	NR	NR	NR	NR	NR	NR
Arizona	1863	3.42	\$4,968,426	\$2,634	551	1.01	\$96,041	\$21,279,051	\$34,388,647	\$55,667,698	NR	NR	NR	NR	NR	NR
Colorado	1836	3.68	\$3,447,445	\$1,917	867	1.74	\$109,856	\$44,152,877	\$36,104,656	\$80,257,533	6	0.01	\$646,090	\$3,462,267	\$2,302	\$3,464,569
Connecticut	261	2.80	\$411,732	\$1,607	163	1.75	\$107,934	\$8,209,928	\$6,966,445	\$15,176,373	NR	NR	NR	NR	NR	NR
Florida	1088	2.57	\$3,272,751	\$2,694	542	1.28	\$52,859	\$15,059,006	\$23,891,893	\$38,950,899	6	0.01	\$240,480	\$741,726	\$1,466,596	\$2,208,322
Georgia	592	2.39	\$1,002,958	\$1,463	266	1.07	\$64,688	\$11,273,141	\$11,239,984	\$22,513,125	NR	NR	\$261,037	\$829,279	\$24,832	\$854,110
Hawaii	83	4.48	\$121,327	\$1,601	83	4.48	\$98,454	\$6,384,449	\$29,860,401	\$36,244,850	NR	NR	NR	NR	NR	NR
Iowa	659	2.53	\$1,755,494	\$2,426	363	1.39	\$100,373	\$13,412,200	\$19,467,850	\$32,880,050	NR	NR	NR	NR	NR	NR
Idaho	849	4.78	\$1,286,249	\$1,492	338	1.90	\$71,618	\$11,740,996	\$14,984,918	\$26,725,914	NR	NR	NR	NR	NR	NR
Illinois	2581	4.23	\$5,774,759	\$2,280	2033	3.33	\$94,065	\$126,789,684	\$70,932,846	\$197,722,530	15	0.02	\$936,777	\$9,025,662	\$77,584	\$9,103,245
Kansas	424	3.41	\$685,700	\$1,646	187	1.50	\$73,751	\$4,929,060	\$6,993,525	\$11,922,585	NR	NR	NR	NR	NR	NR
Kentucky	3289	4.87	\$6,254,544	\$1,810	5673	8.41	\$72,051	\$291,635,594	\$105,380,105	\$397,015,699	14	0.02	\$381,311	\$4,677,537	\$864,364	\$5,541,901
Louisiana	309	1.81	\$1,277,281	\$3,296	171	1.00	\$105,413	\$11,420,729	\$9,917,716	\$21,338,445	NR	NR	NR	NR	NR	NR
Maryland	415	2.59	\$702,831	\$1,526	262	1.64	\$76,603	\$10,742,256	\$9,124,184	\$19,866,440	NR	NR	NR	NR	NR	NR
Maine	300	6.29	\$590,496	\$2,513	88	1.85	\$52,177	\$3,084,741	\$2,037,905	\$5,122,646	NR	NR	NR	NR	NR	NR
Missouri	1176	2.71	\$2,941,957	\$2,377	723	1.67	\$67,754	\$24,790,396	\$34,431,135	\$59,221,531	5	0.01	\$673,761	\$2,906,311	\$8,499	\$2,914,810
Mississippi	194	1.64	\$310,028	\$1,630	107	0.91	\$89,559	\$3,943,130	\$4,677,060	\$8,620,190	NR	NR	NR	NR	NR	NR
Montana	988	4.11	\$2,751,231	\$2,988	394	1.64	\$69,372	\$16,442,723	\$15,183,938	\$31,626,661	NR	NR	NR	NR	NR	NR
Nebraska	298	3.04	\$740,334	\$2,410	120	1.23	\$72,566	\$3,215,033	\$3,954,415	\$7,169,448	NR	NR	NR	NR	NR	NR
New Hampshire	288	5.37	\$726,202	\$2,495	108	2.01	\$59,355	\$2,821,709	\$3,347,791	\$6,169,500	NR	NR	NR	NR	NR	NR
New Mexico	782	3.46	\$1,364,119	\$1,822	277	1.23	\$101,481	\$13,743,647	\$14,262,606	\$28,006,252	NR	NR	NR	NR	NR	NR
Nevada	1951	4.52	\$3,525,046	\$1,827	661	1.53	\$80,243	\$36,524,333	\$24,414,542	\$60,938,875	9	0.02	\$839,333	\$7,509,932	\$158,109	\$7,668,042
Oklahoma	506	1.93	\$861,014	\$1,513	397	1.52	\$58,054	\$10,624,156	\$15,436,379	\$26,060,535	NR	NR	NR	NR	NR	NR
Oregon	563	3.62	\$973,284	\$1,759	328	2.11	\$36,024	\$8,490,031	\$7,945,400	\$16,435,431	NR	NR	NR	NR	NR	NR
Rhode Island	61	2.22	\$60,994	\$934	58	2.11	\$85,293	\$3,243,171	\$929,589	\$4,172,760	NR	NR	NR	NR	NR	NR
South Carolina	187	1.59	\$309,878	\$974	123	1.04	\$87,762	\$8,030,127	\$3,623,204	\$11,653,332	NR	NR	NR	NR	NR	NR
South Dakota	422	4.49	\$529,583	\$1,327	158	1.68	\$47,480	\$3,945,677	\$4,463,400	\$8,409,077	NR	NR	NR	NR	NR	NR

Tennessee	640	3.18	\$1,027,384	\$1,517	254	1.26	\$79,246	\$9,314,650	\$8,068,815	\$17,383,465	NR	NR	\$117,858	\$273,740	\$79,833	\$353,573
Texas	5176	0.68	\$8,759,782	\$1,684	2704	0.36	\$64,250	\$79,057,905	\$96,683,428	\$175,741,333	55	0.01	\$947,354	\$56,200,911	\$811,713	\$57,012,624
Utah	1520	3.38	\$2,773,862	\$1,517	462	1.03	\$76,056	\$13,732,305	\$15,154,334	\$28,886,639	NR	NR	NR	NR	NR	NR
Virginia	1279	2.38	\$5,258,672	\$4,689	1377	2.56	\$145,245	\$126,312,123	\$60,540,506	\$186,852,630	7	0.01	\$441,696	\$2,394,100	\$400,889	\$2,794,989
Vermont	264	3.71	\$424,976	\$1,634	148	2.08	\$79,612	\$6,206,780	\$5,573,245	\$11,780,025	NR	NR	NR	NR	NR	NR
West Virginia	5408	4.70	\$6,204,172	\$1,096	4781	4.15	\$73,696	\$233,485,396	\$112,679,514	\$346,164,910	35	0.03	\$1,030,395	\$32,328,766	\$734,627	\$33,063,392
Total	38,773	2.26	\$77,269,603	\$1,952	26,224	1.53	\$79,798	\$1,229,266,916	\$868,266,629	\$2,097,533,545	223	0.01	\$683,944	\$144,282,572	\$6,120,486	\$150,403,058

*All costs in this table include both paid and reserves. **Rate per 100 workers. ***Mean cost per claim based on 2012-2015 data only. NR means "Not Reported" and indicates fewer than five case counts

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

	Item No	Recommendation	Page No
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract	1
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	1
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1-2
Objectives	3	State specific objectives, including any prespecified hypotheses	2
Methods			<u>I</u>
Study design	4	Present key elements of study design early in the paper	3
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	3
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants	4
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	4-6
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	3-4
Bias	9	Describe any efforts to address potential sources of bias	NA
Study size	10	Explain how the study size was arrived at	4
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	5-6
		(b) Describe any methods used to examine subgroups and interactions	5
		(c) Explain how missing data were addressed	NA

		(d) If applicable, describe analytical methods taking account of sampling strategy	NA
		(<u>e</u>) Describe any sensitivity analyses	NA
Results			1
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	6-7
		(b) Give reasons for non-participation at each stage	NA
		(c) Consider use of a flow diagram	NA
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	NA
		(b) Indicate number of participants with missing data for each variable of interest	NA
Outcome data	15*	Report numbers of outcome events or summary measures	6-9
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	NA
		(b) Report category boundaries when continuous variables were categorized	NA
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	NA
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	NA
Discussion			1
Key results	18	Summarise key results with reference to study objectives	10- 12
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	13
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	10- 11

Generalisability	21	Discuss the generalisability (external validity) of the study results	13
Other information			L
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	NA

^{*}Give information separately for exposed and unexposed groups.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.