

Appendix

Appendix A: List of search terms used to find research awards in the Federal RePORTER database.

Cause of mortality	Search Terms
Motor Vehicle Crash	("Accidents, Traffic" OR "Traffic Accidents" OR "Accident, Traffic" OR "Traffic Accident" OR "motor vehicle crash" OR "traffic safety" OR "child restraint systems" OR "child safety seat" OR "motor vehicle accidents" OR "motor vehicle" OR "vehicle accidents" OR "MVC" OR "car crash" OR "car accident" OR "car accidents" OR "car seat" OR "car seats" OR "seat belt" OR "seat belts") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Firearm Injury	(Firearms OR Shotguns OR Guns OR Rifles OR Firearm OR "Gun violence" OR Gunshot OR "lethal means" OR "firearm violence") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Malignant Neoplasms	(Neoplasms OR Neoplasia OR Neoplasias OR Neoplasm OR Tumors OR Tumor OR Cancer OR Cancers OR Malignancy OR Malignancies OR "Malignant Neoplasms" OR "Malignant Neoplasm" OR "Neoplasm, Malignant" OR "Neoplasms, Malignant") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor) NOT benign
Opioids Overdose	(Opioid OR "Opioid overdose" OR "Opioid Analgesics" OR Opioids OR "Partial Opioid Agonists" OR "Agonists, Partial Opioid" OR "Opioid Agonists, Partial" OR "Opioid Partial Agonists" OR "Agonists, Opioid Partial" OR "Partial Agonists, Opioid" OR "Full Opioid Agonists" OR "Agonists, Full Opioid" OR "Opioid Agonists, Full" OR "Opioid Full Agonists" OR "Agonists, Opioid Full" OR "Full Agonists, Opioid" OR "Opioid Mixed Agonist-Antagonists" OR "Agonist-

	Antagonists, Opioid Mixed" OR "Mixed Agonist-Antagonists, Opioid" OR "Opioid Mixed Agonist Antagonists" OR "Drug Overdose" OR "Drug Overdoses" OR "Overdose, Drug" OR "Overdoses, Drug") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Congenital Abnormalities	("Congenital Abnormalities" OR "Abnormality, Congenital" OR "Congenital Abnormality" OR Deformities OR Deformity OR "Congenital Defects" OR "Congenital Defect" OR "Defect, Congenital" OR "Defects, Congenital" OR "Abnormalities, Congenital" OR "Birth Defects" OR "Birth Defect" OR "Defect, Birth" OR "Defects, Birth") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Sepsis	(Sepsis OR "Severe Sepsis" OR "Sepsis, Severe" OR Pyemia OR Pyemias OR Pyohemia OR Pyohemias OR Pyaemia OR Pyaemias OR Septicemia OR Septicemias OR "Poisoning, Blood" OR "Blood Poisoning" OR "Blood Poisonings" OR "Poisonings, Blood") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Diabetes	("Diabetes Mellitus" OR "Diabetes Mellitus, Experimental" OR "Diabetes Mellitus, Type 1" OR "Wolfram Syndrome" OR "Diabetes Mellitus, Type 2" OR "Diabetes Mellitus, Lipoatrophic" OR "Diabetes, Gestational" OR "Diabetic Ketoacidosis" OR "Donohue Syndrome" OR "Latent Autoimmune Diabetes in Adults" OR "Prediabetic State" OR "Diabetes Complications" OR "Diabetic Angiopathies" OR "Diabetic Cardiomyopathies" OR "Diabetic Coma" OR "Diabetic Ketoacidosis" OR "Diabetic Nephropathies" OR "Diabetic Neuropathies" OR "Fetal Macrosomia") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)

Meningitis	(Meningitis OR Meningitides OR Pachymeningitis OR Pachymeningitides) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)
HIV	(HIV OR “Human Immunodeficiency Virus” OR “Immunodeficiency Virus, Human” OR “Immunodeficiency Viruses, Human” OR “Virus, Human Immunodeficiency” OR “Viruses, Human Immunodeficiency” OR “Human Immunodeficiency Viruses” OR “Human T Cell Lymphotropic Virus Type III” OR “Human T-Cell Lymphotropic Virus Type III” OR “Human T-Cell Leukemia Virus Type III” OR “Human T Cell Leukemia Virus Type III” OR “LAV-HTLV-III” OR “Lymphadenopathy-Associated Virus” OR “Lymphadenopathy Associated Virus” OR “Lymphadenopathy-Associated Viruses” OR “Virus, Lymphadenopathy-Associated” OR “Viruses, Lymphadenopathy-Associated” OR “Human T Lymphotropic Virus Type III” OR “Human T-Lymphotropic Virus Type III” OR “AIDS Virus” OR “AIDS Viruses” OR “Virus, AIDS” OR “Viruses, AIDS” OR “Acquired Immune Deficiency Syndrome Virus” OR “Acquired Immunodeficiency Syndrome Virus” OR HTLV-III) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)
Tetanus	(Tetanus OR “Clostridium tetani Infection” OR “Clostridium tetani Infections” OR “Infection, Clostridium tetani” OR “Infections, Clostridium tetani” OR “Tetanus Toxoid” OR “Toxoid, Tetanus” OR “Tetanus Vaccine” OR “Vaccine, Tetanus” OR “Td” OR “Tdap”) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)

Appendix B: List of search terms used to find research publications in PubMed.

Cause of mortality	Search Terms
Motor Vehicle Crash	("Accidents, Traffic" OR "Traffic Accidents" OR "Accident, Traffic" OR "Traffic Accident" OR "motor vehicle crash" OR "traffic safety" OR "child restraint systems" OR "child safety seat" OR "motor vehicle accidents" OR "motor vehicle" OR "vehicle accidents" OR "car crash" OR "car accident" OR "car accidents" OR "car seat" OR "car seats" OR "seat belt" OR "seat belts") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Firearm Injury	(Firearms OR Firearm OR "Gun violence" OR Gunshot OR "lethal means" OR "firearm violence") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Malignant Neoplasms	(Neoplasms OR Neoplasia OR Neoplasias OR Neoplasm OR Tumors OR Tumor OR Cancer OR Cancers OR Malignancy OR Malignancies OR "Malignant Neoplasms" OR "Malignant Neoplasm" OR "Neoplasm, Malignant" OR "Neoplasms, Malignant") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)
Opioids Overdose	(Opioid OR "Opioid overdose" OR "Opioid Analgesics" OR Opioids OR "Partial Opioid Agonists" OR "Agonists, Partial Opioid" OR "Opioid Agonists, Partial" OR "Opioid Partial Agonists" OR "Agonists, Opioid Partial" OR "Partial Agonists, Opioid" OR "Full Opioid Agonists" OR "Agonists, Full Opioid" OR "Opioid Agonists, Full" OR "Opioid Full Agonists" OR "Agonists, Opioid Full" OR "Full Agonists, Opioid" OR "Opioid Mixed Agonist-Antagonists" OR "Agonist-Antagonists, Opioid Mixed" OR "Mixed Agonist-Antagonists, Opioid" OR "Opioid Mixed Agonist Antagonists" OR "Drug Overdose" OR "Drug Overdoses" OR "Overdose, Drug" OR "Overdoses, Drug") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR

	<p>“adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)</p>
Congenital Abnormalities	<p>(“Congenital Abnormalities” OR “Abnormality, Congenital” OR “Congenital Abnormality” OR Deformities OR Deformity OR “Congenital Defects” OR “Congenital Defect” OR “Defect, Congenital” OR “Defects, Congenital” OR “Abnormalities, Congenital” OR “Birth Defects” OR “Birth Defect” OR “Defect, Birth” OR “Defects, Birth”) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)</p>
Sepsis	<p>(Sepsis OR “Severe Sepsis” OR “Sepsis, Severe” OR Pyemia OR Pyemias OR Pyohemia OR Pyohemias OR Pyaemia OR Pyaemias OR Septicemia OR Septicemias OR “Poisoning, Blood” OR “Blood Poisoning” OR “Blood Poisonings” OR “Poisonings, Blood”) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)</p>
Diabetes	<p>(“Diabetes Mellitus” OR “Diabetes Mellitus, Experimental” OR “Diabetes Mellitus, Type 1” OR “Wolfram Syndrome” OR “Diabetes Mellitus, Type 2” OR “Diabetes Mellitus, Lipotrophic” OR “Diabetes, Gestational” OR “Diabetic Ketoacidosis” OR “Donohue Syndrome” OR “Latent Autoimmune Diabetes in Adults” OR “Prediabetic State” OR “Diabetes Complications” OR “Diabetic Angiopathies” OR “Diabetic Cardiomyopathies” OR “Diabetic Coma” OR “Diabetic Ketoacidosis” OR “Diabetic Nephropathies” OR “Diabetic Neuropathies” OR “Fetal Macrosomia”) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)</p>
Meningitis	<p>(Meningitis OR Meningitides OR Pachymeningitis OR Pachymeningitides) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR “adolescents, female” OR “adolescent, female” OR “female adolescent” OR “female adolescents” OR “adolescents, male” OR “adolescent, male” OR “male adolescent” OR “male adolescents” OR minors OR minor)</p>
HIV	<p>(HIV OR “Human Immunodeficiency Virus” OR “Immunodeficiency Virus, Human” OR “Immunodeficiency Viruses, Human” OR “Virus, Human Immunodeficiency”</p>

	<p>OR "Viruses, Human Immunodeficiency" OR "Human Immunodeficiency Viruses" OR "Human T Cell Lymphotropic Virus Type III" OR "Human T-Cell Lymphotropic Virus Type III" OR "Human T-Cell Leukemia Virus Type III" OR "Human T Cell Leukemia Virus Type III" OR "LAV-HTLV-III" OR "Lymphadenopathy-Associated Virus" OR "Lymphadenopathy Associated Virus" OR "Lymphadenopathy- Associated Viruses" OR "Virus, Lymphadenopathy-Associated" OR "Viruses, Lymphadenopathy-Associated" OR "Human T Lymphotropic Virus Type III" OR "Human T-Lymphotropic Virus Type III" OR "AIDS Virus" OR "AIDS Viruses" OR "Virus, AIDS" OR "Viruses, AIDS" OR "Acquired Immune Deficiency Syndrome Virus" OR "Acquired Immunodeficiency Syndrome Virus" OR HTLV-III) AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)</p>
<p>Tetanus</p>	<p>(Tetanus OR "Clostridium tetani Infection" OR "Clostridium tetani Infections" OR "Infection, Clostridium tetani" OR "Infections, Clostridium tetani" OR "Tetanus Toxoid" OR "Toxoid, Tetanus" OR "Tetanus Vaccine" OR "Vaccine, Tetanus" OR "Tdap") AND (pediatric OR children OR child OR adolescents OR adolescent OR teen OR teens OR youth OR youths OR kids OR adolescence OR teenagers OR teenager OR "adolescents, female" OR "adolescent, female" OR "female adolescent" OR "female adolescents" OR "adolescents, male" OR "adolescent, male" OR "male adolescent" OR "male adolescents" OR minors OR minor)</p>

Appendix C: ICD-10 Codes used to find the number of deaths for each cause of mortality in CDC Wonder online database

Cause of mortality	ICD-10-CM Codes
Motor Vehicle Crash	(V02-V04; V09.0; V09.2; V12-V14; V19.0-V19.2; V19.4-V19.6; V20-V79; V80.3-V80.5; V81.0-V81.1; V82.0-V82.1; V83-V86; V87.0-V87.8; V88.0-V88.8; V89.0; V89.2; X82; Y03; Y32) includes any motor vehicle crash fatality involving one or more drivers/occupants of a car, bus, light or heavy truck, moped/motorcycle or other transport vehicle (e.g., buggy, 4-wheeler). This includes any crash involving a car and a pedestrian and/or pedal cyclist, and excludes any pedestrian or pedal cyclist fatality that did not include a vehicle.
Firearm Injury	(W32-W34; X72-74; X93-X95; Y22-Y24; Y35.0; U01.4) includes any firearm fatalities due to discharge of a handgun or long-gun, including a rifle, shotgun, or larger firearm.
Malignant Neoplasms	(C00-C97) includes a malignant cancer arising from any primary site, and the category includes malignant neoplasms originating from lymphoid, hematopoietic, or related tissue types (e.g., leukemia, multiple myeloma).
Opioids Overdose	(X40-X45; X60-X65; Y10-Y15; T40.0-T40.4; T40.6) includes drug poisoning and if any type of opioid was coded as the agent.
Congenital Abnormalities	(Q00-Q99) includes malformation, deformations and chromosomal abnormalities such as Spina Bifida, Tetralogy of Fallow, and Down’s syndrome.
Sepsis	(A02.1; A22.7; A26.7; A32.7; A40.0-A40.3; A40.8; A40.9; A41.0-A41.5; A41.8; A41.9; A42.7; B37.7; O85) includes salmonella septicaemia, anthrax septicaemia, erysipelothrix septicaemia, listerial septicaemia, septicaemia due to streptococcus, septicaemia due to staphylococcus aureus, septicaemia due to unspecified staphylococcus, septicaemia due to haemophilus influenza, septicaemia due to anaerobes, septicaemia due to other Gram-negative organisms, other specified septicaemia, unspecified septicaemia, actinomycotic septicaemia, sandidal septicaemia, puerperal sepsis.
Diabetes	(E10-E14; E23.2; N25.1; O24.0; O24.1; O24.2; O24.3; O24.4; O24.9; P70.0; P70.2) includes neonatal diabetes mellitus, diabetes mellitus, diabetes insipidus, nephrogenic diabetes insipidus, pre-existing diabetes mellitus - insulin-dependent, pre-existing diabetes mellitus - non-insulin-dependent, pre-existing malnutrition-related diabetes mellitus, pre-existing diabetes mellitus unspecified, diabetes mellitus arising in pregnancy, diabetes mellitus in pregnancy – unspecified, syndrome of infant of mother with gestational diabetes.
Meningitis	A17.0; A20.3; A32.1; A39.0-A39.5; A39.8; A39.9; A87.0-A87.2; A87.8; A87.9; B00.3; B01.0; B02.1; B05.1; B26.1; B37.5; B38.4; G00.0-G00.3; G00.8; G00.9; G03.0-G03.2; G03.8; G03.9 includes tuberculous meningitis, plague meningitis, listerial meningitis and meningoencephalitis, meningococcal meningitis, Waterhouse-Friderichsen syndrome, acute meningococcaemia, chronic meningococcaemia, meningococcaemia unspecified, meningococcal heart

	disease, other meningococcal infections, meningococcal infection unspecified, enteroviral meningitis, adenoviral meningitis, lymphocytic choriomeningitis, other viral meningitis, herpesviral meningitis, viral meningitis unspecified, varicella meningitis, zoster meningitis, measles complicated by meningitis, mumps meningitis, candidal meningitis, coccidioidomycosis meningitis, haemophilus meningitis, pneumococcal meningitis, streptococcal meningitis, staphylococcal meningitis, other bacterial meningitis, bacterial meningitis unspecified, nonpyogenic meningitis, chronic meningitis, benign recurrent meningitis [Mollaret], meningitis due to other specified causes, meningitis, unspecified.
HIV	(B20-B24) includes human immunodeficiency virus [HIV] disease.
Tetanus	(A34; A35) includes obstetrical tetanus and other tetanus.