

THE LANCET Global Health

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Salomon JA, Haagsma JA, Davis A, et al. Disability weights for the Global Burden of Disease 2013 study. *Lancet Glob Health* 2015; **3**: e712–23.

Disability weights for the Global Burden of Disease 2013 study

Supplementary Information

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Appendix Table 1: Lay descriptions for 235 unique health states in GBD 2013

Health state	Lay description
<i>Infectious disease</i>	
Infectious disease: acute episode, mild	has a low fever and mild discomfort, but no difficulty with daily activities.
Infectious disease: acute episode, moderate	has a fever and aches, and feels weak, which causes some difficulty with daily activities.
Infectious disease: acute episode, severe	has a high fever and pain, and feels very weak, which causes great difficulty with daily activities.
Infectious disease: post-acute consequences (fatigue, emotional lability, insomnia)	is always tired and easily upset. The person feels pain all over the body and is depressed.
Diarrhoea: mild	has diarrhea three or more times a day with occasional discomfort in the belly.
Diarrhoea: moderate	has diarrhea three or more times a day, with painful cramps in the belly and feeling thirsty.
Diarrhoea: severe	has diarrhea three or more times a day with severe belly cramps. The person is very thirsty and feels nauseous and tired.
Epididymo-orchitis	has swelling and tenderness in the testicles and pain during urination.
Herpes zoster	has a blistering skin rash that causes pain, with some burning and itching.
HIV: symptomatic, pre-AIDS	has weight loss, fatigue, and frequent infections.
HIV/AIDS: receiving antiretroviral treatment	has occasional fevers and infections. The person takes daily medication that sometimes causes diarrhea.
AIDS: not receiving antiretroviral treatment	has severe weight loss, weakness, fatigue, cough and fever, and frequent infections, skin rashes and diarrhea.
Intestinal nematode infections: symptomatic	has cramping pain and a bloated feeling in the belly.
Lymphatic filariasis: symptomatic	has swollen legs with hard and thick skin, which causes difficulty in moving around.
Ear pain	has an ear-ache that causes some difficulty with daily activities.
Tuberculosis: without HIV infection	has a persistent cough and fever, is short of breath, feels weak, and has lost a lot of weight.
Tuberculosis: with HIV infection	has a persistent cough and fever, shortness of breath, night sweats, weakness and fatigue and severe weight loss.
<i>Cancer</i>	
Cancer: diagnosis and primary therapy	has pain, nausea, fatigue, weight loss and high anxiety.
Cancer: metastatic	has severe pain, extreme fatigue, weight loss and high anxiety.
Mastectomy	had one of her breasts removed and sometimes has pain or swelling in the arms.
Stoma	has a pouch attached to an opening in the belly to collect and empty stools.
Terminal phase: with medication (for cancers, end-stage kidney or liver disease)	has lost a lot of weight and regularly uses strong medication to avoid constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.
Terminal phase: without medication (for cancers, end-stage kidney or liver disease)	has lost a lot of weight and has constant pain. The person has no appetite, feels nauseous, and needs to spend most of the day in bed.
<i>Cardiovascular and circulatory disease</i>	
Acute myocardial infarction: days 1-2	has severe chest pain that becomes worse with any physical activity,. The person feels nauseous, short of breath, and very anxious.
Acute myocardial infarction: days 3-28	gets short of breath after heavy physical activity, and tires easily, but has no problems when at rest. The person has to take medication every day and has some anxiety.
Angina pectoris: mild	has chest pain that occurs with strenuous physical activity, such as running or lifting heavy objects. After a brief rest, the pain goes away.
Angina pectoris: moderate	has chest pain that occurs with moderate physical activity, such as walking uphill or more than half a kilometer (around a quarter-mile) on level ground. After a brief rest, the pain goes away.
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Health state	Lay description
Angina pectoris: severe	has chest pain that occurs with minimal physical activity, such as walking only a short distance. After a brief rest, the pain goes away. The person avoids most physical activities because of the pain.
Cardiac conduction disorders and cardiac dysrhythmias	has periods of rapid and irregular heartbeats and occasional fainting.
Claudication	has cramping pains in the legs after walking a medium distance. The pain goes away after a short rest.
Heart failure: mild	is short of breath and easily tires with moderate physical activity, such as walking uphill or more than a quarter-mile on level ground. The person feels comfortable at rest or during activities requiring less effort.
Heart failure: moderate	is short of breath and easily tires with minimal physical activity, such as walking only a short distance. The person feels comfortable at rest but avoids moderate activity.
Heart failure: severe	is short of breath and feels tired when at rest. The person avoids any physical activity, for fear of worsening the breathing problems.
Stroke: long-term consequences, mild	has some difficulty in moving around and some weakness in one hand, but is able to walk without help.
Stroke: long-term consequences, moderate	has some difficulty in moving around, and in using the hands for lifting and holding things, dressing and grooming.
Stroke: long-term consequences, moderate plus cognition problems	has some difficulty in moving around, in using the hands for lifting and holding things, dressing and grooming, and in speaking. The person is often forgetful and confused.
Stroke: long-term consequences, severe	is confined to bed or a wheelchair, has difficulty speaking and depends on others for feeding, toileting and dressing.
Stroke: long-term consequences, severe plus cognition problems	is confined to bed or a wheelchair, depends on others for feeding, toileting and dressing, and has difficulty speaking, thinking clearly and remembering things.
<i>Diabetes, digestive, and genitourinary disease</i>	
Diabetic foot	has a sore on the foot that is swollen and causes some difficulty in walking.
Diabetic neuropathy	has pain, tingling and numbness in the arms, legs, hands and feet. The person sometimes gets cramps and muscle weakness.
Chronic kidney disease (stage IV)	tires easily, has nausea, reduced appetite and difficulty sleeping.
End-stage renal disease: with kidney transplant	sometimes feels tired and down, and has some difficulty with daily activities.
End-stage renal disease: on dialysis	is tired and has itching, cramps, headache, joint pains and shortness of breath. The person needs intensive medical care every other day lasting about half a day.
Decompensated cirrhosis of the liver	has a swollen belly and swollen legs. The person feels weakness, fatigue and loss of appetite.
Gastric bleeding	vomits blood and feels nauseous.
Crohn's disease or ulcerative colitis	has cramping abdominal pain, has diarrhea several times a day, and feels very tired for two months every year. When the person does not have symptoms, there is anxiety about them returning.
Benign prostatic hypertrophy: symptomatic	feels the urge to urinate frequently, but when passing urine it comes out slowly and sometimes is painful.
Urinary incontinence	cannot control urinating.
Stress incontinence	loses small amounts of urine without meaning to when coughing, sneezing, laughing or during physical exercise.
Impotence	has difficulty in obtaining or maintaining an erection.
Infertility: primary	wants to have a child and has a fertile partner, but the couple cannot conceive.
Infertility: secondary	has at least one child, and wants to have more children. The person has a fertile partner, but the couple cannot conceive.
<i>Chronic respiratory diseases</i>	
Asthma: controlled	has wheezing and cough once a month, which does not cause difficulty with daily activities.

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Health state	Lay description
Asthma: partially controlled	has wheezing and cough once a week, which causes some difficulty with daily activities.
Asthma: uncontrolled	has wheezing, cough and shortness of breath more than twice a week, which causes difficulty with daily activities and sometimes wakes the person at night.
COPD and other chronic respiratory diseases: mild	has cough and shortness of breath after heavy physical activity, but is able to walk long distances and climb stairs.
COPD and other chronic respiratory diseases: moderate	has cough, wheezing and shortness of breath, even after light physical activity. The person feels tired and can walk only short distances or climb only a few stairs.
COPD and other chronic respiratory diseases: severe	has cough, wheezing and shortness of breath all the time. The person has great difficulty walking even short distances or climbing any stairs, feels tired when at rest, and is anxious.
<i>Neurological disorders</i>	
Dementia: mild	has some trouble remembering recent events, and finds it hard to concentrate and make decisions and plans.
Dementia: moderate	has memory problems and confusion, feels disoriented, at times hears voices that are not real, and needs help with some daily activities.
Dementia: severe	has complete memory loss; no longer recognizes close family members; and requires help with all daily activities.
Headache: migraine	has severe, throbbing head pain and nausea that cause great difficulty in daily activities and sometimes confine the person to bed. Moving around, light, and noise make it worse.
Headache: tension-type	has a moderate headache that also affects the neck, which causes difficulty in daily activities.
Headache: medication overuse	has daily headaches, felt as dull pain and often lasting all day, with poor sleep, nausea and fatigue. The person takes medicine for the headaches, which provides little relief but is needed to avoid having worse symptoms.
Multiple sclerosis: mild	has mild loss of feeling in one hand, is a little unsteady while walking, has slight loss of vision in one eye, and often needs to urinate urgently.
Multiple sclerosis: moderate	needs help walking, has difficulty with writing and arm coordination, has loss of vision in one eye and cannot control urinating.
Multiple sclerosis: severe	has slurred speech and difficulty swallowing. The person has weak arms and hands, very limited and stiff leg movement, has loss of vision in both eyes and cannot control urinating.
Epilepsy: severe (seizures \geq once per month)	has sudden seizures one or more times each month, with violent muscle contractions and stiffness, loss of consciousness, and loss of urine or bowel control. Between seizures the person has memory loss and difficulty concentrating.
Epilepsy: less severe (seizures $<$ once per month)	has sudden seizures two to five times a year, with violent muscle contractions and stiffness, loss of consciousness, and loss of urine or bowel control.
Parkinson's disease: mild	has mild tremors and moves a little slowly, but is able to walk and do daily activities without assistance.
Parkinson's disease: moderate	has moderate tremors and moves slowly, which causes some difficulty in walking and daily activities. The person has some trouble swallowing, talking, sleeping, and remembering things.
Parkinson's disease: severe	has severe tremors and moves very slowly, which causes great difficulty in walking and daily activities. The person falls easily and has a lot of difficulty talking, swallowing, sleeping, and remembering things.
<i>Mental, behavioural, and substance use disorders</i>	
Alcohol use disorder: very mild	drinks alcohol daily and has difficulty controlling the urge to drink. When sober, the person functions normally.
Alcohol use disorder: mild	drinks a lot of alcohol and sometimes has difficulty controlling the urge to drink. While intoxicated, the person has difficulty performing daily activities.
Alcohol use disorder: moderate	drinks a lot, gets drunk almost every week and has great difficulty controlling the urge to drink. Drinking and recovering cause great difficulty in daily activities, sleep loss, and fatigue.

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Appendix Table 1 (continued from previous page)

Health state	Lay description
Alcohol use disorder: severe	gets drunk almost every day and is unable to control the urge to drink. Drinking and recovering replace most daily activities. The person has difficulty thinking, remembering and communicating, and feels constant pain and fatigue.
Fetal alcohol syndrome: mild	is a little slow in developing physically and mentally, which causes some difficulty in learning but no other difficulties in daily activities.
Fetal alcohol syndrome: moderate	is slow in developing physically and mentally, which causes some difficulty in daily activities.
Fetal alcohol syndrome: severe	is very slow in developing physically and mentally, which causes great difficulty in daily activities.
Cannabis dependence: mild	uses marijuana at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.
Cannabis dependence: moderate to severe	uses marijuana daily and has difficulty controlling the habit. The person sometimes has mood swings, anxiety and hallucinations, and has some difficulty in daily activities.
Amphetamine dependence: mild	uses stimulants (drugs) at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.
Amphetamine dependence: moderate to severe	uses stimulants (drugs) and has difficulty controlling the habit. The person sometimes has depression, hallucinations and mood swings, and has difficulty in daily activities.
Cocaine dependence: mild	uses cocaine at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.
Cocaine dependence: moderate to severe	uses cocaine and has difficulty controlling the habit. The person sometimes has mood swings, anxiety, paranoia, hallucinations and sleep problems, and has some difficulty in daily activities.
Heroin and other opioid dependence: mild	uses heroin (or methadone) daily and has difficulty controlling the habit. When not using, the person functions normally.
Heroin and other opioid dependence: moderate to severe	uses heroin daily and has difficulty controlling the habit. When the effects wear off, the person feels severe nausea, agitation, vomiting and fever. The person has a lot of difficulty in daily activities.
Anxiety disorders: mild	feels mildly anxious and worried, which makes it slightly difficult to concentrate, remember things, and sleep. The person tires easily but is able to perform daily activities.
Anxiety disorders: moderate	feels anxious and worried, which makes it difficult to concentrate, remember things, and sleep. The person tires easily and finds it difficult to perform daily activities.
Anxiety disorders: severe	constantly feels very anxious and worried, which makes it difficult to concentrate, remember things and sleep. The person has lost pleasure in life and thinks about suicide.
Major depressive disorder: mild episode	feels persistent sadness and has lost interest in usual activities. The person sometimes sleeps badly, feels tired, or has trouble concentrating but still manages to function in daily life with extra effort.
Major depressive disorder: moderate episode	has constant sadness and has lost interest in usual activities. The person has some difficulty in daily life, sleeps badly, has trouble concentrating, and sometimes thinks about harming himself (or herself).
Major depressive disorder: severe episode	has overwhelming, constant sadness and cannot function in daily life. The person sometimes loses touch with reality and wants to harm or kill himself (or herself).
Bipolar disorder: manic episode	is hyperactive, hears and believes things that are not real, and engages in impulsive and aggressive behavior that endanger the person and others.
Bipolar disorder: residual state	has mild mood swings, irritability and some difficulty with daily activities.
Schizophrenia: acute state	hears and sees things that are not real and is afraid, confused, and sometimes violent. The person has great difficulty with communication and daily activities, and sometimes wants to harm or kill himself (or herself).
Schizophrenia: residual state	hears and sees things that are not real and has trouble communicating. The person can be forgetful, has difficulty with daily activities, and thinks about hurting himself (or herself).

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Appendix Table 1 (continued from previous page)

Health state	Lay description
Anorexia nervosa	feels an overwhelming need to starve and exercises excessively to lose weight. The person is very thin, weak and anxious.
Bulimia nervosa	has uncontrolled overeating followed by guilt, starving, and vomiting to lose weight.
Attention deficit hyperactivity disorder	is hyperactive and has difficulty concentrating, remembering things, and completing tasks.
Conduct disorder	has frequent behavior problems, which are sometimes violent. The person often has difficulty interacting with other people and feels irritable.
Asperger's syndrome	has difficulty interacting with other people, and is slow to understand or respond to questions. The person is often preoccupied with one thing and has some difficulty with basic daily activities.
Autism	has severe problems interacting with others and difficulty understanding simple questions or directions. The person has great difficulty with basic daily activities and becomes distressed by any change in routine.
Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.
Intellectual disability: mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.
Intellectual disability: moderate	has low intelligence, and is slow in learning to speak and to do even simple tasks. As an adult, the person requires a lot of support to live independently and raise children. The person can only work at the simplest supervised jobs.
Intellectual disability: severe	has very low intelligence and cannot speak more than a few words, needs constant supervision and help with most daily activities, and can do only the simplest tasks.
Intellectual disability: profound	has very low intelligence, has almost no language, and does not understand even the most basic requests or instructions. The person requires constant supervision and help for all activities.
<i>Hearing and vision loss</i>	
Hearing loss, mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).
Hearing loss, moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.
Hearing loss, severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).
Hearing loss, profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to others often cause worry, depression or loneliness.
Hearing loss, complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.
Hearing loss, mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.
Hearing loss, moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for 5 minutes at a time, almost every day.
Hearing loss, severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost every day. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).

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Appendix Table 1 (continued from previous page)

Health state	Lay description
Hearing loss, profound, with ringing	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry, depression, or loneliness.
Hearing loss, complete, with ringing	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.
Distance vision: mild impairment	has some difficulty with distance vision, for example reading signs, but no other problems with eyesight.
Distance vision: moderate impairment	has vision problems that make it difficult to recognize faces or objects across a room.
Distance vision: severe impairment	has severe vision loss, which causes difficulty in daily activities, some emotional impact (for example worry), and some difficulty going outside the home without assistance.
Distance vision blindness	is completely blind, which causes great difficulty in some daily activities, worry and anxiety, and great difficulty going outside the home without assistance.
Presbyopia	has difficulty seeing things that are nearer than 3 feet, but has no difficulty with seeing things at a distance.
Distance vision: monocular impairment	is blind in one eye and has difficulty judging distances
<i>Musculoskeletal disorders</i>	
Low back pain: mild	has mild back pain, which causes some difficulty dressing, standing, and lifting things.
Low back pain: moderate	has moderate back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things.
Low back pain: severe, without leg pain	has severe back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person sleeps poorly and feels worried.
Low back pain: severe, with leg pain	has severe back and leg pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person sleeps poorly and feels worried.
Low back pain: most severe, without leg pain	has constant back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person sleeps poorly, is worried, and has lost some enjoyment in life.
Low back pain: most severe, with leg pain	has constant back and leg pain, which causes difficulty dressing, sitting, standing, walking, and lifting things. The person sleeps poorly, is worried, and has lost some enjoyment in life.
Neck pain: mild	has neck pain, and has difficulty turning the head and lifting things.
Neck pain: moderate	has constant neck pain, and has difficulty turning the head, holding arms up, and lifting things
Neck pain: severe	has severe neck pain, and difficulty turning the head and lifting things. The person gets headaches and arm pain, sleeps poorly, and feels tired and worried.
Neck pain: most severe	has constant neck pain and arm pain, and difficulty turning the head, holding arms up, and lifting things. The person gets headaches, sleeps poorly, and feels tired and worried.
Musculoskeletal problems: legs, mild	has pain in the leg, which causes some difficulty running, walking long distances, and getting up and down.
Musculoskeletal problems: legs, moderate	has moderate pain in the leg, which makes the person limp, and causes some difficulty walking, standing, lifting and carrying heavy things, getting up and down and sleeping.
Musculoskeletal problems: legs, severe	has severe pain in the leg, which makes the person limp and causes a lot of difficulty walking, standing, lifting and carrying heavy things, getting up and down, and sleeping.

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Health state	Lay description
Musculoskeletal problems: arms, mild	has mild pain and stiffness in the arms and hands. The person has some difficulty lifting, carrying and holding things.
Musculoskeletal problems: arms, moderate	has moderate pain and stiffness in the arms and hands, which causes difficulty lifting, carrying, and holding things, and trouble sleeping because of the pain.
Musculoskeletal problems: generalised, moderate	has pain and deformity in most joints, causing difficulty moving around, getting up and down, and using the hands for lifting and carrying. The person often feels fatigue.
Musculoskeletal problems: generalised, severe	has severe, constant pain and deformity in most joints, causing difficulty moving around, getting up and down, eating, dressing, lifting, carrying and using the hands. The person often feels sadness, anxiety and extreme fatigue.
Gout: acute	has severe pain and swelling in the leg, making it very difficult to get up and down, stand, walk, lift, and carry heavy things. The person has trouble sleeping because of the pain.
<i>Injuries</i>	
Amputation of finger(s), excluding thumb	has lost a finger of one hand. At times there is pain and tingling in the stump.
Amputation of thumb: long term	has lost one thumb, causing some difficulty in using the hand, pain, and tingling in the stump.
Amputation of one arm: long term, with treatment	has lost one hand and part of the arm, leaving pain and tingling in the stump. The person has an artificial arm that makes it possible to lift objects and do daily activities such as cooking, with some extra effort.
Amputation of one arm: long term, without treatment	has lost one hand and part of the arm, leaving pain and tingling in the stump. The person needs help from others to lift objects or do daily activities such as cooking.
Amputation of both arms: long term, with treatment	has lost part of both arms, leaving pain and tingling in the stumps. The person has two artificial arms that make it possible to do daily activities, with a great deal of extra effort.
Amputation of both arms: long term, without treatment	has lost part of both arms, leaving pain and tingling in the stumps. The person needs a great deal of help from others to do even basic daily activities such as eating and using the toilet, and the person is very limited in other activities.
Amputation of toe	has lost one toe, leaving occasional pain and tingling in the stump.
Amputation of one leg: long term, with treatment	has lost part of one leg, leaving pain and tingling in the stump. The person has an artificial leg that helps in moving around.
Amputation of one leg: long term, without treatment	has lost part of one leg, leaving pain and tingling in the stump. The person does not have an artificial leg, has frequent sores, and uses crutches.
Amputation of both legs: long term, with treatment	has lost part of both legs, leaving pain and tingling in the stumps. The person has two artificial legs that make moving around possible, with extra effort.
Amputation of both legs: long term, without treatment	has lost part of both legs, leaving pain, tingling, and frequent sores in the stumps. The person has great difficulty moving around, has episodes of depression and anxiety, and needs help from others to do many daily activities.
Burns of <20% total surface area without lower airway burns: short term, with or without treatment	has a burn on part of the body. Parts of the burned area are painful, and other parts have lost feeling.
Burns of <20% total surface area or <10% total surface area if head or neck, or hands or wrist involved: long term, with or without treatment	has scars caused by a burn. The scars are sometimes painful and itchy.
Burns of ≥20% total surface area: short term, with or without treatment	has a painful burn over a large part of the body. Parts of the burned area have lost feeling, and the person feels anxious and unwell.
Burns of ≥20% total surface area or ≥10% total surface area if head or neck, or hands or wrist involved: long term, with treatment	has scars caused by burns over a large part of the body. The scars are frequently painful and itchy, and the person is often sad.
Burns of ≥20% total surface area or ≥10% total surface area if head or neck, or hands or wrist involved: long term, without treatment	has severe, disfiguring and itchy scars caused by burns over a large part of the body. The person cannot move some joints, feels sad, and has great difficulty with self-care such as dressing and toileting.

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Appendix Table 1 (continued from previous page)

Health state	Lay description
Lower airway burns: with or without treatment	has a burn in the throat and lungs, which causes great difficulty breathing and a lot of anxiety.
Crush injury: short or long term, with or without treatment	had part of the body crushed, leaving pain, swelling, tingling and limited feeling in the affected area.
Dislocation of hip: long term, with or without treatment	walks with a limp and feels discomfort when walking.
Dislocation of knee: long term, with or without treatment	has a knee out of joint, causing pain and difficulty moving the knee, which sometimes gives way. The person needs crutches for walking and help with self-care such as dressing.
Dislocation of shoulder: long term, with or without treatment	has a shoulder that is out of joint, causing pain and difficulty moving. The person has difficulty with daily activities such as dressing and cooking.
Other injuries of muscle and tendon (includes sprains, strains, and dislocations other than shoulder, knee, or hip)	has a strained muscle that causes pain and swelling.
Drowning and nonfatal submersion: short or long term, with or without treatment	has breathlessness, anxiety, cough, and vomiting.
Fracture of clavicle, scapula, or humerus: short or long term, with or without treatment	has a broken shoulder bone, which is painful and swollen. The person cannot use the affected arm and has difficulty with getting dressed.
Fracture of face bone: short or long term, with or without treatment	has a broken cheek bone or a broken nose or chipped teeth, with swelling and severe pain.
Fracture of foot bones: short term, with or without treatment	has a broken foot bone, which causes pain, swelling, and difficulty walking.
Fracture of foot bones: long term, without treatment	had a broken foot in the past that did not heal properly. The person now has pain in the foot and has some difficulty walking.
Fracture of hand: short term, with or without treatment	has a broken hand, causing pain and swelling.
Fracture of hand: long term, without treatment	has stiffness in the hand and a weak grip.
Fracture of neck of femur: short term, with or without treatment	has broken a hip and is in pain. The person cannot stand or walk, and needs help washing, dressing, and going to the toilet.
Fracture of neck of femur: long term, with treatment	had a broken hip in the past, which was fixed with treatment. The person can only walk short distances, has discomfort when moving around, and has some difficulty in daily activities.
Fracture of neck of femur: long term, without treatment	had a broken hip bone in the past, which was never treated and did not heal properly. The person cannot get out of bed and needs help washing and going to the toilet.
Fracture, other than neck of femur: short term, with or without treatment	has a broken thigh bone. The person has severe pain and swelling and cannot walk.
Fracture, other than neck of femur: long term, without treatment	had a broken thigh bone in the past, which was never treated and did not heal properly. The person now has a limp and discomfort when walking.
Fracture of patella, tibia or fibula, or ankle: short term, with or without treatment	has a broken shin bone, which causes severe pain, swelling, and difficulty walking.
Fracture of patella, tibia or fibula, or ankle: long term, with or without treatment	had a broken shin bone in the past that did not heal properly. The person has pain in the knee and ankle, and has difficulty walking.
Fracture of pelvis: short term	has a broken pelvis bone, with swelling and bruising. The person has severe pain, and cannot walk or do daily activities.
Fracture of pelvis: long term	had a broken pelvis in the past and now walks with a limp. There is often pain in the back and groin, and when urinating and sitting for a long time.
Fracture of radius or ulna: short term, with or without treatment	has a broken forearm, which causes severe pain, swelling, and limited movement.
Fracture of radius or ulna: long term, without treatment	had a broken forearm in the past that did not heal properly, causing some pain and limited movement in the elbow and wrist. The person has difficulty with daily activities such as dressing.
Fracture of skull: short or long term, with or without treatment	has a broken skull, but does not have brain damage. The broken area is painful and swollen.
Fracture of sternum or fracture of one or two ribs: short term, with or without treatment	has a broken rib that causes severe pain in the chest, especially when breathing in. The person has difficulty with daily activities such as dressing.
Fracture of vertebral column: short or long term, with or without treatment	has broken back bones and is in pain, but still has full use of arms and legs.
Fractures: treated, long term	has slight pain in a bone that was broken in the past.

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Appendix Table 1 (continued from previous page)

Health state	Lay description
Injured nerves: short term	has a nerve injury, which causes difficulty moving and some loss of feeling in the affected area.
Injured nerves: long term	had a nerve injury in the past, which continues to cause some difficulty moving. The person often injures the affected part because it is numb.
Injury to eyes: short term	has an injury to one eye, which causes pain and difficulty seeing.
Concussion	has headaches, dizziness, nausea and difficulty concentrating.
Severe traumatic brain injury: short term, with or without treatment	cannot concentrate and has headaches, memory problems, dizziness, and feels angry.
Traumatic brain injury: long-term consequences, minor, with or without treatment	has episodes of headaches, memory problems, and difficulty concentrating.
Traumatic brain injury: long-term consequences, moderate, with or without treatment	has frequent headaches, memory problems, difficulty concentrating, and dizziness. The person is often anxious and moody.
Traumatic brain injury: long-term consequences, severe, with or without treatment	cannot think clearly and has frequent headaches, memory problems, difficulty concentrating and dizziness. The person is often anxious and moody, and depends on others for feeding, toileting, dressing and walking.
Open wound: short term, with or without treatment	has a cut in the skin, which causes pain and numbness around the cut.
Poisoning: short term with or without treatment	has drowsiness, stomach pain and vomiting.
Severe chest injury: long term, with or without treatment	had a severe chest injury in the past that has now healed. The person still gets breathless when walking and feels discomfort in the chest.
Severe chest injury: short term, with or without treatment	has a serious chest injury, which causes severe pain, shortness of breath and anxiety.
Spinal cord lesion below neck: treated	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.
Spinal cord lesion below neck: untreated	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. Legs are in fixed, bent positions, and the person gets frequent infections and pressure sores.
Spinal cord lesion at neck: treated	is paralyzed from the neck down, with no feeling or control over any part of the body below the neck, and no urine or bowel control.
Spinal cord lesion at neck: untreated	is paralyzed from the neck down, with no feeling or control over any part of the body below the neck, and no urine or bowel control. Arms and legs are in fixed, bent positions, and the person gets frequent infections and pressure sores.
<i>Other</i>	
Abdominopelvic problem: mild	has some pain in the belly that causes nausea but does not interfere with daily activities.
Abdominopelvic problem: moderate	has pain in the belly and feels nauseous. The person has difficulties with daily activities.
Abdominopelvic problem: severe	has severe pain in the belly and feels nauseous. The person is anxious and unable to carry out daily activities.
Anemia: mild	feels slightly tired and weak at times, but this does not interfere with normal daily activities.
Anemia: moderate	feels moderate fatigue, weakness, and shortness of breath after exercise, making daily activities more difficult.
Anemia: severe	feels very weak, tired and short of breath, and has problems with activities that require physical effort or deep concentration.
Periodontitis	has minor bleeding of the gums from time to time, with mild discomfort.
Dental caries: symptomatic	has a toothache, which causes some difficulty in eating.
Severe tooth loss	has lost more than 20 teeth including front and back, and has great difficulty in eating meat, fruits, and vegetables.
Disfigurement: level 1	has a slight, visible physical deformity that others notice, which causes some worry and discomfort.
Disfigurement: level 2	has a visible physical deformity that causes others to stare and comment. As a result, the person is worried and has trouble sleeping and concentrating.

(Continues on next page)

Appendix Table 1 (continued from previous page)

Health state	Lay description
Disfigurement: level 3	has an obvious physical deformity that makes others uncomfortable, which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.
Disfigurement: level 1 with itch or pain	has a slight, visible physical deformity that is sometimes sore or itchy. Others notice the deformity, which causes some worry and discomfort.
Disfigurement: level 2, with itch or pain	has a visible physical deformity that is sore and itchy. Other people stare and comment, which causes the person to worry. The person has trouble sleeping and concentrating.
Disfigurement: level 3, with itch or pain	has an obvious physical deformity that is very painful and itchy. The physical deformity makes others uncomfortable, which causes the person to avoid social contact, feel worried, sleep poorly, and think about suicide.
Generic uncomplicated disease: worry and daily medication	has a chronic disease that requires medication every day and causes some worry but minimal interference with daily activities.
Generic uncomplicated disease: anxiety about diagnosis	has a disease diagnosis that causes some worry but minimal interference with daily activities.
Iodine-deficiency goitre	has a large mass in the front of the neck. The person sometimes has weakness and fatigue, constipation and weight gain.
Kwashiorkor	is very tired and irritable and has diarrhea.
Severe wasting	is extremely skinny and has no energy.
Speech problems	has difficulty speaking, and others find it difficult to understand.
Motor impairment: mild	has some difficulty in moving around but is able to walk without help.
Motor impairment: moderate	has some difficulty in moving around, and difficulty in lifting and holding objects, dressing and sitting upright, but is able to walk without help.
Motor impairment: severe	is unable to move around without help, and is not able to lift or hold objects, get dressed or sit upright.
Motor plus cognitive impairments: mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.
Motor plus cognitive impairments: moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks.
Motor plus cognitive impairments: severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.
Rectovaginal fistula	has an abnormal opening between her vagina and rectum causing flatulence and feces to escape through the vagina. The person gets infections in her vagina, and has pain when urinating.
Vesicovaginal fistula	has an abnormal opening between the bladder and the vagina, which makes her unable to control urinating. The woman is anxious and depressed.
Thrombocytopenic purpura	easily bruises and sometimes bleeds from the gums and nose; feels weak and has some difficulty with daily activities.
Hypothyroidism	has low energy and feels cold.
Hyperthyroidism	feels nervous, has palpitations, sweats a lot and has difficulty sleeping.
Vertigo	has short spells of dizziness and loss of balance; between spells the person is worried the spells will occur again.

Appendix Table 2a: Disability weights for health states common to GBD2013 and GBD2010 – 135 health states included in both GBD and European surveys

Health state	GBD 2013 estimate (95% uncertainty interval)	GBD 2010 estimate (95% uncertainty interval)
<i>Infectious disease</i>		
Infectious disease: acute episode, mild	0.006 (0.002-0.012)	0.005 (0.002-0.011)
Infectious disease: acute episode, moderate	0.051 (0.032-0.074)	0.053 (0.033-0.081)
Infectious disease: acute episode, severe	0.133 (0.088-0.190)	0.210 (0.139-0.298)
Infectious disease: post-acute consequences (fatigue, emotional lability, insomnia)	0.219 (0.148-0.308)	0.254 (0.170-0.355)
Diarrhoea: mild	0.074 (0.049-0.104)	0.061 (0.036-0.093)
Diarrhoea: moderate	0.188 (0.125-0.264)	0.202 (0.133-0.299)
Diarrhoea: severe	0.247 (0.164-0.348)	0.281 (0.184-0.399)
Epididymo-orchitis	0.128 (0.086-0.180)	0.097 (0.063-0.137)
HIV: symptomatic, pre-AIDS	0.274 (0.184-0.377)	0.221 (0.146-0.310)
HIV/AIDS: receiving antiretroviral treatment	0.078 (0.052-0.111)	0.053 (0.034-0.079)
AIDS: not receiving antiretroviral treatment	0.582 (0.406-0.743)	0.547 (0.382-0.715)
Ear pain	0.013 (0.007-0.024)	0.018 (0.009-0.031)
Tuberculosis: without HIV infection	0.333 (0.224-0.454)	0.331 (0.222-0.450)
Tuberculosis: with HIV infection	0.408 (0.274-0.549)	0.399 (0.267-0.547)
<i>Cancer</i>		
Cancer: diagnosis and primary therapy	0.288 (0.193-0.399)	0.294 (0.199-0.411)
Cancer: metastatic	0.451 (0.307-0.600)	0.484 (0.330-0.643)
Stoma	0.095 (0.063-0.131)	0.086 (0.055-0.131)
Terminal phase: with medication (for cancers, end-stage kidney or liver disease)	0.540 (0.377-0.687)	0.508 (0.348-0.670)
Terminal phase: without medication (for cancers, end-stage kidney or liver disease)	0.569 (0.389-0.727)	0.519 (0.356-0.683)
<i>Cardiovascular and circulatory disease</i>		
Acute myocardial infarction: days 3-28	0.074 (0.049-0.105)	0.056 (0.035-0.082)
Angina pectoris: moderate	0.080 (0.052-0.113)	0.066 (0.043-0.095)
Cardiac conduction disorders and cardiac dysrhythmias	0.224 (0.151-0.312)	0.145 (0.097-0.205)
Heart failure: mild	0.041 (0.026-0.062)	0.037 (0.021-0.058)
Heart failure: moderate	0.072 (0.047-0.103)	0.070 (0.044-0.102)
Heart failure: severe	0.179 (0.122-0.251)	0.186 (0.128-0.261)
Stroke: long-term consequences, moderate	0.070 (0.046-0.099)	0.076 (0.050-0.110)
Stroke: long-term consequences, severe plus cognition problems	0.588 (0.411-0.744)	0.567 (0.394-0.738)
<i>Diabetes, digestive, and genitourinary disease</i>		
Diabetic neuropathy	0.133 (0.089-0.187)	0.099 (0.066-0.145)
Chronic kidney disease (stage IV)	0.104 (0.070-0.147)	0.105 (0.069-0.154)
End-stage renal disease: with kidney transplant	0.024 (0.014-0.039)	0.027 (0.015-0.043)
End-stage renal disease: on dialysis	0.571 (0.398-0.725)	0.573 (0.397-0.749)
Decompensated cirrhosis of the liver	0.178 (0.123-0.250)	0.194 (0.127-0.273)
Crohn's disease or ulcerative colitis	0.231 (0.156-0.320)	0.225 (0.152-0.314)
Infertility: primary	0.008 (0.003-0.015)	0.011 (0.005-0.021)
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Appendix Table 2a (continued from previous page)		
Health state	GBD 2013 estimate (95% uncertainty interval)	GBD 2010 estimate (95% uncertainty interval)
Infertility: secondary	0.005 (0.002-0.011)	0.006 (0.002-0.013)
<i>Chronic respiratory diseases</i>		
Asthma: controlled	0.015 (0.007-0.026)	0.009 (0.004-0.018)
Asthma: partially controlled	0.036 (0.022-0.055)	0.027 (0.015-0.045)
COPD and other chronic respiratory diseases: mild	0.019 (0.011-0.033)	0.015 (0.007-0.028)
COPD and other chronic respiratory diseases: moderate	0.225 (0.153-0.310)	0.192 (0.129-0.271)
COPD and other chronic respiratory diseases: severe	0.408 (0.273-0.556)	0.383 (0.259-0.528)
<i>Neurological disorders</i>		
Dementia: mild	0.069 (0.046-0.099)	0.082 (0.055-0.117)
Dementia: moderate	0.377 (0.252-0.508)	0.346 (0.233-0.475)
Multiple sclerosis: mild	0.183 (0.124-0.253)	0.198 (0.137-0.278)
Multiple sclerosis: moderate	0.463 (0.313-0.613)	0.445 (0.303-0.593)
Multiple sclerosis: severe	0.719 (0.534-0.858)	0.707 (0.522-0.857)
Parkinson's disease: mild	0.010 (0.005-0.019)	0.011 (0.005-0.021)
Parkinson's disease: moderate	0.267 (0.181-0.372)	0.263 (0.179-0.360)
Parkinson's disease: severe	0.575 (0.396-0.730)	0.549 (0.383-0.711)
<i>Mental, behavioural, and substance use disorders</i>		
Alcohol use disorder: mild	0.235 (0.160-0.327)	0.259 (0.176-0.359)
Alcohol use disorder: moderate	0.373 (0.248-0.508)	0.388 (0.262-0.529)
Alcohol use disorder: severe	0.570 (0.396-0.732)	0.549 (0.384-0.708)
Cannabis dependence: moderate to severe	0.266 (0.178-0.364)	0.329 (0.223-0.455)
Amphetamine dependence: moderate to severe	0.486 (0.329-0.637)	0.353 (0.215-0.525)
Cocaine dependence: moderate to severe	0.479 (0.324-0.634)	0.376 (0.235-0.553)
Heroin and other opioid dependence: moderate to severe	0.697 (0.510-0.843)	0.641 (0.459-0.803)
Anxiety disorders: mild	0.030 (0.018-0.046)	0.030 (0.017-0.048)
Anxiety disorders: moderate	0.133 (0.091-0.186)	0.149 (0.101-0.210)
Anxiety disorders: severe	0.523 (0.362-0.677)	0.523 (0.365-0.684)
Major depressive disorder: moderate episode	0.396 (0.267-0.531)	0.406 (0.276-0.551)
Major depressive disorder: severe episode	0.658 (0.477-0.807)	0.655 (0.469-0.816)
<i>Hearing and vision loss</i>		
Distance vision: mild impairment	0.003 (0.001-0.007)	0.004 (0.001-0.010)
Distance vision: moderate impairment	0.031 (0.019-0.049)	0.033 (0.020-0.052)
Distance vision: severe impairment	0.184 (0.125-0.258)	0.191 (0.129-0.269)
Distance vision blindness	0.187 (0.124-0.260)	0.195 (0.132-0.272)
Presbyopia	0.011 (0.005-0.020)	0.013 (0.006-0.024)
<i>Musculoskeletal disorders</i>		
Low back pain: severe, without leg pain	0.272 (0.182-0.373)	0.269 (0.184-0.373)
Low back pain: severe, with leg pain	0.325 (0.219-0.446)	0.322 (0.219-0.447)
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Appendix Table 2a (continued from previous page)

Health state	GBD 2013 estimate (95% uncertainty interval)	GBD 2010 estimate (95% uncertainty interval)
Low back pain: most severe, without leg pain	0.372 (0.250-0.506)	0.366 (0.248-0.499)
Low back pain: most severe, with leg pain	0.384 (0.256-0.518)	0.374 (0.252-0.506)
Neck pain: mild	0.053 (0.034-0.078)	0.040 (0.023-0.064)
Neck pain: moderate	0.114 (0.075-0.162)	0.101 (0.067-0.149)
Neck pain: severe	0.229 (0.153-0.317)	0.221 (0.150-0.305)
Neck pain: most severe	0.304 (0.202-0.415)	0.286 (0.197-0.398)
Musculoskeletal problems: legs, mild	0.023 (0.013-0.037)	0.023 (0.013-0.039)
Musculoskeletal problems: legs, moderate	0.079 (0.054-0.110)	0.079 (0.053-0.115)
Musculoskeletal problems: legs, severe	0.165 (0.112-0.232)	0.171 (0.117-0.240)
Musculoskeletal problems: arms, mild	0.028 (0.017-0.045)	0.024 (0.014-0.041)
Musculoskeletal problems: arms, moderate	0.117 (0.080-0.163)	0.114 (0.077-0.159)
Musculoskeletal problems: generalised, moderate	0.317 (0.216-0.440)	0.292 (0.197-0.410)
Musculoskeletal problems: generalised, severe	0.581 (0.403-0.739)	0.606 (0.421-0.771)
<i>Injuries</i>		
Amputation of thumb: long term	0.011 (0.005-0.021)	0.013 (0.006-0.025)
Amputation of toe	0.006 (0.002-0.012)	0.008 (0.003-0.017)
Amputation of one leg: long term, without treatment	0.173 (0.118-0.240)	0.164 (0.111-0.229)
Burns of <20% total surface area without lower airway burns: short term, with or without treatment	0.141 (0.094-0.196)	0.096 (0.062-0.140)
Burns of <20% total surface area or <10% total surface area if head or neck, or hands or wrist involved: long term, with or without treatment	0.016 (0.008-0.028)	0.018 (0.010-0.032)
Burns of ≥20% total surface area: short term, with or without treatment	0.314 (0.211-0.441)	0.333 (0.220-0.472)
Burns of ≥20% total surface area or ≥10% total surface area if head or neck, or hands or wrist involved: long term, with treatment	0.135 (0.092-0.190)	0.127 (0.086-0.183)
Burns of ≥20% total surface area or ≥10% total surface area if head or neck, or hands or wrist involved: long term, without treatment	0.455 (0.302-0.601)	0.438 (0.298-0.588)
Crush injury: short or long term, with or without treatment	0.132 (0.089-0.189)	0.145 (0.093-0.211)
Dislocation of hip: long term, with or without treatment	0.016 (0.008-0.028)	0.017 (0.008-0.030)
Dislocation of knee: long term, with or without treatment	0.113 (0.075-0.160)	0.129 (0.087-0.178)
Dislocation of shoulder: long term, with or without treatment	0.062 (0.041-0.088)	0.080 (0.053-0.116)
Other injuries of muscle and tendon (includes sprains, strains, and dislocations other than shoulder, knee, or hip)	0.008 (0.003-0.015)	0.009 (0.004-0.018)
Drowning and nonfatal submersion: short or long term, with or without treatment	0.247 (0.164-0.341)	0.288 (0.191-0.403)
Fracture of clavicle, scapula, or humerus: short or long term, with or without treatment	0.035 (0.021-0.053)	0.053 (0.033-0.080)
Fracture of foot bones: short term, with or without treatment	0.026 (0.015-0.043)	0.033 (0.019-0.053)
Fracture of foot bones: long term, without treatment	0.026 (0.015-0.042)	0.033 (0.019-0.052)
Fracture of hand: short term, with or without treatment	0.010 (0.005-0.019)	0.025 (0.013-0.043)
Fracture of hand: long term, without treatment	0.014 (0.007-0.025)	0.016 (0.008-0.028)
Fracture of neck of femur: short term, with or without treatment	0.258 (0.172-0.356)	0.308 (0.205-0.439)
Fracture of neck of femur: long term, with treatment	0.058 (0.038-0.084)	0.072 (0.047-0.105)
Fracture of neck of femur: long term, without treatment	0.402 (0.269-0.541)	0.388 (0.261-0.532)
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Appendix Table 2a (continued from previous page)

Health state	GBD 2013 estimate (95% uncertainty interval)	GBD 2010 estimate (95% uncertainty interval)
Fracture, other than neck of femur: short term, with or without treatment	0.111 (0.074-0.156)	0.192 (0.121-0.280)
Fracture, other than neck of femur: long term, without treatment	0.042 (0.027-0.063)	0.053 (0.035-0.079)
Fracture of patella, tibia or fibula, or ankle: short term, with or without treatment	0.050 (0.032-0.075)	0.087 (0.055-0.127)
Fracture of patella, tibia or fibula, or ankle: long term, with or without treatment	0.055 (0.036-0.081)	0.070 (0.047-0.102)
Fracture of pelvis: short term	0.279 (0.188-0.384)	0.390 (0.257-0.545)
Fracture of pelvis: long term	0.182 (0.123-0.253)	0.194 (0.132-0.272)
Fracture of radius or ulna: short term, with or without treatment	0.028 (0.016-0.046)	0.065 (0.040-0.101)
Fracture of radius or ulna: long term, without treatment	0.043 (0.028-0.064)	0.050 (0.032-0.075)
Fracture of skull: short or long term, with or without treatment	0.071 (0.048-0.100)	0.073 (0.046-0.109)
Fracture of sternum or fracture of one or two ribs: short term, with or without treatment	0.103 (0.068-0.145)	0.150 (0.098-0.215)
Fracture of vertebral column: short or long term, with or without treatment	0.111 (0.075-0.156)	0.132 (0.085-0.195)
Fractures: treated, long term	0.005 (0.002-0.010)	0.003 (0.001-0.008)
Injured nerves: short term	0.100 (0.067-0.140)	0.065 (0.040-0.096)
Injured nerves: long term	0.113 (0.076-0.157)	0.136 (0.092-0.189)
Injury to eyes: short term	0.054 (0.035-0.081)	0.079 (0.050-0.118)
Severe traumatic brain injury: short term, with or without treatment	0.214 (0.141-0.297)	0.235 (0.156-0.331)
Traumatic brain injury: long-term consequences, minor, with or without treatment	0.094 (0.063-0.133)	0.106 (0.072-0.147)
Traumatic brain injury: long-term consequences, moderate, with or without treatment	0.231 (0.156-0.324)	0.224 (0.153-0.314)
Traumatic brain injury: long-term consequences, severe, with or without treatment	0.637 (0.462-0.789)	0.625 (0.444-0.789)
Open wound: short term, with or without treatment	0.006 (0.002-0.012)	0.005 (0.002-0.013)
Poisoning: short term with or without treatment	0.163 (0.109-0.227)	0.171 (0.116-0.239)
Severe chest injury: long term, with or without treatment	0.047 (0.030-0.070)	0.056 (0.036-0.082)
Severe chest injury: short term, with or without treatment	0.369 (0.248-0.501)	0.352 (0.229-0.484)
<i>Other</i>		
Abdominopelvic problem: mild	0.011 (0.005-0.021)	0.012 (0.005-0.023)
Abdominopelvic problem: moderate	0.114 (0.078-0.159)	0.123 (0.083-0.176)
Abdominopelvic problem: severe	0.324 (0.220-0.442)	0.326 (0.219-0.451)
Anemia: mild	0.004 (0.001-0.008)	0.005 (0.002-0.011)
Anemia: moderate	0.052 (0.034-0.076)	0.058 (0.038-0.086)
Anemia: severe	0.149 (0.101-0.209)	0.164 (0.112-0.228)
Generic uncomplicated disease: worry and daily medication	0.049 (0.031-0.072)	0.031 (0.017-0.050)
Motor impairment: mild	0.010 (0.005-0.019)	0.012 (0.005-0.022)
Motor impairment: moderate	0.061 (0.040-0.089)	0.076 (0.050-0.109)
Motor impairment: severe	0.402 (0.268-0.545)	0.377 (0.251-0.518)

Appendix Table 2b: Disability weights for health states common to GBD2013 and GBD2010 – 50 health states included in GBD survey only

Health state	GBD 2013 estimate (95% uncertainty interval)	GBD 2010 estimate (95% uncertainty interval)
<i>Infectious disease</i>		
Herpes zoster	0.058 (0.035-0.090)	0.061 (0.039-0.094)
Intestinal nematode infections: symptomatic	0.027 (0.015-0.043)	0.030 (0.016-0.048)
Lymphatic filariasis: symptomatic	0.109 (0.073-0.154)	0.110 (0.073-0.157)
<i>Cancer</i>		
Mastectomy	0.036 (0.020-0.057)	0.038 (0.022-0.059)
<i>Cardiovascular and circulatory disease</i>		
Acute myocardial infarction: days 1-2	0.432 (0.288-0.579)	0.422 (0.284-0.566)
Angina pectoris: mild	0.033 (0.020-0.052)	0.037 (0.022-0.058)
Angina pectoris: severe	0.167 (0.110-0.240)	0.167 (0.109-0.234)
Claudication	0.014 (0.007-0.025)	0.016 (0.008-0.028)
Stroke: long-term consequences, mild	0.019 (0.010-0.032)	0.021 (0.011-0.037)
Stroke: long-term consequences, moderate plus cognition problems	0.316 (0.206-0.437)	0.312 (0.211-0.433)
Stroke: long-term consequences, severe	0.552 (0.377-0.707)	0.539 (0.363-0.705)
<i>Diabetes, digestive, and genitourinary disease</i>		
Diabetic foot	0.020 (0.010-0.034)	0.023 (0.012-0.039)
Gastric bleeding	0.325 (0.209-0.462)	0.323 (0.214-0.461)
Benign prostatic hypertrophy: symptomatic	0.067 (0.043-0.097)	0.070 (0.046-0.102)
Urinary incontinence	0.139 (0.094-0.198)	0.142 (0.094-0.204)
Impotence	0.017 (0.009-0.030)	0.019 (0.010-0.034)
<i>Neurological disorders</i>		
Dementia: severe	0.449 (0.304-0.595)	0.438 (0.299-0.584)
Headache: migraine	0.441 (0.294-0.588)	0.433 (0.287-0.593)
Headache: tension-type	0.037 (0.022-0.057)	0.040 (0.025-0.062)
<i>Mental, behavioural, and substance use disorders</i>		
Fetal alcohol syndrome: mild	0.016 (0.008-0.030)	0.017 (0.008-0.032)
Fetal alcohol syndrome: moderate	0.056 (0.035-0.083)	0.057 (0.036-0.087)
Fetal alcohol syndrome: severe	0.179 (0.119-0.257)	0.177 (0.117-0.255)
Bipolar disorder: manic episode	0.492 (0.341-0.646)	0.480 (0.323-0.642)
Bipolar disorder: residual state	0.032 (0.018-0.051)	0.035 (0.021-0.055)
Schizophrenia: acute state	0.778 (0.606-0.900)	0.756 (0.571-0.894)
Schizophrenia: residual state	0.588 (0.411-0.754)	0.576 (0.399-0.756)
Anorexia nervosa	0.224 (0.150-0.312)	0.223 (0.151-0.313)
Bulimia nervosa	0.223 (0.149-0.311)	0.223 (0.150-0.310)
Attention deficit hyperactivity disorder	0.045 (0.028-0.066)	0.049 (0.031-0.074)
Conduct disorder	0.241 (0.159-0.341)	0.236 (0.154-0.337)
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Appendix Table 2b (continued from previous page)

Health state	GBD 2013 estimate (95% uncertainty interval)	GBD 2010 estimate (95% uncertainty interval)
Asperger's syndrome	0.104 (0.071-0.147)	0.110 (0.073-0.157)
Autism	0.262 (0.176-0.365)	0.259 (0.177-0.362)
<i>Musculoskeletal disorders</i>		
Gout: acute	0.295 (0.196-0.409)	0.293 (0.198-0.404)
<i>Injuries</i>		
Lower airway burns: with or without treatment	0.376 (0.240-0.524)	0.373 (0.248-0.521)
<i>Other</i>		
Periodontitis	0.007 (0.003-0.014)	0.008 (0.003-0.017)
Dental caries: symptomatic	0.010 (0.005-0.019)	0.012 (0.005-0.023)
Severe tooth loss	0.067 (0.045-0.095)	0.072 (0.048-0.103)
Disfigurement: level 1	0.011 (0.005-0.021)	0.013 (0.006-0.025)
Disfigurement: level 2	0.067 (0.044-0.096)	0.072 (0.048-0.103)
Disfigurement: level 3	0.405 (0.275-0.546)	0.398 (0.271-0.543)
Disfigurement: level 1 with itch or pain	0.027 (0.015-0.042)	0.029 (0.016-0.048)
Disfigurement: level 2, with itch or pain	0.188 (0.125-0.267)	0.187 (0.125-0.264)
Disfigurement: level 3, with itch or pain	0.576 (0.401-0.731)	0.562 (0.394-0.725)
Iodine-deficiency goitre	0.199 (0.133-0.276)	0.200 (0.134-0.283)
Kwashiorkor	0.051 (0.031-0.079)	0.055 (0.033-0.085)
Severe wasting	0.128 (0.082-0.183)	0.127 (0.081-0.183)
Speech problems	0.051 (0.032-0.078)	0.054 (0.034-0.081)
Rectovaginal fistula	0.501 (0.339-0.657)	0.492 (0.330-0.660)
Vesicovaginal fistula	0.342 (0.227-0.478)	0.338 (0.228-0.467)

Appendix Table 3: Comparison of disability weights in GBD2013 and GBD2010 for 30 states with revised descriptions used in GBD2013 study				
Health state	Modified lay description, European surveys	Disability weight estimate (95% uncertainty interval)	Original lay description, GBD2010	Disability weight estimate* (95% uncertainty interval)
Major depressive disorder: mild episode	feels persistent sadness and has lost interest in usual activities. The person sometimes sleeps badly, feels tired, or has trouble concentrating but still manages to function in daily life with extra effort.	0.145 (0.099, 0.209)	has constant sadness and has lost interest in usual activities. The person can still function in daily life with extra effort, but sleeps badly, feels tired, and has trouble concentrating.	0.152 (0.102, 0.212)
Intellectual disability: mild	has low intelligence and is slow in learning at school. As an adult, the person can live independently, but often needs help to raise children and can only work at simple supervised jobs.	0.043 (0.026, 0.064)	has low intelligence and is slow in learning at school. As an adult, the person can work at simple supervised jobs and live independently, but often needs help to raise children.	0.031 (0.018, 0.048)
Intellectual disability: moderate	has low intelligence, and is slow in learning to speak and to do even simple tasks. As an adult, the person requires a lot of support to live independently and raise children. The person can only work at the simplest supervised jobs.	0.100 (0.066, 0.142)	has low intelligence and is slow in learning to speak and do simple tasks. As an adult, the person requires a lot of support to work productively, live independently and raise children.	0.076 (0.051, 0.107)
Intellectual disability: severe	has very low intelligence and cannot speak more than a few words, needs constant supervision and help with most daily activities, and can do only the simplest tasks.	0.160 (0.107, 0.226)	has low intelligence and cannot speak more than a few words, needs help with most basic daily activities, and can do only simple tasks under close supervision.	0.135 (0.092, 0.187)
Intellectual disability: profound	has very low intelligence, has almost no language, and does not understand even the most basic requests or instructions. The person requires constant supervision and help for all activities.	0.200 (0.133, 0.283)	has low intelligence, cannot understand basic requests or instructions, and requires constant assistance for nearly all activities.	0.141 (0.095, 0.195)
Hearing loss: mild	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street).	0.010 (0.004, 0.019)	has difficulty following a conversation in a noisy environment but no other hearing problems.	0.004 (0.001, 0.009)
Hearing loss: moderate	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), and has difficulty hearing another person talking even in a quiet place or on the phone.	0.027 (0.015, 0.042)	has difficulty hearing a normal voice and great difficulty following a conversation in a noisy environment.	0.018 (0.010, 0.031)
Hearing loss: severe	is unable to hear and understand another person talking, even in a quiet place, and unable to take part in a phone conversation. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.158 (0.105, 0.227)	has great difficulty hearing in any situation or in using a phone.	0.024 (0.014, 0.039)
Hearing loss: profound	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has great difficulty hearing anything in any other situation. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.204 (0.134, 0.288)	always has great difficulty hearing in any situation and is not able to use a phone.	0.027 (0.016, 0.043)
Hearing loss: complete	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.215 (0.144, 0.307)	cannot hear at all, even loud sounds.	0.027 (0.016, 0.044)

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Appendix Table 3 (continued from previous page)

Health state	Modified lay description, European surveys	Disability weight estimate (95% uncertainty interval)	Original lay description, GBD2010	Disability weight estimate* (95% uncertainty interval)
Hearing loss: mild, with ringing	has great difficulty hearing and understanding another person talking in a noisy place (for example, on an urban street), and sometimes has annoying ringing in the ears.	0.021 (0.012, 0.036)	has great difficulty following a conversation in a noisy environment, and has ringing in the ears for more than 5 minutes, almost every day.	0.039 (0.024, 0.059)
Hearing loss: moderate, with ringing	is unable to hear and understand another person talking in a noisy place (for example, on an urban street), has difficulty hearing another person talking even in a quiet place or on the phone, and has annoying ringing in the ears for 5 minutes at a time, almost every day.	0.074 (0.049, 0.107)	has difficulty hearing a normal voice or using a phone, has great difficulty following a conversation in a noisy environment, and has ringing in the ears for more than 5 minutes, almost every day.	0.058 (0.038, 0.086)
Hearing loss: severe, with ringing	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, and has annoying ringing in the ears for more than 5 minutes at a time, almost every day. Difficulties with communicating and relating to others cause emotional impact at times (for example worry or depression).	0.261 (0.175, 0.360)	has great difficulty hearing in any situation or in using a phone, and has ringing in the ears for more than 5 minutes, almost every day.	0.059 (0.038, 0.086)
Hearing loss: profound, with ringing	is unable to hear and understand another person talking, even in a quiet place, is unable to take part in a phone conversation, has great difficulty hearing anything in any other situation, and has annoying ringing in the ears for more than 5 minutes at a time, several times a day. Difficulties with communicating and relating to others often cause worry, depression, or loneliness.	0.277 (0.182, 0.387)	always has great difficulty hearing in any situation, cannot use a phone, and has ringing in the ears for more than 5 minutes, almost every day.	0.075 (0.049, 0.107)
Hearing loss: complete, with ringing	cannot hear at all in any situation, including even the loudest sounds, and cannot communicate verbally or use a phone, and has very annoying ringing in the ears for more than half of the day. Difficulties with communicating and relating to others often cause worry, depression or loneliness.	0.316 (0.212, 0.435)	cannot hear at all, even loud sounds, cannot use a phone, and has ringing in the ears for more than 5 minutes, almost every day.	0.093 (0.064, 0.130)
Amputation of finger(s), excluding thumb	has lost a finger of one hand. At times there is pain and tingling in the stump.	0.005 (0.002, 0.010)	has lost part of the fingers of one hand, causing difficulties in using the hand, pain, and tingling in the stumps.	0.026 (0.015, 0.042)
Amputation of both arms: long term, with treatment	has lost part of both arms, leaving pain and tingling in the stumps. The person has two artificial arms that make it possible to do daily activities, with a great deal of extra effort.	0.123 (0.081, 0.176)	has lost part of both arms, leaving pain and tingling in the stumps and flashbacks from the injury. The person has comfortable artificial arms and is mostly independent.	0.048 (0.031, 0.069)
Amputation of both arms: long term, without treatment	has lost part of both arms, leaving pain and tingling in the stumps. The person needs a great deal of help from others to do even basic daily activities such as eating and using the toilet, and the person is very limited in other activities.	0.383 (0.251, 0.525)	has lost part of both arms, leaving pain and tingling in the stumps and flashbacks from the injury. The person needs help with basic daily activities such as eating and using the toilet.	0.373 (0.249, 0.502)

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Appendix Table 3 (continued from previous page)

Health state	Modified lay description, European surveys	Disability weight estimate (95% uncertainty interval)	Original lay description, GBD2010	Disability weight estimate* (95% uncertainty interval)
Amputation of one leg: long term, with treatment	has lost part of one leg, leaving pain and tingling in the stump. The person has an artificial leg that helps in moving around.	0.039 (0.023, 0.059)	has lost part of one leg, leaving pain and tingling in the stump. The person has a comfortable artificial leg and only slight difficulties moving around.	0.017 (0.010, 0.030)
Amputation of both legs: long term, with treatment	has lost part of both legs, leaving pain and tingling in the stumps. The person has two artificial legs that make moving around possible, with extra effort.	0.088 (0.057, 0.124)	has lost part of both legs, leaving pain and tingling in the stumps. The person has two comfortable artificial legs, which allow for movement.	0.049 (0.031, 0.072)
Amputation of both legs: long term, without treatment	has lost part of both legs, leaving pain, tingling, and frequent sores in the stumps. The person has great difficulty moving around, has episodes of depression and anxiety, and needs help from others to do many daily activities.	0.443 (0.297, 0.589)	has lost part of both legs, leaving pain, tingling, and frequent sores in the stumps. The person has great difficulty moving around and has episodes of depression, anxiety and flashbacks to the injury.	0.510 (0.349, 0.668)
Fracture of face bone: short or long term, with or without treatment	has a broken cheek bone or a broken nose or chipped teeth, with swelling and severe pain.	0.067 (0.044, 0.097)	has a broken cheek bone, broken nose, and chipped teeth, with swelling and severe pain.	0.111 (0.074, 0.157)
Spinal cord lesion below neck: treated	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. The person uses a wheelchair to move around.	0.296 (0.198, 0.414)	is paralyzed from the waist down and cannot feel or move the legs. The person uses a lightweight and comfortable wheelchair to move around.	0.057 (0.037, 0.085)
Spinal cord lesion below neck: untreated	is paralyzed from the waist down, cannot feel or move the legs and has difficulties with urine and bowel control. Legs are in fixed, bent positions, and the person gets frequent infections and pressure sores.	0.623 (0.434, 0.777)	is paralyzed from the waist down and cannot feel or move the legs. Legs are in fixed, bent positions, and the person gets frequent infections and pressure sores.	0.460 (0.310, 0.605)
Spinal cord lesion at neck: treated	is paralyzed from the neck down, with no feeling or control over any part of the body below the neck, and no urine or bowel control.	0.589 (0.415, 0.748)	is paralyzed from the neck down and cannot feel or move the arms and legs.	0.463 (0.308, 0.615)
Spinal cord lesion at neck: untreated	is paralyzed from the neck down, with no feeling or control over any part of the body below the neck, and no urine or bowel control. Arms and legs are in fixed, bent positions, and the person gets frequent infections and pressure sores.	0.732 (0.544, 0.871)	is paralyzed from the neck down and cannot feel or move the arms and legs. Arms and legs are in fixed, bent positions, and the person gets frequent infections and pressure sores.	0.682 (0.497, 0.826)
Generic uncomplicated disease: anxiety about diagnosis	has a disease diagnosis that causes some worry but minimal interference with daily activities.	0.012 (0.006, 0.023)	has a disease diagnosis that causes worry about the future.	0.077 (0.051, 0.110)
Motor plus cognitive impairments: mild	has some difficulty in moving around but is able to walk without help. The person is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.031 (0.018, 0.050)	has some difficulty in moving around, and is slow in learning at school. The person can walk without help, work at simple supervised jobs and live independently, but often needs help to raise children.	0.049 (0.031, 0.072)
Motor plus cognitive impairments: moderate	has some difficulty in moving around, holding objects, dressing and sitting upright, but can walk without help. The person has low intelligence and is slow in learning to speak and to do simple tasks. As an adult, the person requires support to live independently and raise children and can only work at simple supervised jobs.	0.203 (0.134, 0.290)	has some difficulty in moving around, holding objects, dressing and sitting upright, and is slow in learning to speak and do simple tasks. The person can walk without help, but requires a lot of help with daily activities.	0.200 (0.133, 0.280)
Motor plus cognitive impairments: severe	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has very low intelligence, speaks few words, and needs constant supervision and help with all daily activities.	0.542 (0.374, 0.702)	cannot move around without help, and cannot lift or hold objects, get dressed or sit upright. The person also has low intelligence, speaks few words, and needs a lot of help with all basic daily activities.	0.453 (0.304, 0.604)

*Note that the disability weights reported here in connection with the original lay descriptions from the GBD 2010 are not the same as the values reported previously in Salomon et al. 2012. Values reported here have been re-estimated from the pooled dataset described in the current paper, which combines the dataset used in GBD 2010 with the new European disability weights measurement surveys. The main text reports, for selected examples, comparisons of the GBD 2013 disability weights, which are the values in this table, to the original GBD 2010 values, which are not the weights reported in this table but rather the results reported in Salomon et al. 2012.

Appendix Table 4: Lay descriptions and disability weights for states new to GBD2013

Health state	Lay description	Disability weight estimate (95% uncertainty interval)
<i>Diabetes, digestive, and genitourinary disease</i>		
Stress incontinence	loses small amounts of urine without meaning to when coughing, sneezing, laughing or during physical exercise.	0.020 (0.011-0.035)
<i>Neurological disorders</i>		
Headache: medication overuse	has daily headaches, felt as dull pain and often lasting all day, with poor sleep, nausea and fatigue. The person takes medicine for the headaches, which provides little relief but is needed to avoid having worse symptoms.	0.223 (0.146-0.313)
Epilepsy: severe (seizures \geq once per month)	has sudden seizures one or more times each month, with violent muscle contractions and stiffness, loss of consciousness, and loss of urine or bowel control. Between seizures the person has memory loss and difficulty concentrating.	0.552 (0.375-0.710)
Epilepsy: less severe (seizures < once per month)	has sudden seizures two to five times a year, with violent muscle contractions and stiffness, loss of consciousness, and loss of urine or bowel control.	0.263 (0.173-0.367)
<i>Mental, behavioural, and substance use disorders</i>		
Alcohol use disorder: very mild	drinks alcohol daily and has difficulty controlling the urge to drink. When sober, the person functions normally.	0.123 (0.082-0.177)
Cannabis dependence: mild	uses marijuana at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.039 (0.024-0.060)
Amphetamine dependence: mild	uses stimulants (drugs) at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.079 (0.051-0.114)
Cocaine dependence: mild	uses cocaine at least once a week and has some difficulty controlling the habit. When not using, the person functions normally.	0.116 (0.074-0.165)
Heroin and other opioid dependence: mild	uses heroin (or methadone) ³⁴ daily and has difficulty controlling the habit. When not using, the person functions normally.	0.335 (0.221-0.473)
Borderline intellectual functioning	is slow in learning at school. As an adult, the person has some difficulty doing complex or unfamiliar tasks but otherwise functions independently.	0.011 (0.005-0.020)
<i>Hearing and vision loss</i>		
Distance vision: monocular impairment	is blind in one eye and has difficulty judging distances	0.017 (0.009-0.029)
<i>Musculoskeletal disorders</i>		
Low back pain: mild	has mild back pain, which causes some difficulty dressing, standing, and lifting things.	0.020 (0.011-0.035)
Low back pain: moderate	has moderate back pain, which causes difficulty dressing, sitting, standing, walking, and lifting things.	0.054 (0.035-0.079)
<i>Injuries</i>		
Amputation of one arm: long term, with treatment	has lost one hand and part of the arm, leaving pain and tingling in the stump. The person has an artificial arm that makes it possible to lift objects and do daily activities such as cooking, with some extra effort.	0.039 (0.024-0.059)
Amputation of one arm: long term, without treatment	has lost one hand and part of the arm, leaving pain and tingling in the stump. ³⁴ The person needs help from others to lift objects or do daily activities such as cooking.	0.118 (0.079-0.167)
Concussion	has headaches, dizziness, nausea and difficulty concentrating.	0.110 (0.074-0.158)
<i>Other</i>		
Thrombocytopenic purpura	easily bruises and sometimes bleeds from the gums and nose; feels weak and has some difficulty with daily activities.	0.159 (0.106-0.226)
Hypothyroidism	has low energy and feels cold.	0.019 (0.010-0.032)
Hyperthyroidism	feels nervous, has palpitations, sweats a lot and has difficulty sleeping.	0.145 (0.096-0.202)
Vertigo	has short spells of dizziness and loss of balance; between spells the person is worried the spells will occur again.	0.113 (0.074-0.158)