

Annexure A: Causes of various diseases/health conditions

NATIONAL COMMISSION ON MACROECONOMICS AND HEALTH, NEW DELHI

Table A1 Causes of blindness

Disease/health condition	Direct (clinical-point of care)	Direct (health system)	Indirect (socio-economic determinants)	Indirect (lifestyle RF)	Indirect (genetic, medical history, age, sex)
Cataract	<ul style="list-style-type: none"> Intraocular inflammation Injury to the eyes Metabolic causes Congenital (intra-uterine infections) Corticosteroids (systemic and topical) 		<ul style="list-style-type: none"> Poor socioeconomic status Illiteracy 	<ul style="list-style-type: none"> Exposure to sunlight Poor nutrition Smoking Alcohol Cheap cooking fuel 	<ul style="list-style-type: none"> Age Acute diarrhoea in early life Diabetes Glaucoma Myopia Hypertension Sex—more common in females
Refractive errors and low vision	<ul style="list-style-type: none"> Non-utilization of spectacles Diabetes Cataract Eye surgery Trauma 	<ul style="list-style-type: none"> Non-screening of eyesight Lack of school health services 	<ul style="list-style-type: none"> Rural areas Illiteracy 		<ul style="list-style-type: none"> Anatomical aberrations of the eye

RF: risk factors

Table A2 Causes of chronic obstructive pulmonary disease (COPD) and asthma

Disease/health condition	Direct (clinical-point of care)	Direct (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
COPD	Delayed treatment-seeking	Lack of awareness of symptoms of COPD	Air pollution	<ul style="list-style-type: none"> Type of cooking fuel used Tobacco smoking 	Sex—more common in males
Asthma	Viral upper respiratory tract infections	Lack of awareness on symptoms or causes of asthma	<ul style="list-style-type: none"> Air pollution More common in rural areas 	<ul style="list-style-type: none"> Poor housing conditions such as poor ventilation, less living space Type of fuel and method used for cooking—chullah, stove Occupational asthma—industry-related Smoking 	<ul style="list-style-type: none"> Family history Slightly more common in males than females Season—more common in winters

COPD: chronic obstructive pulmonary disease

Table A3 Causes of cancer

Disease/health condition	Direct (clinical-point of care)	Direct (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Cancer	Some infections (HBV, HPV)	<ul style="list-style-type: none"> Lack of awareness of signs and symptoms for early diagnosis of cancers Lack of screening of high-risk groups 	<ul style="list-style-type: none"> Environmental pollution Industrial toxins 	<ul style="list-style-type: none"> Consumption of tobacco Excessive fat in the diet Excessive alcohol consumption Reproductive and sexual behaviour Occupational hazards Other lifestyle factors 	<ul style="list-style-type: none"> Genetic predisposition Hormones

HBV: hepatitis B virus; HPV: human papillomavirus

Table A4 Causes of chronic otitis media

Disease/health condition	Direct (clinical-point of care)	Direct (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Chronic otitis media	<ul style="list-style-type: none"> Recurrent upper respiratory tract infections Allergy Enlarged adenoids Seasonal viral infections 	<ul style="list-style-type: none"> Lack of adequate medical attention Lack of awareness on basic ENT and dental care 	<ul style="list-style-type: none"> Poverty Malnutrition More common in rural areas Poor environmental sanitation 	Poor personal hygiene	

ENT: ear, nose, throat

Table A5 Causes of childhood diseases/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Birth asphyxia	<ul style="list-style-type: none"> Low birth weight Obstetric complications (APH, cord prolapse, PIH, etc.) Foetal malformations 	<ul style="list-style-type: none"> Unskilled birth attendant Inadequate maternal care Poor/no emergency obstetric care Absence of a credible referral system Lack of community awareness on danger signs of a sick child 	<ul style="list-style-type: none"> Maternal illiteracy Low socioeconomic status 	Maternal age <18 or >35 years	
Neonatal sepsis	<ul style="list-style-type: none"> Low birth weight Acute maternal intrapartum infection (including STI) Prolonged and preterm rupture of membranes 	<ul style="list-style-type: none"> Unhygienic delivery and postnatal conditions Lack of community awareness on danger signs of a sick child Unskilled birth attendant Inappropriate community practices (e.g. cord care practices, branding, etc.) 	<ul style="list-style-type: none"> Maternal illiteracy Low socioeconomic status 	<ul style="list-style-type: none"> Delayed and non-exclusive breastfeeding Delayed recognition and care-seeking 	Increased biological risk in males
Low birth weight	<ul style="list-style-type: none"> Obstetric complications Medical illness (e.g. malaria) Multiple pregnancy 	Lack of community awareness on dietary requirements of pregnant women	<ul style="list-style-type: none"> Maternal illiteracy Low socioeconomic status 	<ul style="list-style-type: none"> Maternal work and inadequate rest during pregnancy Adolescent pregnancy Maternal age <18 or >35 years 	

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Table A5 (cont.) Causes of childhood diseases/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
				Interpregnancy interval <2 years	
Diarrhoea	<ul style="list-style-type: none"> • Foetal malformations • Inadequate maternal care • Poor maternal health • Vitamin A deficiency • Low birth weight 	Lack of community awareness on prevention and management of diarrhoea	<ul style="list-style-type: none"> • Maternal illiteracy • Low socioeconomic status • Lack of sanitation • Contaminated water and food 	<ul style="list-style-type: none"> • Bottle-feeding • Non-exclusive breastfeeding for 6 months 	
Pneumonia	<ul style="list-style-type: none"> • Lower respiratory tract infection in family • Low birth weight/severe malnutrition • Vitamin A deficiency 	<ul style="list-style-type: none"> • Lack of community awareness • Inappropriate immunization for age 	<ul style="list-style-type: none"> • Illiteracy • Low socioeconomic status 	<ul style="list-style-type: none"> • Use of biomass fuel • Passive smoking • Lack of community awareness • Non-exclusive breast-feeding for 6 months 	More common in males
Malnutrition	<ul style="list-style-type: none"> • Recurrent infections • Low birth weight 	<ul style="list-style-type: none"> • Lack of awareness about dietary requirements of children • Delay in care-seeking 	<ul style="list-style-type: none"> • Poverty • Natural disasters (drought, flood, etc.) • Non-energy-dense feeds • Inadequate quantity of weaning food 	<ul style="list-style-type: none"> • Community feeding practices • Non-exclusive breast-feeding for 6 months 	

APH: antepartum haemorrhage; PIH: pregnancy-induced hypertension; STI: sexually transmitted infection

Table A6 Causes of maternal diseases/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Puerperal sepsis	<ul style="list-style-type: none"> • Prolonged labour • Prolonged leakage of membranes • Multiple unclean per vaginal examinations • Manual removal of the placenta • Retained placental bits • Unclean/unsterile instruments • Inadequate antibiotic therapy when indicated 	<ul style="list-style-type: none"> • Delay in referral • Appropriate health facility too distant from home • Delivery by untrained person 	Low socioeconomic status		
Septic abortion	<ul style="list-style-type: none"> • Foreign body inserted into the genital tract • Injury to genital organs • Retained foetal tissue • Unclean/unsterile instruments 	Abortion by untrained person	<ul style="list-style-type: none"> • Illegal abortion • Fear of loss of confidentiality • Prenatal sex determination 	<ul style="list-style-type: none"> • Pregnancy in unmarried girls • Ignorance • Use of abortifacients 	
Eclampsia	<ul style="list-style-type: none"> • Associated diabetes • Underlying renal disorder • SLE 	Lack of antenatal care (especially recording of the blood pressure)	Illiteracy	<ul style="list-style-type: none"> • Insufficient calcium intake • Ignorance 	<ul style="list-style-type: none"> • Elderly woman • Immunological causes • Genetic predisposition

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Table A6 (cont.) Causes of maternal diseases/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Postpartum haemorrhage					
a) Uterine inversion	<ul style="list-style-type: none"> Adherent placenta Strong traction on the umbilical cord 	<ul style="list-style-type: none"> Delivery by unskilled person Specialist available at a distance 	<ul style="list-style-type: none"> Poverty Delayed transportation 	<ul style="list-style-type: none"> Ignorance Home delivery 	
b) Retained placenta	<ul style="list-style-type: none"> Placenta accreta Tearing of the cord 	<ul style="list-style-type: none"> Delivery by unskilled person Specialist available at a distance Blood bank facility available at a distance 	<ul style="list-style-type: none"> Poverty Delayed transportation 	<ul style="list-style-type: none"> Home delivery 	
Premature rupture of membranes	<ul style="list-style-type: none"> Genital tract infection Occult amniotic fluid Multiple fetuses Abruptio placentae Polyhydramnios Cervical incompetence 	Lack of antenatal care			
Anaemia	<ul style="list-style-type: none"> Poor intake of iron during pregnancy Intolerance to iron Worm infestation Malaria Malabsorption of iron 	<ul style="list-style-type: none"> Lack of adequate antenatal care Inadequate supply of iron—folic acid (IFA) tablets 	<ul style="list-style-type: none"> Low socioeconomic status Poverty Illiteracy 	<ul style="list-style-type: none"> Poor reserves of iron Multiparity Inadequate birth spacing Teenage marriage and pregnancy Ignorance 	
Bleeding in pregnancy					
a) Bleeding in early pregnancy	<ul style="list-style-type: none"> Threatened abortion Inevitable abortion Incomplete abortion Ectopic pregnancy Molar pregnancy Complications due to medical termination of pregnancy Injury to the genital tract 				
b) Bleeding in late pregnancy (APH)	<ul style="list-style-type: none"> Placenta praevia Abruptio placentae Undetermined APH Chronic hypertension Gestational hypertension 				<ul style="list-style-type: none"> Elderly woman Multiparity
Prolonged/obstructed labour	<ul style="list-style-type: none"> Cephalopelvic disproportion Malposition Malpresentation Cervical dystocia Prolonged rupture of membranes Uterine dysfunction 	<ul style="list-style-type: none"> Unbooked cases Home delivery Hospital at a distance 		Ignorance	<ul style="list-style-type: none"> Short-statured mother Bad obstetric history Multiparity Foetal anomalies

RF: risk factors; SLE: systemic lupus erythematosus; APH: antepartum haemorrhage

Table A7 Causes of tuberculosis (TB)

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Tuberculosis (TB)	Contact with a smear-positive case of TB	<ul style="list-style-type: none"> Ignorance and lack of awareness of TB Unimmunized child 	<ul style="list-style-type: none"> Malnutrition Poverty Low socioeconomic status Overcrowding Illiteracy Natural disaster 	<ul style="list-style-type: none"> Smoking Alcoholism Stigma associated with TB 	<ul style="list-style-type: none"> Male Age >45 years HIV infection Patient on immunosuppressive therapy Diabetes mellitus Silicosis

HIV: human immunodeficiency virus

Table A8 Causes of cardiovascular diseases

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Coronary heart disease/stroke/transient ischaemic attack (TIA)	<ul style="list-style-type: none"> High blood pressure Diabetes High total cholesterol Low high-density lipoprotein (HDL) cholesterol Obesity Renal/vascular disease 		<ul style="list-style-type: none"> Upper socioeconomic status Migration Literacy status Acculturation 	<ul style="list-style-type: none"> Smoking Physical inactivity Diet Stress Psychological factors 	<ul style="list-style-type: none"> Age Sex Ethnicity
Congestive heart failure	<ul style="list-style-type: none"> Underlying heart disease Rheumatic heart disease High blood pressure Left ventricular hypertrophy Diabetes Obesity—general and central 			Smoking	<ul style="list-style-type: none"> Age Sex Ethnicity
Rheumatic fever	<ul style="list-style-type: none"> Streptococcal infection Underlying infection of valves Poorly adapted autoimmune response to group A β-haemolytic streptococci 		<ul style="list-style-type: none"> Overcrowding Low socioeconomic status Low literacy status 		Age (mostly in children)
Hypertension	<ul style="list-style-type: none"> Obesity—central and generalized Diabetes 		Upper socioeconomic status	<ul style="list-style-type: none"> Diet (low fruit and vegetable or excess sodium intake) Physical inactivity Psychological factors 	<ul style="list-style-type: none"> Age Sex Ethnicity
Diabetes	Obesity—general and central		<ul style="list-style-type: none"> Upper socioeconomic status Urbanization 	<ul style="list-style-type: none"> Diet Physical inactivity Smoking 	<ul style="list-style-type: none"> Age Sex Family history of diabetes Ethnicity

Table A9 Causes of dental diseases/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Dental caries	<ul style="list-style-type: none"> Loss of a few teeth and failure to replace them Deep pits and fissures in teeth Malalignment of teeth Crowding of teeth Gum recession Trace elements—Zn, Pb, Fe Viscous salivary secretion Enzymes—lactoperoxidase, lysozyme, lactoferrin Reduced secretion (xerostomia) Immunoglobulin A 	<ul style="list-style-type: none"> Lack of availability/poor access to health facility Lack of health insurance 	<ul style="list-style-type: none"> Low socioeconomic status Low literacy Urban/rural location 	<ul style="list-style-type: none"> Poor dietary habits Social and cultural practices Excessive intake of refined carbohydrates Oral clearance rate 	<ul style="list-style-type: none"> Age Sex Fluoride content of teeth
Periodontal diseases	<ul style="list-style-type: none"> Dental plaque and occlusion Traumatic occlusion Food impaction 	<ul style="list-style-type: none"> Lack of health insurance Poor knowledge of oral health 	<ul style="list-style-type: none"> Low socioeconomic status Low literacy 	<ul style="list-style-type: none"> Chewing and smoking tobacco Oral hygiene 	<ul style="list-style-type: none"> Idiopathic (gingival fibromatosis) Deficiency of vitamins A and C Endocrine disturbances (puberty, pregnancy, menopause, hyperthyroidism, hyperparathyroidism, diabetes) HIV infection Immunosuppressant drugs Anaemia, leukaemia
Dentofacial anomalies and malocclusion	<ul style="list-style-type: none"> Trauma and accidents Abnormalities in number, size and shape of teeth Abnormal labial frenum and mucosal barriers Premature tooth loss Delayed eruption of permanent teeth Abnormal eruptive path Ankylosis 	Untreated dental caries and improper dental restorations		<ul style="list-style-type: none"> Deficiency of vitamin D, calcium and phosphates Abnormal suckling Mouth breathing Thumb and finger sucking Tongue thrusting and tongue sucking Abnormal swallowing habits 	<ul style="list-style-type: none"> Maternal diet and metabolism Maternal German measles Position of foetus <i>in utero</i> Intake of certain drugs during pregnancy Birth injury Cerebral palsy Temporomandibular joint surgery Psychogenic tics and bruxism Posture Endocrine imbalance Muscular dystrophies Infectious diseases such as poliomyelitis
Oral cancer	<ul style="list-style-type: none"> Infectious diseases—HPV, HSP, AIDS, syphilis, candidiasis Chronic irritation—faulty prosthesis, sharp teeth 	<ul style="list-style-type: none"> Poor access to oral health care facilities Radiation 	<ul style="list-style-type: none"> Industrial pollution— asbestos, lead, leather, textile industries Low socioeconomic and literacy level 	<ul style="list-style-type: none"> Tobacco smoking/chewing Paan masala/gutka chewing 	<ul style="list-style-type: none"> Compromised immune status Deficiency of vitamins A, B complex and zinc

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Table A9 (cont.) Causes for dental diseases/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Dental fluorosis			<ul style="list-style-type: none"> Poor nutritional status Industrial pollution Exposure to high levels of fluorides in drinking water Diet (sea food, poultry, grain and cereal products, tea, green leafy vegetables) 	Diet (sea food, poultry, grain and cereal products, tea, green leafy vegetables)	<ul style="list-style-type: none"> Tropical climate (excess ingestion of water) Renal diseases Thyroid and thyrotrophic hormones Decreased bone phosphatase activity Deficiency of vitamin D, calcium and phosphates

HPV: human papilloma virus

Table A10 Causes of mental illnesses/health conditions

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
General	Physiological factors	<ul style="list-style-type: none"> Lack of mental care services Non-availability of medicines 	Absence of clearly defined mental health policies	<ul style="list-style-type: none"> Poor level of awareness Lack of care-seeking 	
Schizophrenia	<ul style="list-style-type: none"> Alcohol and drug abuse Post-viral infections 	Drugs beyond the reach of the poor	<ul style="list-style-type: none"> Violence Lack of income and employment Poverty Stigma 	<ul style="list-style-type: none"> Living alone Lack of family support systems 	<ul style="list-style-type: none"> Genetic predisposition Personality/nature of individuals Immunological factors
Alcohol and drug abuse		Lack of early recognition and diagnosis	<ul style="list-style-type: none"> Easy availability of alcohol and drugs Extensive promotion by the media Lack of clear policies on production, availability, distribution and promotion of alcohol and drugs 	<ul style="list-style-type: none"> 'Liberalized' values among people Peer group influences Poor life skills 	<ul style="list-style-type: none"> Genetic predisposition Personality profile of individual Family history of usage
Dementia	History of mental disorder	Deprivation of basic care		<ul style="list-style-type: none"> Isolation and other social issues Absence of supportive care 	
Epilepsy	<ul style="list-style-type: none"> Brain injury Febrile convulsions Pyogenic meningitis 	Inaccessibility to drugs			Genetic factors

Table A11 Causes of malaria and other vector-borne diseases

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Malaria	Lack of adequate and timely treatment		<ul style="list-style-type: none"> • Malnutrition • Low socioeconomic status • Occupation • Illiteracy • Migration of labourers 	<ul style="list-style-type: none"> • Non-use of personal protection against mosquito bites • Outdoor sleeping habits • Lack of health care-seeking behaviour • Collection of water favouring breeding of mosquitoes 	Immunosuppressive drugs
Kala-azar (additional factors)				Proximity to animal stables (favouring sandfly breeding)	Environment—high temperature, high humidity, alluvial soil
Japanese encephalitis (additional factors)		Poor intersectoral coordination with agriculture, animal husbandry and local government	<ul style="list-style-type: none"> • Poor community participation for control of mosquito breeding • Intensive rice cultivation • Proximity to piggery • Asylum for migratory birds 	Mixed dwelling	
Dengue (additional factors)			<ul style="list-style-type: none"> • Poor socioeconomic status • Illiteracy 	<ul style="list-style-type: none"> • Poor water storing practices • Not drying coolers once every week • Lack of personal protection against mosquito bite 	

Table A12 Causes of leprosy

Disease/health condition	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Leprosy	Exposure to a patient with leprosy	Lack of adequate health services	<ul style="list-style-type: none"> • Illiteracy • Malnutrition • Overcrowding • Lack of ventilation 		

Table A13 Causes of HIV infection/AIDS

Route of HIV infection	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Sexual transmission	Incompletely treated STI/RTI	<ul style="list-style-type: none"> • Ignorance about STIs • Low coverage with quality life skills education to adolescents and out-of-school children • Unregulated, unqualified practitioners traditionally accepted for treatment of STIs • Poor coordination between private and public sectors • Poor access to quality risk reduction counselling • Low acceptability/awareness about syndromic management 	<ul style="list-style-type: none"> • Poverty • Natural calamities—famine, earthquake • Lower empowerment of women • Single male member migration 	<ul style="list-style-type: none"> • Unprotected sex with casual partner or HIV-infected person • Practice of risky sexual behaviour • Social stigma associated with risky behaviour, STIs and 'at risk' sub-populations • Social taboo on discussions on sexuality • Alcohol or other substance abuse • Poor treatment-seeking behaviour 	

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Table A13 (cont.) Causes of HIV infection/AIDS

Route of HIV infection	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
		<ul style="list-style-type: none"> guidelines among health care providers • Low coverage with quality, targeted interventions among 'at risk' subpopulations 			
Transfusion-associated	<ul style="list-style-type: none"> • Practice to provide plasma • Non-adherence to rational use of blood 	<ul style="list-style-type: none"> • Poor adherence to biosafety precautions • Lack of wide availability of HIV-tested blood products • Occupational—lack of protective equipment at workplace • Ignorance about post-exposure prophylaxis • Lack of access to post-exposure prophylaxis drugs 	<ul style="list-style-type: none"> • Unemployment • Poverty • Social instability 	<ul style="list-style-type: none"> • Injecting drug use • Peer pressure 	
Mother-to-child transmission	Vaginal delivery	Lack of access to HIV testing and counselling		Ignorance about MTCT of HIV infection	

STI: sexually transmitted infection; RTI: reproductive tract infection; MTCT: mother-to-child transmission

Table A14 Causes of injuries

Type of injury	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Road traffic injuries	Lack of standard treatment protocols	<ul style="list-style-type: none"> • Lack of advocacy by health personnel for injury prevention and control • Poor emergency care services • Lack of medical treatment facilities • Lack of skill-based training of health personnel • Absence of triage • Lack of communication facilities in health care settings 	<ul style="list-style-type: none"> • Increasing motorization • Lack of road safety policy • Non-functioning road safety councils at all levels • Absence of mandatory laws and poorly implemented laws regarding wearing of helmets and use of seat belts • Poor design and visibility of vehicles • Poor design, maintenance and quality of roads • Accident black spots • Lack of integrated rehabilitation programmes for road traffic injury patients • Delay in transportation of patients, especially in rural and semi-urban areas 	<ul style="list-style-type: none"> • Consumption of alcohol • High speed 	
Fall-related injuries	Lack of standard treatment protocols	<ul style="list-style-type: none"> • High cost of care • Lack of trauma audits • Absence of triage • Improper referral • Lack of facilities to treat polytrauma 	<ul style="list-style-type: none"> • Non-compliance of laws on work safety and home safety • Poor design of homes • Lack of safety equipment for construction workers 	Influence of alcohol	

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Table A14 (cont.) Causes of injuries

Type of injury	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
Burns-related injuries		<ul style="list-style-type: none"> • Lack of health care facilities • High costs of treatment 	<ul style="list-style-type: none"> • Poor quality of climbing devices • Lack of insurance and compensation benefits • Absence of fire safety mechanisms in public places • Unsafe electrical appliances • Unsafe stoves • Easily flammable clothes • Lack of transportation facilities, especially in rural areas 	Risk-taking behaviour of people	
Occupational injuries	Lack of knowledge of first aid	<ul style="list-style-type: none"> • Lack of health care facilities in small industries and rural areas • Lack of emergency care in the unorganized labour sector 	<ul style="list-style-type: none"> • Poor work safety laws and poor implementation of laws • Hazardous workplaces • Use of unsafe technology • Greater use of toxic chemicals and materials • Lack of periodic inspection of workplaces • Child labour 	Inadequate experience of workers	
Drowning	Lack of knowledge of first aid	<ul style="list-style-type: none"> • Poor emergency care services • Lack of medical treatment facilities • Lack of skill-based training of health personnel • Lack of communication facilities in health care settings • Lack of advocacy by health personnel for injury prevention and control 	<ul style="list-style-type: none"> • Presence of unprotected wells, ponds and lakes • Natural disasters such as cyclones and floods 		
Poisoning	Absence of specific antidotes in peripheral hospitals	<ul style="list-style-type: none"> • Poor emergency care services • Lack of medical treatment facilities • Lack of skill-based training of health personnel • Lack of communication facilities in healthcare settings • Lack of advocacy by health personnel for injury prevention and control 	<ul style="list-style-type: none"> • Lack of laws and systems to regulate the availability and use of OPC and drugs • Increasing use of toxic chemicals • Unsafe workplaces 	<ul style="list-style-type: none"> • Absence of parental supervision • Drugs within the easy reach of children 	
Suicide	<ul style="list-style-type: none"> • Lack of skills to detect those with suicidal ideation • Lack of screening of high-risk groups 	<ul style="list-style-type: none"> • Easy availability of OPC and drugs • Lack of supportive care facilities in schools and workplaces • Lack of transportation 	<ul style="list-style-type: none"> • Impact of media portrayal • Medicolegal issues and complications • Growing disparity in society • Stigma in society 	<ul style="list-style-type: none"> • Increasing domestic violence • Alcohol-related problems 	

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Table A14 (cont.) Causes of injuries

Type of injury	Direct (clinical-point of care)	Direct and indirect (health system)	Indirect (socioeconomic determinants)	Indirect (lifestyle RF, awareness)	Indirect (genetic, medical history, age, sex, ethnicity RF)
		<ul style="list-style-type: none"> systems • Lack of first-aid facilities • Lack of health interventions for suicide attempters 	<ul style="list-style-type: none"> • Lack of employment opportunities • Increasing stress in society 		
Violence	Absence of screening for patients who have experienced violence	<ul style="list-style-type: none"> • Lack of counselling and other support systems within the health sector • Lack of emergency helplines • Absence of crisis prevention centres 	<ul style="list-style-type: none"> • Changing society values • Easy availability of weapons • Lack of employment opportunities • Lack of educational opportunities • Stigma with regard to violence • Non-availability of help from concerned sectors • Growing disparity between people and society • Discriminatory laws in society • Growing depiction of violence in the media 		

OPC: organophosphorus compounds