

MASCULINE NORMS AND MEN'S HEALTH

MAKING THE CONNECTIONS



MASCULINE NORMS AND MEN'S HEALTH: MAKING THE CONNECTIONS

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About Promundo:

Founded in Brazil in 1997, Promundo works to promote gender equality and create a world free from violence by engaging men and boys in partnership with women and girls. Promundo is a global consortium with member organizations in the United States, Brazil, Portugal, and Democratic Republic of Congo who collaborate to achieve this mission by conducting cutting-edge research that builds the knowledge base on masculinities and gender equality; developing, evaluating, and scaling up high-impact gender-transformative interventions and programs; and carrying out national and international campaign and advocacy initiatives to prevent violence and promote gender justice.

For more information, see: www.promundoglobal.org

About Global Action on Men's Health:

Global Action on Men's Health is a collaborative project that brings together a global network of men's health organizations. Global Action on Men's Health's mission is to create a world where all men and boys have the opportunity to achieve the best possible health and well-being wherever they live and whatever their backgrounds. The network works towards this vision by encouraging the World Health Organization, individual states, and non-governmental organizations to develop research, policies, and strategies on men's health.

For more information, see: www.gamh.org

About Movember Foundation:

The Movember Foundation is the leading global charity dedicated to changing the face of men's health. It raises funds to deliver innovative, breakthrough research and support programs that enable men to live happier, healthier, and longer lives. Committed to disrupting the status quo, millions have joined the movement, helping fund over 1,200 projects focused on prostate cancer, testicular cancer, and suicide prevention. In addition to tackling key health issues faced by men, the foundation works to encourage men to stay healthy in all areas of their life, with a focus on men staying socially connected and becoming more open to discussing their health and significant moments in their lives.

For more information, see: www.movember.com

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TERMINOLOGY

Age-Standardized Mortality Rate

The age-standardized mortality rate is a weighted average of the age-specific mortality rates per 100,000 persons, where the weights are the proportions of persons in the corresponding age groups of the WHO standard population.

Cisgender and Transgender

For this report, the authors' references are related to cisgender and cis-masculinities, recognizing the unique health challenges of transmen and transwomen due to biological and social determinants, particularly the impact of transphobia.

Disability-Adjusted Life Years (DALYs)

This globally recognized indicator is a measure of overall disease burden, expressed as the cumulative number of years lost due to ill health, disability, or early death.

Gender Norms

Socially prescribed rules and expectations dictating appropriately masculine and feminine behavior in a given culture. Generally speaking, to varying degrees, individuals expect others to conform to these behaviors and tend to prefer to conform to them as well.

Gender Roles

The public and private behaviors and roles that are assigned to or associated with the sexes. Through gender socialization, children and adolescents learn to associate certain behaviors and roles with specific genders and to adopt these behaviors and roles themselves according to the gender with which they identify.

Hegemonic Masculine Norms

Ideals of masculinity that emphasize and elevate certain expressions of masculinity and enforce men's dominance, power, and privilege over women, as well as some men's dominance over certain other men. The expression also refers to versions of manhood that enjoy greater power than other, "subaltern" masculinities (i.e., middle- and higher-income, racial majority, and heterosexual men having more power or being perceived as dominant over lower-income, racial/ethnic minority, or non-cisgendered/non-heterosexual men).

Masculinities

Refers to the idea that there is no single, fixed, natural, universal "masculinity" to which all men ought to aspire, but rather the multiple, plural, complex, and even contradictory male identities that exist across cultural and historical settings.

Masculine Norms

The socially enforced rules and expected roles and behavior associated with men and manhood in a given culture.

Structural Influences on Masculinities

Refers to economic inequalities, historical injustices, broader life circumstances (such as regional, ethnic, or geographical disparities), as well as employment-related or corporate-sector interests that may contribute to ill (or good) health. These circumstances, systems, and interests often perpetuate certain socially acceptable versions of masculinity.

Years Living with Disability (YLD)

A component of DALYs, which measures the burden of living with a disease or disability in the amount of years.

Years of Life Lost (YLL)

A component of DALYs, which measures the years of life due to premature mortality in the population.



ACRONYMS

ADHD	Attention deficit hyperactivity disorder
CVD	Cardiovascular disease
DALYS	Disability-adjusted life years
GBD	Global burden of disease
GDP	Gross domestic product
HALE	Health-adjusted life expectancy
HIV	Human immunodeficiency virus
HRO	High-reliability organization
LRI	Lower-respiratory infection
MSM	Men who have sex with men
NGO	Non-governmental organization
PAHO	Pan-American Health Organization
PWID	People who inject drugs
STI	Sexually transmitted infection
TB	Tuberculosis
WHO	World Health Organization

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EXECUTIVE SUMMARY

What are the links between masculine norms and men's health outcomes globally?

What implications do these links have for efforts to improve men's health – alongside efforts to improve the health of women and children – and as part of broader efforts to create healthier, thriving societies?

The aim of this report is to provide an overview of the current state of men's health globally and to illustrate the direct connections between health-risk behaviors and hegemonic masculine norms.ⁱ Addressing men's health requires an understanding that gender is relational, and an understanding that healthcare systems and efforts to promote health must incorporate an understanding of the relations among men, women, and children at the household and community levels, as well as consider the context of broader systematic and persistent inequalities and discrimination that women face in private and public life.

This document is targeted at practitioners, policymakers, donors, and advocates who have

an interest in strengthening national and global responses to address the intersections of masculine norms and men's ill health. While it focuses on men globally, men and masculinities are not uniform across the world; there is substantial variation in terms of culture, religion, ethnicity, sexual orientation, and gender identity. This analysis does not intend to minimize these differences. Rather, it intends to provide a global snapshot that will serve as a starting point for future, more nuanced analyses.

Presenting a new analysis of men's health using data from the 2016 Global Burden of Disease (GBD), we outline the leading causes of morbidity and mortality among men globally. The report highlights seven of the most influential risk behaviors that, in large part, drive these poor health outcomes, and it presents evidence on the connections between hegemonic masculine norms and these risk behaviors and poor health outcomes. The key point is that salient norms related to masculinities, and the gendered nature of paid work and men's lives, are a driving force in men's ill health: globally, on average, men die 5.5 years earlier than women, and men are over-represented in nearly every major burden-of-disease category.¹

ⁱ A set of rules and expected behaviors that is associated with men and manhood in a given culture and that emphasizes certain expressions of masculinity and enforces certain men's dominance, power, and privilege over women, as well as over certain other men. The expression also refers to versions of manhood that enjoy greater power than other, "subaltern" masculinities (e.g., lower income, racial/ethnic minority, non-heterosexual).

While biological factors are involved in male-specific ill health, the vast majority of men's morbidities and excess mortality are related to health practices and the social and cultural influences that shape them. In short, while some gender norms can be protective in terms of health outcomes, men's poor health is most often driven by their efforts to live up to or adhere to restrictive societal norms related to manhood.

Men's health matters for everyone: for men themselves; for women, who generally bear the burden of care for sick and disabled men; for children, who can experience adverse outcomes from the poor health of caregivers; and for societies, which bear the social and economic cost of men's illness and premature death. Poor health affects men's mobility, productivity, and overall quality of life. Furthermore, women are generally responsible for picking up the pieces of men's poor health or premature death, which create greater care and income-generation burdens for women. The loss of a husband, father, son, or brother can have lasting psychological, financial, and social effects on families and communities.²

On the other hand, men in good physical and mental health are better able to participate in caregiving and household responsibilities, reducing the care burdens on partners and families. Additionally, men who exemplify health-seeking and self-care often serve as role models for younger boys and men.

Despite the growing body of evidence, the need to improve men's health struggles to gain traction and attention on the world's stage. Only three countries in the world – Brazil, Ireland, and Australia – have developed national men's health policy frameworks or departments.³ Even when men's health is discussed, the focus is often on the biological drivers of men's ill health, not on the social determinants, including masculine norms.

What Do Masculinities and Masculine Norms Have to Do With Health?

The leading health-risk behaviors that account for a major share of men's ill health are directly related to masculine norms and masculinities interacting with other factors. These six health behaviors – poor diet, tobacco use, alcohol use, occupational hazards, unsafe sex, and drug use – according to 2016 GBD data, account for more than half of all male deaths and over one-third of male morbidity globally.⁴ To this list of six health behaviors, the authors added men's limited health-seeking behavior. It is worth noting that there are some positive masculine norms that may support health-seeking behavior. Evidence shows that, in some settings, men who are more involved as fathers and caregivers are more likely to have better health, suggesting that the care of others may also support an ethic of self-care.⁵ More research is needed on other ways that positive masculine norms may support men's health.

"Masculinities" refers to the plural and dynamic ways in which masculine norms, attitudes, identities, power dynamics, and behaviors are lived.⁶ This report focuses on masculine norms, which are a set of rules and expected behaviors that are associated with men and manhood in a given culture.

In a 2017 multi-country study of masculine norms, Promundo referred to these norms collectively as the "Man Box,"⁷ a set of beliefs that place pressure on boys and men to think and behave in specific ways. The idea of the "Man Box" is based on a construct originally created by Paul Kivel.⁸ In the study, Promundo, in partnership with Axe, operationalized the prevalent social constructions of masculinity seen in many parts of the world into seven "pillars." These components, or "pillars of the Man Box" as we called them, are salient and widely reinforced norms about manhood, even as they vary tremendously by individual and cultural context. Clearly not all men have internalized these norms, but in various studies from around the world, most men affirm that they have been pressured or encouraged to act in these ways at least some of the time. We adapted these pillars of the "Man Box" slightly to the context of men's health:

1 Self-Sufficiency and Emotional Control

There is a widespread social expectation that men should not rely on other people, talk about their feelings, or seek help for their physical and emotional health. Pillar 1 encompasses how men cope with stresses and disease in their lives.

2 Acting Tough and Risk-Taking

A man's toughness is seen as closely tied to physical strength and invincibility. The beliefs included in Pillar 2 hold that a man must be willing to defend his reputation by fighting or using physical force, if necessary, as well as take risks and engage in activities that are not perceived as weak.

3 Attractiveness

Pillar 3 includes ideas related to men's physical appearance, body image, and physical attractiveness. Men who prioritize physical attractiveness will engage in behaviors that they believe make them appear desirable to women and seem "cool" to their peer group. This pillar is associated with the potentially dangerous use of anabolic steroids and other mind- and body-altering substances.

4 Rigid Masculine Gender Roles

Pillar 4 reflects the perception that certain activities and duties are either masculine or feminine. Men who subscribe to these rigid beliefs relate to the still-common expectation that men contribute to family well-being primarily as financial providers, while seeking healthcare or taking care of the health of those in the home is a female task.

5 Superiority Among Males

Pillar 5 reflects the socially constructed hierarchy of male identity and a belief that men must experience feelings of superiority. This includes the marginalization or idolization of men based on specific behaviors seen as more or less masculine. Men who do not engage in certain behaviors (e.g., excessive drinking, eating meat) are deemed to be feminine or non-masculine, and are marginalized by other men.

6 Hypersexuality

Pillar 6 emphasizes not only that a man should be unambiguously straight or heterosexual, but also that he should always be ready for sex and always eager to acquire another "sexual conquest." The hypersexuality implied in Pillar 6 serves to undermine men's sexual agency and sexual health, along with women's, in that it can contribute to sexual coercion and limited attention to sexual health.

7 Power, Aggression, and Control

Pillar 7 emphasizes the need for men to use physical, emotional, sexual, financial, and psychological violence when necessary and to hold control and power over women and male peers around them.

While men's individual health-related behavior is important, using a masculinities lens underscores that men's health is shaped, in large part, by a specific set of masculine norms that encourage certain attitudes and practices, among others, risk-taking, aggression, and limited self-care. Addressing men's ill health – which includes that, of the 12 leading causes of global mortality, 11 disproportionately burden males⁹; that the global average life expectancy at birth for men is 69.8 years compared to 75.3 years for women¹⁰; and that cardiovascular disease is the leading cause of mortality and disability-adjusted life years (DALYs) among males globally, accounting for 31 percent of all male deaths¹¹ – requires changes to healthcare systems, to social norms about manhood, and in individual men.

Furthermore, it is important to recognize the plurality, contextual factors, and fluid nature of gender norms. Many men around the world regularly engage in health-promoting and health-seeking behaviors, even as many men also show poor health-seeking and risky health-affected behaviors. Finally, men's health must be understood via an intersectional approach; norms about manhood interact with other social factors, such as the acute vulnerability of racial/ethnic and sexual minorities as a result of systemic and structural forces.^{12,13,14} Indeed, there are vast regional disparities in age-standardized morbidity and mortality rates among the World Health Organization regions, which attest to the extent to which poverty, living conditions, and occupation-related risks drive men's ill health. Men in Africa have the poorest health globally, followed by men in South-East Asia. Stratifications by country, according to World Bank income classifications, show a clear positive relationship between higher income and better health indicators.¹⁵

Policy, Research, and Programming Recommendations

National governments, global health institutions, researchers, civil society organizations, corporations, and activists should act to strengthen the response to men's health – alongside efforts to improve the health of women and children, and as a part of broader efforts to

create healthier, thriving societies. Any efforts that address men's health should build on men's strengths rather than pathologize men as problematic or toxic. It is important to recognize and leverage the fact that many men are already striving to take care of their individual health and well-being. In addition, in advancing men's health practices, it is important to address not only attitudes and practices at the individual level, but also men's lack of inclusion in health policies, structures, and services. Efforts to include men's health in the national healthcare sector should be supported by civil society, by additional research, and by the support of donors and international agencies. Resources that have been dedicated to women's and girls' health programs should not be reallocated or reduced due to these efforts.

National and local governments should...

- Ensure that health policies and services actively address potential barriers to men's use of services – such as available hours and staff composition – and increase the provision of health services that actively seek out men as well as women in the workplace, in the community, and in other settings.
- Develop and implement multisectoral health and well-being policies, and monitor the differential effects by sex.
- Develop and implement multisectoral health and well-being policies that take into consideration the effects of social, economic, and cultural factors, including masculine norms, on the health outcomes of men.
- Integrate awareness of harmful masculine norms into occupational safety and employment policies in an attempt to neutralize their effects.
- Promote policies and create gender-transformative programs that, by implicitly or explicitly questioning the underlying masculine norms that often drive harmful behavior (e.g., tobacco use, drunk driving, and unprotected sex), aim to reduce men's risk-taking and harmful behavior.
- Publish and appropriately fund national and local men's health strategies, as part of broader work on gender and health, that ensure specific consideration for men who are members of minority groups.^{16,17}

- Build the capacity of medical and health personnel within countries to understand masculinities and men's health needs and to incorporate them into their diagnostic, referral, and treatment practices. Again, this should be undertaken with attention to the allocation of funds and resources, to ensure access for all.

Global and regional health institutions and bodies should...

- Adopt specific global commitments, and accompanying frameworks and strategies, to better address the links between masculinities and men's ill health.

Researchers, scholars, and academic institutions should...

- Widen the breadth of research on alternative dimensions of masculinities that are less researched and that could promote healthy behavior, such as responsibility, self-control, and how men's positive involvement as fathers and caregivers may also provide a way to promote self-care and help-seeking.

Civil society organizations, practitioners, and advocates within public health systems should...

- Design and implement evidence-based and gender-transformative programs and advocacy efforts^{18,19} that effectively address gender inequities and the consequences associated with men's exercise of hegemonic power over women and other men.

Donors should...

- Strengthen the focus on masculinities and men's health within their work, without diluting resources for women's health, and look for ways to engage men in their own self-care that also support better outcomes for women (related to sexual health, for example).

Corporations and other employers should...

- Provide flexible working conditions and hours – as well as comprehensive, adequately paid leave – so that all employees can take the time they need to care for their own health and the health of their families.



INTRODUCTION

This report provides an overview of the current state of men's health globally, and illustrates the connections between health-risk behaviors and hegemonic masculine normsⁱ.

This document targets practitioners, policy makers, donors, and advocates who have an interest in strengthening national and global responses to address the intersections of masculine norms and men's ill health. Presenting a new analysis of men's health, using data from the 2016 Global Burden of Disease (GBD) study, the report outlines the leading causes of morbidity and mortality among men globally. It also highlights seven of the most influential risk behaviors that together account, in large part, for these poor health outcomes. The centerpiece of the report underscores the importance of salient masculine norms as a driving force in men's ill health.

Men's health matters for everyone: for men themselves; for women, who generally bear the burden of care for sick and disabled men; for children, who can experience adverse outcomes from the poor health or premature death of caregivers; and for societies, which bear the social and economic cost of men's illness and premature death. Gender is relational, and health care systems and efforts to promote health must incorporate an understanding of the relations among men, women, and children at the household and community levels, as well as of the power dynamics involved. Furthermore, it is important that any discussion of men's health adopt an intersectional approach, taking into account the interactions of race- and ethnicity-based injustices, homophobia, transphobia, disproportionate rates of incarceration, and poverty, among other social determinants of men's health.

ⁱ The rules, roles, and expected behavior that are associated with men and manhood in a given culture and that emphasizes certain expressions of masculinity and enforces certain men's dominance, power, and privilege over women, as well as over certain other men. The expression also refers to versions of manhood that have greater power than other, "subaltern" masculinities (for example, lower income, racial/ethnic minority, non-cisgendered/non-heterosexual).

WHAT DO WE MEAN BY MASCULINITIES AND MASCULINE NORMS?

This report builds on existing social science research on masculinities, which refer to the plural and dynamic ways that masculine norms, attitudes, identities, power dynamics, and behaviors are lived.¹

Masculinity has been described as:

A constantly changing collection of meanings that we construct through our relationships with ourselves, with each other and with our world. Manhood is neither static nor timeless; it is historical. Manhood is not the manifestation of an inner essence; it is socially constructed. Manhood does not bubble up to consciousness from our biological makeup; it is created in culture. Manhood means different things at different times to different people. We come to know what it means to be a man in our culture by setting our definitions in opposition to a set of 'others' – racial minorities, sexual minorities, and above all, women.²

Social norms dictate socially acceptable behavior.³ Therefore, a man's (and woman's or individuals of all gender identities) behavior is largely determined by the social environment in which the individual grows up, lives, works, and plays.⁴ Masculine norms are a set of social rules and expected behaviors that are associated with men and manhood in a given culture. Theorized by Connell,⁵ hegemonic masculine norms are a subset of masculine norms that emphasize particular expressions of masculinity and enforce certain men's dominance, power, and privilege over women, as well as over certain other men. The expression also refers to versions of manhood that have greater power than other, "subaltern" masculinities (for example, lower-income, racial/ethnic minority, non-cisgendered/non-heterosexual). Mahalik and colleagues, among others, have demonstrated that masculine norms are associated with several health behaviors.^{6,7} Finally, it is important to note that such norms change over the life cycle, with different meanings and health implications for boys and men as they transition from school into work, into partner relations, and many into fatherhood. For example, some health research has focused on young men and the ways in which particular norms around body image, suppression of close friendships, and other age- and developmentally-specific issues affect their health.⁸

In every region of the world, men and boys bear a disproportionate share of the disease burden, relative to women and girls. The 2016 Global Burden of Disease (GBD) data set shows that males currently experience significantly more and earlier deaths than females – with age-standardizedⁱⁱ death rates per 100,000 of 1,002 and 690, respectively.⁹ Similar findings for disability-adjusted life

years (DALYs) disproportionately burden males. There are also significant disparities among men, based on region, age, sexual orientation and gender identity, income, and other demographic factors. Throughout this report, we examine health over the life course – including adolescence, and young, as well as adult, manhood. Men's health burden has increased relative to women's over recent years as a

ii The age-standardized mortality rate is a weighted average of the age-specific mortality rates per 100,000 persons, where the weights are the proportions of persons in the corresponding age groups of the WHO standard population.

result of tremendous reductions in maternal mortality and morbidity, and improved nutrition. This in no ways means that we have achieved full health for women and girls; on the contrary, there are key gaps in women's health that must remain urgent on the global health agenda.

Many of the challenges associated with men's ill health are linked to masculine norms and to an insufficient focus on men's health within public health systems.¹⁰ Despite the high burden of disease among men, researchers, ministries of health, international organizations, civil society, and other stakeholders have failed to adequately address men's health in policies and practice.^{11,12} To date, only three countries have developed national policies regarding men's health, and men's health is not explicitly addressed in the United Nations' Sustainable Development Goals and other international health initiatives.

Around the world, men's health urgently needs more attention – not at the expense of efforts to improve the health of women and children but in addition – and that attention must be intersectional in approach.¹³ By positioning men's health in a relational way, the authors highlight the ways in which men's health affects women and children, just as the health of women and children affect men. A full understanding of the state of men's health requires a social-determinants approach – that is, one that incorporates analysis of age, poverty and economic status, disability status, educational status, health care access, rural versus urban realities, historical racial and ethnic injustices, and other social factors.

Healthier men contribute to healthier and more equitable families, communities, and societies.^{14,15} Men with good physical and mental health, assuming of course that they are already - or intend to be - involved caregivers, are better able to participate in caregiving and household responsibilities, which, in turn, can ease the double burden of work on their partners and broader families, as well as provide better support for their children's well-being and development. Additionally, because young boys often look up to men in their families as role models and learn about gender roles and expectations from their families, practicing healthy behaviors and progressive attitudes around masculine gender norms can positively influence the next generation of men.

Women and children are often directly and indirectly burdened with the social and economic costs of men's ill health. As numerous studies confirm, the loss of a husband, father, son, or brother can have lasting effects on families and communities.¹⁶ Around the world, many men provide physical, emotional, and financial support for those around them.¹⁷ The burden of a man's death varies but generally impacts those around him psychologically, financially, and socially.^{18,19} Too often, women are responsible for picking up the pieces of men's poor health or premature death, each of which create greater care and income generation burdens for women. The premature deaths of men in low-income settings often exacerbate harsh realities and perpetuate cycles of poverty.²⁰ In highly patriarchal societies, where women are discouraged or even forbidden from remarrying, men's disability and death tend to increase the vulnerability of women and children. In some cases, women may become stronger and more independent as a result of having to take on different roles, and for some women and children, a husband's or father's premature death may mean the end of abuse even if it also may bring other costs to a household.

Improving health matters from an economic perspective, as well. Brott and colleagues²¹ have found that in the US, men's premature morbidity and mortality costs nearly half a trillion dollars, from the combined costs to government (\$142 billion), employer pay-outs (\$156 billion), and costs associated with reduced quality of life (\$181 billion). Researchers have also estimated direct and indirect costs associated with health disparities in the US between American American, Hispanic, White, and Asian men. They found that African American and Hispanic men consistently incur excess expenditures for both indirect and direct costs, compared to White and Asian men.²² These expenses have severe consequences for the financial health of institutional systems, as well as families and communities.

The key argument in this report is that the health issues that most affect men are lifestyle- and behavior-related, and lifestyle and behavior, in turn, are strongly influenced by socially constructed masculine norms that interact with other social determinants of men's health. In the field of public health, there have been relatively few and limited efforts to measure or assess the effects of masculine norms on health, with

the exception of HIV and sexual and reproductive health. Despite these gaps in the research, there is sufficient data to establish the associations between masculine norms and men's health that are broadly outlined in this report. To improve health outcomes for men, the evidence suggests that we must first understand how these social norms work and how they drive behavior. Furthermore, we must design health care services, public health outreach, and prevention strategies that take into consideration the ways in which boys and men are socialized to internalize these norms, at the same time considering other social determinants of health, particularly poverty and access to health care.

The report asserts the importance of policies and systems that address and aim to improve the health practices of men and boys - alongside ongoing efforts to improve the health and well-being of women and girls, and as a part of broader efforts to create healthier, thriving societies. Currently, few international policies and programs related to health and well-being specifically address the particular health issues of men and boys, nor do they recognize the impact of masculine norms on men's health and the well-being of others.²³ In Hawkes' and Buse's analysis of 11 major global health institutions, including the World Health Organization, they found minimal references to care for the specific health needs of men.²⁴ The United Nations' Sustainable Development Goal 3, which focuses on the world's health and well-being, contains no explicit acknowledgement of men's health issues nor the masculine norms that affect men's health. In the 2018 Global Health 50/50 Report, fewer than one-third of the 140 organizations define gender in a manner inclusive of men.²⁵ Additionally, in the 50/50 report, not one of the 140 NGOs sampled focused exclusively on the health of boys and men.²⁶

Baker²⁷ identifies an absence of national men's health policies, with key exceptions of Australia, Brazil, and Ireland. Baker^{28,29} and others^{30,32} state that the latter three nations' policies have made a significant contribution in providing a platform for further action to deliver effective gender mainstreaming that embeds men's health policy within the wider policy landscape. At a regional level, WHO Europe and the Pan American Health Organization (PAHO) are currently drafting reports entirely focused on the well-being of boys and men and the role of masculinities in the ill health of men and others.³³ These are the first

reports of their kind and, hopefully, will spark other regions to undertake similar initiatives. But Baker³⁴ cautions that policies are only as effective as their implementation and practice. Advocates for men's health and masculinities, and for gender equity in health care, will need to make the case for effective implementation, and further evaluation will need to be conducted to assess the impact of these policies on men, women, and children.

In many countries, health care delivery systems have largely struggled to meaningfully engage men and boys in their own health. In a regional report detailing health services, Sonke Gender Justice in South Africa states that "substantive work needs to be done ... to ensure that men's health needs are addressed as part of an integrated health care system, rather than as piecemeal and standalone efforts for specific services."³⁵ Their analysis revealed 7 of the 13 countries in Southern and Eastern Africa have integrated health services for men, including HIV, SRH, and general health.³⁶ Grace, Richardson, and Carroll³⁷ suggest that men may be reluctant to seek help because of the service providers' negative attitudes towards them. They advocate for gender-sensitive approaches to health care, approaches that engage males rather than problematize them.³⁸ For example, in Brazil, researchers have formulated a strategic framework for increasing paternity and male-targeted sexual and reproductive health care offered by the public health system.³⁹

At the same time, it is important to note that health-sector investment, research, and development, including pharmaceutical research, have often focused on and prioritized specific areas of men's health (for example, heart disease, prostate cancer, and sports medicine, among others) in which the benefits of such investment and research mostly accrue to men, and to specific groups of men, usually higher-income men. Indeed, not all men are treated equally within the systems and policies that currently exist. Structural and social disparities tend to exclude or marginalize men of certain identities from receiving adequate health care services, just as they contribute to health inequities for women. Therefore, it is important to be mindful and inclusive of all genders and other social determinants of health and health access when advocating for universal health coverage around the world.



CONCEPTUAL FRAMEWORK

This report explores the relationship between masculine norms and the leading causes of morbidity and mortality among men. Globally, seven risk behaviors account for at least 50 percent of deaths and over one-third of morbidity among men; research confirms

that all seven are strongly related to masculine norms. Indeed, researchers – ourselves included – have found linkages between masculine norms and health-risk behaviors,⁴⁰⁻⁴⁴ as well as direct pathways from health-risk behaviors to specific illnesses.⁴⁵⁻⁴⁷

THE MAN BOX: A WAY TO UNDERSTAND MASCULINE NORMS AND THEIR RELATIONSHIP TO MEN'S HEALTH

In a recent multi-country study of masculine norms, Promundo referred to these norms collectively as the “Man Box,” a term coined by Paul Kivel for a set of norms, or implicit rules and expectations, for socially expected and/or approved male behavior.⁴⁸ In the Man Box study, Promundo, in partnership with Axe/Unilever, operationalized the prevalent social construction of masculinities into seven “pillars”.⁴⁹ These have been adapted for this paper for use in the context of men’s health. They are: (1) self-sufficiency and emotional control; (2) acting tough and risk-taking; (3) attractiveness; (4) rigid masculine gender roles; (5) superiority among men; (6) hypersexuality; and (7) power, aggression, and control. The use of the term “Man Box” thus alludes to the way that these norms constrain and shape men’s behaviors. In a three-country survey applying this concept of the Man Box, Promundo posed attitude questions related to each of these seven pillars, and, in all three countries, consistently confirmed that young men who were “in the box” were more likely to have practiced health-risk behaviors (or, as a result of such behavior, to have experienced negative health outcomes), including binge-drinking, bullying, traffic accidents, and suicidal ideation. Other researchers have found similarly strong correlations between men’s adherence to harmful or restrictive ideas about manhood and negative health outcomes.⁵⁰

The above-mentioned seven pillars of socially constructed masculinity that influence men's health outcomes and health-related behaviors are outlined below. Clearly these norms vary by cultural and historical context, and manifest themselves differently in individual men and boys, but they have been identified and documented in many settings. It is worth noting that, while there is some evidence to suggest that biologically rooted sex differences play a role in the general differences between men's and women's impulse control and aggression, most research affirms that biological sex is far less influential than gender norms are when it comes to such behaviors.

- 1. Self-Sufficiency and Emotional Control:** There is a widespread social expectation that men should not rely on other people or seek help for their physical and emotional health. The emphasis on emotional stoicism perpetuates the stereotype that men don't cry or talk about their feelings. This pillar relates to the ways in which men cope with stress, personal vulnerability, and illness.
- 2. Acting Tough and Risk-Taking:** A man's power, as a man, is closely tied to physical strength and invincibility. Social norms in many settings hold that a man must be willing to defend his reputation with physical force, if necessary. Relatedly, this pillar includes a man's desire to engage in activities that make him appear strong or brave, and to handle and overcome physically difficult situations. Risk-taking behavior is seen as taking a behavior or activity to the extreme, putting oneself in harm's way, while remaining unconcerned and invulnerable.
- 3. Attractiveness:** This pillar includes ideas related to men's physical appearance and body image. Men who prioritize physical attractiveness engage in behaviors intended to increase their desirability to women and "coolness" to their peer group. This norm can be associated with eating disorders and the potentially dangerous use of anabolic steroids and other mind and body altering substances in an effort to be accepted in social situations.
- 4. Rigid Masculine Gender Roles:** This pillar involves the identification of certain behaviors and activities as masculine or feminine. Men who subscribe to traditional gender roles tend to expect and believe that men contribute to family well-being primarily as financial providers, while women are responsible for the unpaid care work. Rigid masculine gender roles can be seen in inequitable divisions of labor at home and in the workplace, as well as in inequitable decision-making between men and women. They are also evident in the notion that seeking health care or taking care of the health of family members is a female task.
- 5. Superiority among Men:** This pillar reflects the socially constructed hierarchy of male identity and a male drive to feel superior *as men*. This includes the idolization (or marginalization) of men based on their engagement (or lack thereof) in specific behaviors. This pillar is associated with the phrase "real men [*insert masculine behavior here*]." Men who subscribe to this pillar place high value on certain behaviors (for example, heavy drinking, eating meat), and tend to conform with peers in an effort to participate in a collective "manhood." Men who do not engage in these behaviors may be judged as feminine or insufficiently masculine, and are often marginalized and policed by other men.

6. **Hypersexuality:** This pillar dictates that not only is a man unambiguously heterosexual, but he is always ready for sex, and always eager to acquire another sexual conquest. The hypersexuality implied in this pillar also serves to undermine men’s sexual health, in that it can contribute to sexual coercion and insufficient attention to sexual health.
7. **Power, Aggression, and Control:** This pillar of the Man Box encourages men to use physical, emotional, sexual, financial, and psychological violence to maintain control and exert power over women and other men.

The Man Box study⁵¹ found that about half of young men in the United States (59 percent), the United Kingdom (52 percent), and Mexico (47 percent) perceived that their parents, society, or partners think that men should aspire to those masculine norms, and high percentages of young men were also found to have internalized them (40 percent, 38 percent, and 25 percent, respectively). The study found that the stronger young men’s stated belief in those norms, the more likely they were to show several negative behavioral health outcomes.

In the US, UK, and Mexico, being in the Man Box (that is, generally subscribing to hegemonic masculine normsⁱⁱⁱ) is associated with:

- Experience of suicidal ideation and depression in the previous two weeks;
- Participation in binge drinking and drug abuse;
- A two- to three-times greater likelihood of having been in traffic accidents;
- Use of violence against women;
- A three- to seven-times greater likelihood of having physically bullied others; and
- A three- to six-times greater likelihood of having sexually harassed others.

A productive and meaningful discussion of masculine norms and the ways in which ideas about manhood influence men’s health behaviors requires an understanding of the complex and contradictory ways that men experience power. Patriarchal power – the pervasive dynamic in which some men hold power over other men, and men’s aggregate power is greater than women’s – is at the root of all processes of harmful masculine gendering and the

inequitable ordering of gendered society. Certain kinds of manhood (particularly those represented by the pillars of the Man Box, above) are often called “hegemonic masculinity” precisely for this reason: the norms uphold a hegemonic order in which all participants contribute to an inequitable and oppressive distribution of status and power, often policed and patrolled by state-sanctioned violence.⁵² Even as the report calls attention to these

iii Other factors can influence these health-related behaviors, including physiological or genetic predispositions with regard to some risk-taking, drug-dependency, and mental health-problems. Nevertheless, adherence to harmful masculine norms is a strong predictor of these outcomes.

norms' negative outcomes in men's lives, it views men's experiences of power, violence, and, for many, relative powerlessness in relation to the historical, ongoing, disproportionate, and unjust disadvantages imposed on women and girls, as well as on gender minorities. At the same time, it acknowledges the real sense of powerlessness many men feel in their lives, particularly within the context of health. Furthermore, it is important to state that some traditional ideas about manhood – such as keeping one's word or being responsible for one's family – are positive attributes.

Boys and men experience patriarchy, power, and privilege in different ways throughout the course of their lives, with direct implications for their health. Although men and boys, on average, have more privileges and benefits in society than women and girls do, men and boys are not a homogenous group.^{53,54} Men can feel and are powerless in some situations, and powerful in others.⁵⁵ Additionally, definitions of masculinities vary depending on underlying historical, religious, and cultural factors, and can change over time.⁵⁶ Nevertheless, it is the case that in most cultures, as boys grow up, they are socialized to subscribe to rigid definitions of emotion-repressing, violent, misogynistic, and heteronormative manhood. As a result, many take risks that can harm their own and others' health. Therefore, it is important to understand the ways in which gender inequality, along with the paradoxical ways in which men experience power, is costly to men and boys.⁵⁷ Highlighting the contradictory experiences of male power and privilege, Kaufman remarks that “men are wounded by the very way we have learned to embody and exercise power.”⁵⁸ Indeed, many of the behaviors and risks highlighted in this report, including alcohol consumption, tobacco use, and occupational hazards, are products, in part, of privileges unequally afforded to men. For example, men are more likely to have discretionary income with which to buy cigarettes, as well as to be socially permitted to smoke and consume alcohol. Thus, men experience both a privilege and a cost. The same can be said of men's greater probability of being involved in traffic accidents. In many societies, men and boys have greater freedom of movement and more freedom to be in public spaces,

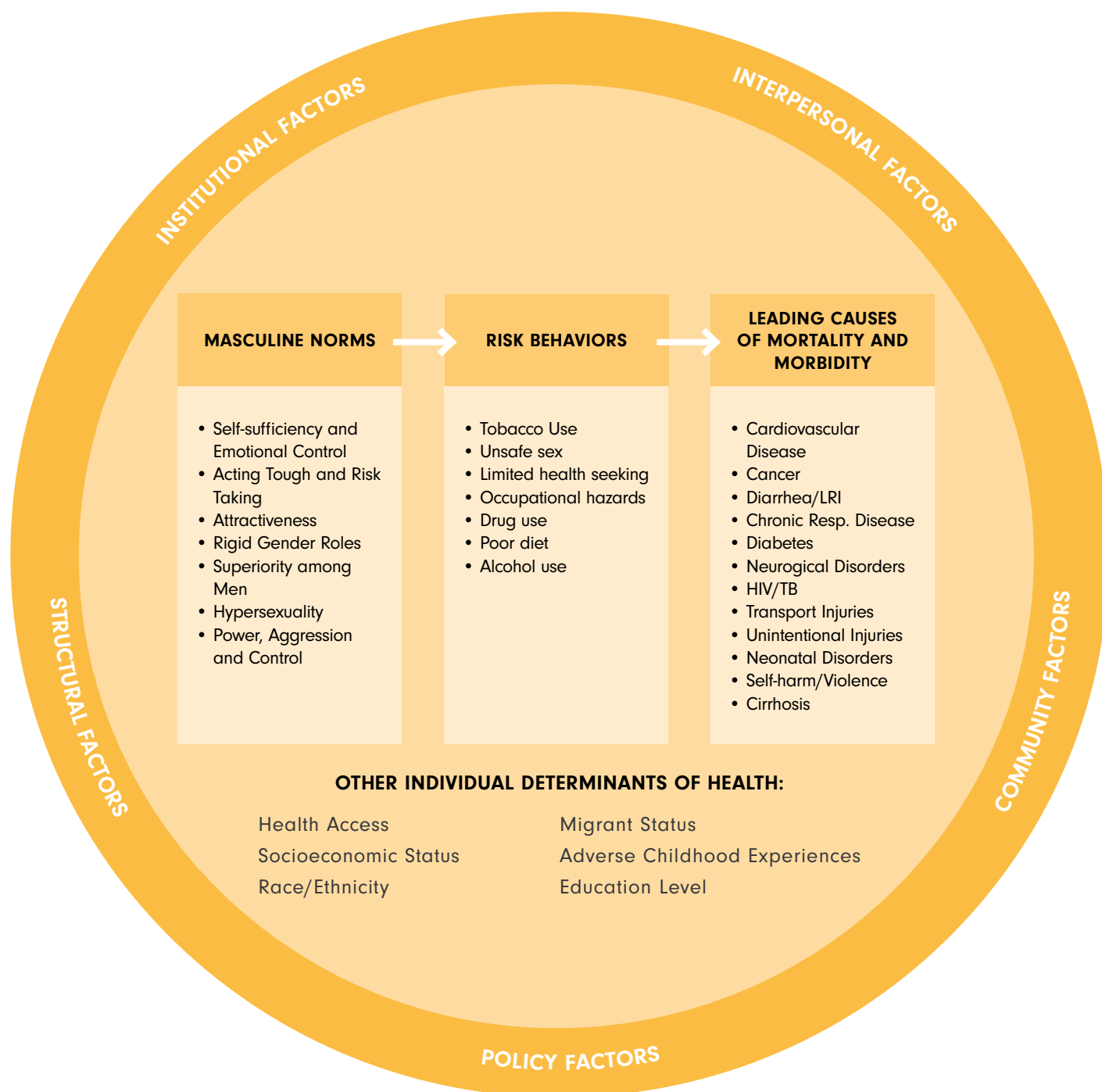
and to work outside the home, than do women and girls. But this same greater freedom of movement and leisure time means that men are more likely to be exposed to some forms of violence and accidents.

Our theoretical framework also acknowledges the importance of the policy context, and of recognizing the intersectionality of the social determinants that shape the health of men.^{iv} As defined by the Global Commission on Social Determinants of Health⁵⁹, social determinants of health are variable circumstances and factors that influence the way people grow, live, work, and age, and that ultimately impact health behaviors and outcomes. They include national wealth, degree of gender equality, education, income, class, age, employment status, disability, sexual orientation, ethnicity, migrant status, access to health systems, and adverse childhood experiences. These social determinants act as concurrent identities that intersect with the gendered factors to shape health outcomes. An intersectional approach assumes that certain dimensions of masculinities (for example, behaviors, attitudes, and norms) vary across groups of men depending on structural, cultural, and institutional context, and economic and social resources. Griffith^{61,62} and others⁶³ highlight the acute vulnerability of racial/ethnic and sexual minority men due to systemic and structural factors, such as racism, disproportionate incarceration rates, and homophobia.

Traditionally, the social determinants of health treat gender as a binary – male versus female – with female gender being a risk factor. However, this approach does not sufficiently address gender norms, including masculinities. Figure 1 provides a visual representation of how these elements interact in our conceptual framework. Grounded in gender-role socialization and social norm theory, research affirms that masculine norms translate into risk behaviors.⁶⁴⁻⁶⁸ The seven masculine norms described in the report interact both independently and collectively with each of the seven risk behaviors. The final and most well-established link is the manifestation of risk behaviors into illness and injury. In what is known as risk-factor clustering, many men engage in two or more risk behaviors concurrently, compounding the likelihood of illness or injury.^{69,70}

iv Although we recognize their importance, the report largely lacks an analysis of health disparities among different groups of men. This report is not meant to be a deep dive into particular sub-groups of men, but to bring the global picture into focus. We would also like to acknowledge the limitation inherent in the binary language we use, such as “men,” “adolescents,” “young adults,” and “boys”.

FIGURE 1. Conceptual Framework for Understanding Masculine Norms and Health Outcomes



The report works right to left through the conceptual framework. The first section analyzes the GBD data and discusses the top 12 causes of morbidity, mortality, and DALYs among men. Data for women can also be found in Annex 2. Section 1 also briefly highlights the seven

risk behaviors that contribute to the leading causes of morbidity and mortality. A more extensive overview of regional patterns for the individual illnesses can be found in Annex 1. The second section, the centerpiece of the report, connects risk behaviors and masculine norms.

THE STATE OF MEN'S HEALTH

1.

Descriptive Data for Men's Global Disease Burden

This section presents a new analysis of the 2016 Global Burden of Disease data set. The 2016 Global Burden of Disease (GBD) study includes mortality, causes of death and illness, and risk factors, with data from 195 countries and territories dating from between 1990 and 2016. Estimates presented in this report were generated using the open-source Viz Hub visualization tool provided by the GBD study authors at the Institute of Health Metrics and Evaluation at the University of Washington, in the US. Unless otherwise noted, the findings are based on the 2016 Global Burden

of Disease dataset. Although there are multiple data sets that measure men's health outcomes, this report identified the 2016 GBD data set as the most comprehensive for the purposes of this analysis – given its sex and regional designation, age-standardized rates, and estimates of the disease burden attributable to various risk factors.

This section uses two metrics to measure illness and injury at a population level: crude mortality, and disability-adjusted life years (DALYS). Individually, these measures tell slightly different, yet equally important, stories of the ways in which illness and injury impact men around the world. Together, they demonstrate a clear public-health need to address men's health.



CRUDE MORTALITY RATES

According to GBD data, global all-cause male mortality was nearly 30 million deaths in 2016 – resulting in an age-standardized mortality rate of 1,002 deaths per 100,000 males. However, the data set was only able to attribute 18 million of the 30 million to specific risk factors.

When Are Men Dying?

The average global life expectancy is 69.8 years for men, compared with 75.3 years for women.⁷¹ Life expectancy for men differs widely between countries, ranging

from 47.1 years in Lesotho to 81.3 years in Singapore – a difference of 34.2 years. In 192 of 195 countries, men’s life expectancy is lower than women’s, with Mauritania, Kuwait, and the Republic of Congo being the only exceptions^v. When the amount of time lived in less-than-ideal health is subtracted from overall life expectancy, the result is known as the health-adjusted life expectancy (HALE)^{vi}; the global average is 61.3 years for males. Figure 2 shows male life expectancy and HALE averages from each of the WHO regions, as well as the global averages.

v According to 2016 GBD data, men in Mauritania live 0.08 years longer than women do, on average. In the Republic of Congo, men live 0.49 years longer than women do, on average. And in Kuwait, men live 1.27 years longer than women do, on average. All other countries (192) in the data set show women living longer lives than men. When comparing the HALE, males in 135 countries have shorter health-adjusted life expectancies than women have.

vi HALE is a measure of population health that takes into account mortality and morbidity. It adjusts overall life expectancy by the amount of time lived in less-than-ideal health. This is calculated by subtracting from the life expectancy the number of years lived with disability multiplied by a weighting to represent the effect of the disability. For more information, visit: <https://www.healthknowledge.org.uk/e-learning/health-information/population-health-specialists/lifetables-hales-dalys-pylls>

FIGURE 2. Regional Averages of Male Life Expectancy and Health-Adjusted Life Expectancy, 2016

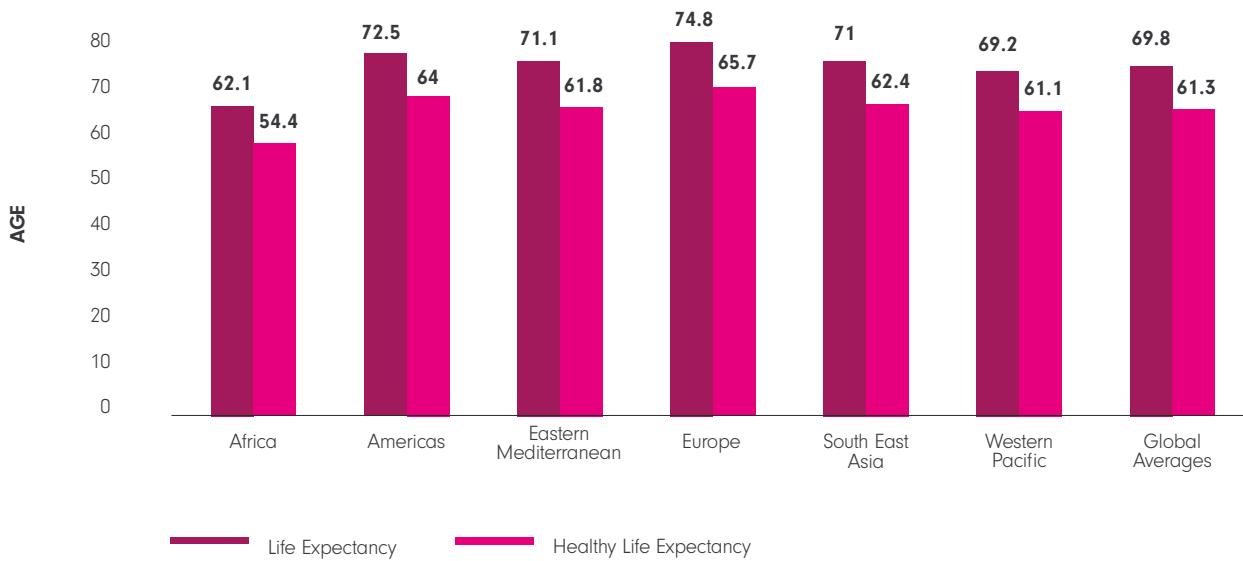
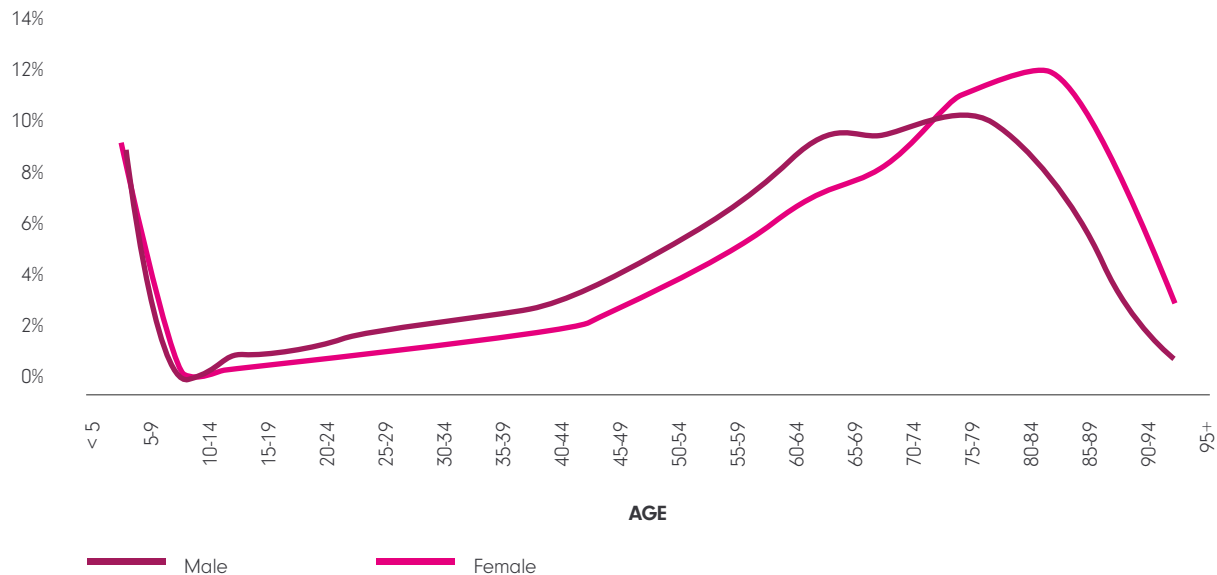


Figure 3 displays the percentage of total mortality of both sexes, distributed across the life-course. At first glance, this graph shows approximately nine percent of all male deaths occur during the first five years of life, and this percentage dramatically declines between the ages of five and nine.

The death rate then gradually increases through early and middle adulthood. This is consistent with the adoption of and engagement in health-risk behaviors discussed later in this report. Approximately 10 percent of all male deaths occur at the average male life expectancy of 68.9 years.

FIGURE 3. Mortality Across the Life Course, Globally, 2016

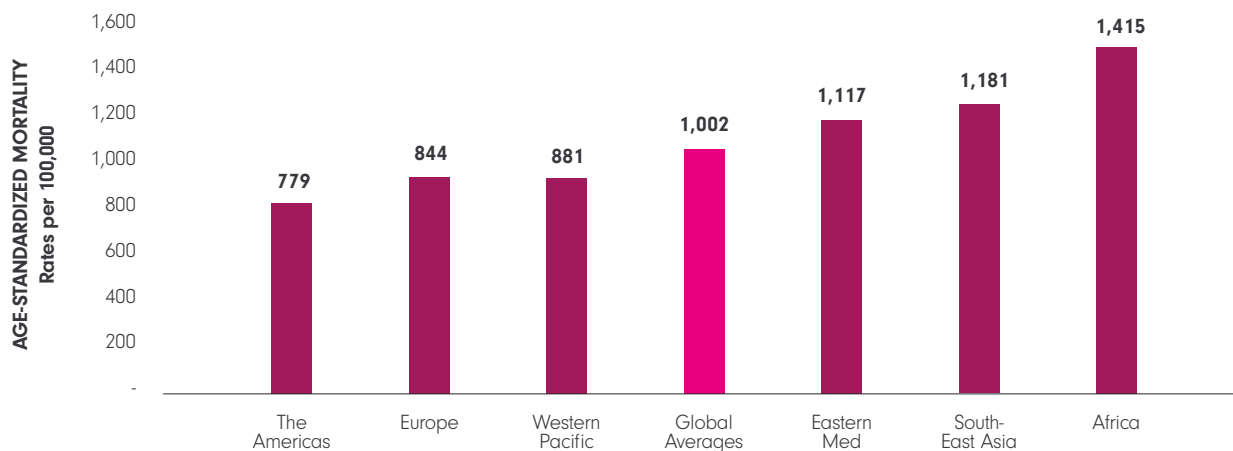


Where Are Men Dying?

The regional stratification of morbidity and mortality reveals more nuanced results.^{vii} Age-standardized rates of mortality show that men in the African region have the worst health in the world, and the South East Asia and Eastern Mediterranean regions are the second and third worst,

respectively. Regions with age-standardized mortality rates lower than the global average are Western Pacific, Europe and the Americas. Although not analyzed in this report, it is important to note that there are internal variations within regions. Stratification of country, according to World Bank income classifications, showed a clear positive relationship between higher income and better health indicators.

FIGURE 4. Male Age-Standardized Mortality Rates per 100,000, per Region, 2016



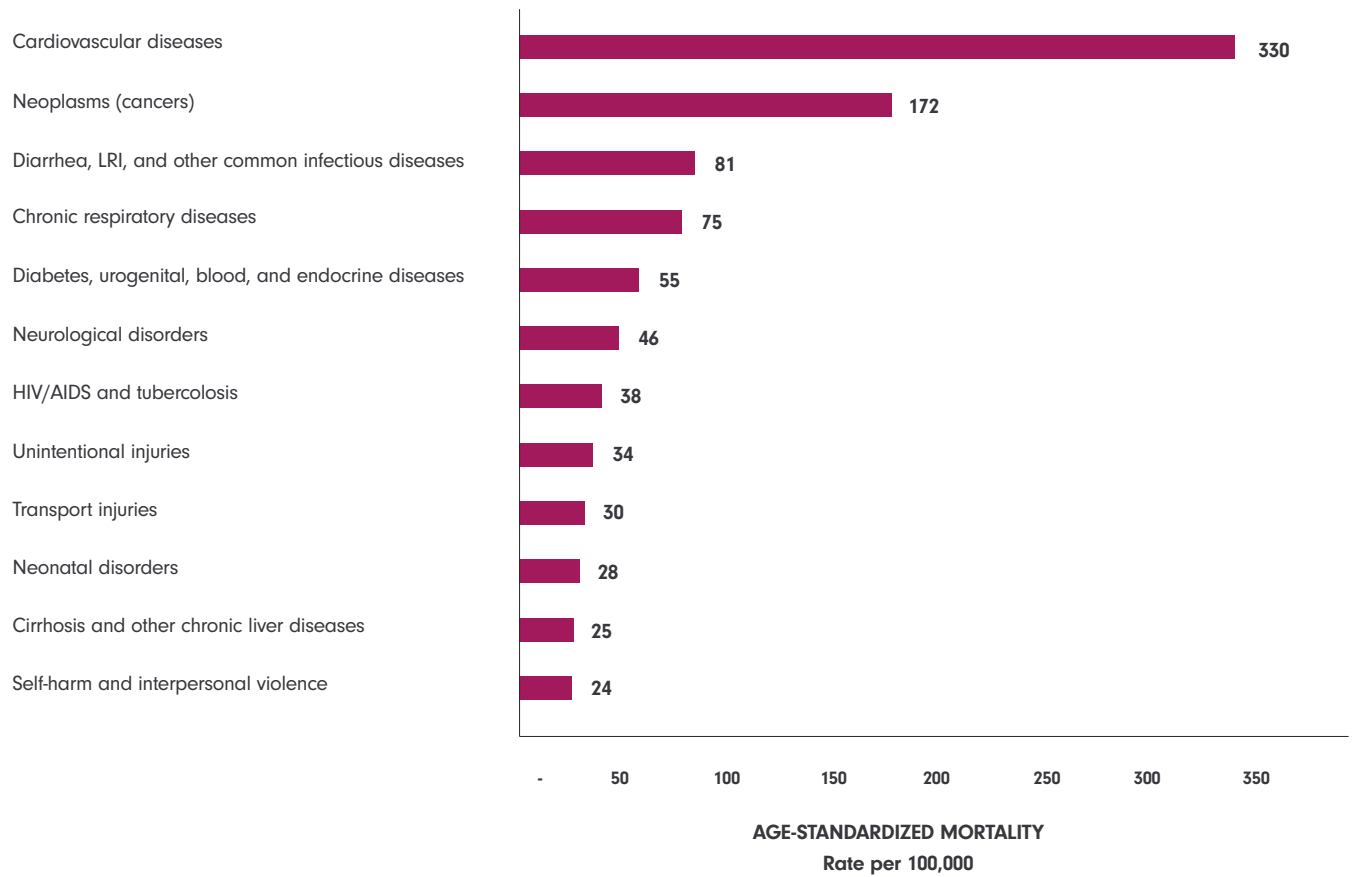
What Are Men Dying From?

The leading causes of death among males globally can be divided into three main categories: non-communicable diseases (NCDs), infectious diseases, and physical injuries. As shown in Figure 5, seven of the

twelve leading causes of death are NCDs, three types of physical injury, and two types of infectious disease. The leading cause of death is cardiovascular disease, followed by neoplasms (cancer). In the next section of the report, we analyze each cause of death individually, with regional and age disaggregation.

^{vii} Throughout this report, the authors use the World Health Organization (WHO) regions – including Africa, the Americas, the Eastern Mediterranean, South East Asia, the Western Pacific, and Europe. For a full list of countries and their regional designations, please see <http://www.who.int/about/regions/en/>.

FIGURE 5. Age-Standardized Rates of Death by Cause, among Males, Globally, 2016





THE COMPREHENSIVE METRIC: DALYS LOST

Disability-adjusted life years (DALYs) represent the sum of years of life lost (YLL) due to premature mortality in the population, and years lost due to disability (YLD) for people living with a health condition.⁷² Therefore, one DALY can be understood as one lost year of fully healthy life.

Years of Life Lost

Given that all males will die at some point, the crude mortality rate is not the most useful measure for assessing the full impact of a death. YLL captures the difference between age at death and age-adjusted life expectancy.^{viii}

Years Lost due to Disability

YLD measures the impact of impairment or disability associated with illness or injury, commonly referred to as morbidity. In Figure 6, there is an estimated 25 percent reduction in full health for that individual.

What Are the Leading Causes of DALYs?

Globally, the leading causes of DALYs closely parallel

those of crude mortality. However, as seen in Figure 7, the magnitudes of the specific burdens differ. Cardiovascular diseases (CVD), cancers, diarrhea, and lower respiratory infection (LRI) and other common infectious diseases remain at the top of the list, highlighting the immense burden on men of these four causes globally. At the same time, few causes of DALYs do not appear among the top mortality burdens: mental and substance use disorders, sensory impairments and skin diseases, and musculoskeletal disorders.

Which Regions Have the Highest Rates of DALYs?

The regional disaggregation of DALYs shows high concentrations in Africa, South East Asia, and the Eastern Mediterranean regions. As with crude mortality rates, Europe, the Americas and the Western Pacific regions all rank lower than the global average. Additionally, there is a clear correlation between lower World Bank income classification and poorer DALY outcomes.

viii Age-adjusted life expectancy is the expected remaining years of life, depending on how long a person has lived. For example, the age-adjusted life expectancy at age 0 for boys in eSwatini is 55 years; if an infant dies, he has lost 55 years of life. However, a 69-year-old man in eSwatini can expect to live to 81 years. Therefore, if this 69-year-old man dies, he loses 12 years of life, according to the YLL measure.

FIGURE 6. What Is a DALY and How Is It Measured?

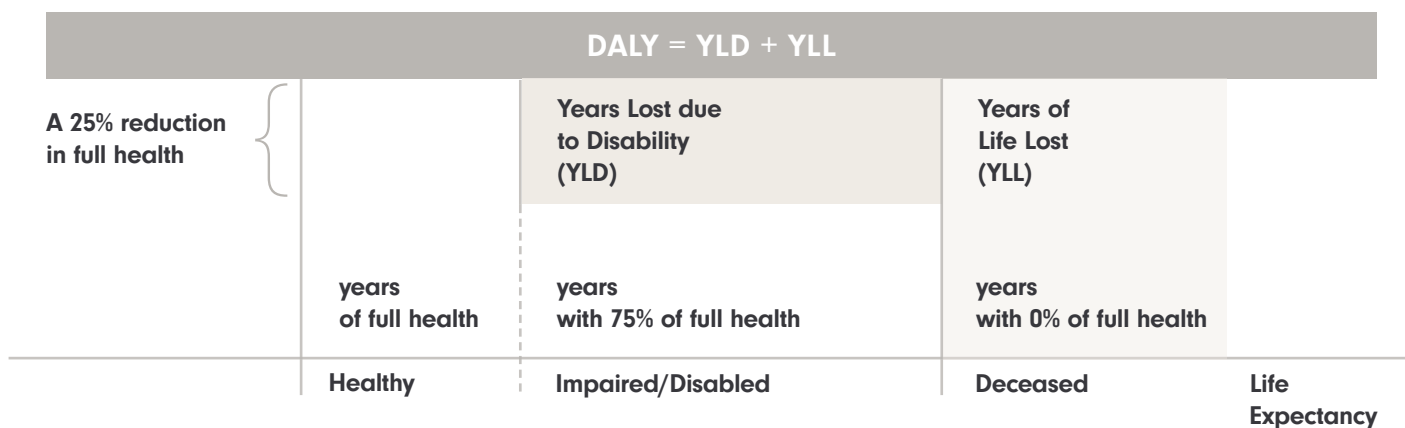


FIGURE 7. Global Age-Standardized Rates of DALYs by Cause, among Males, 2016

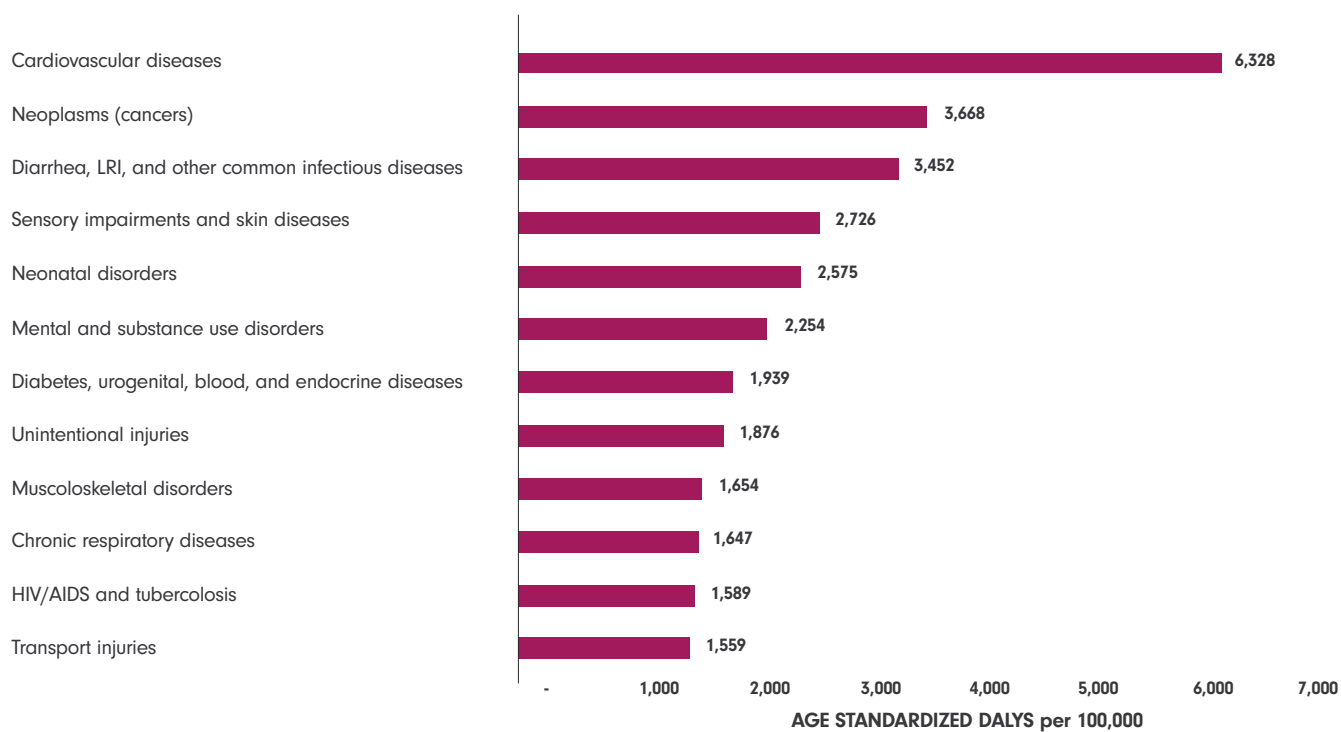
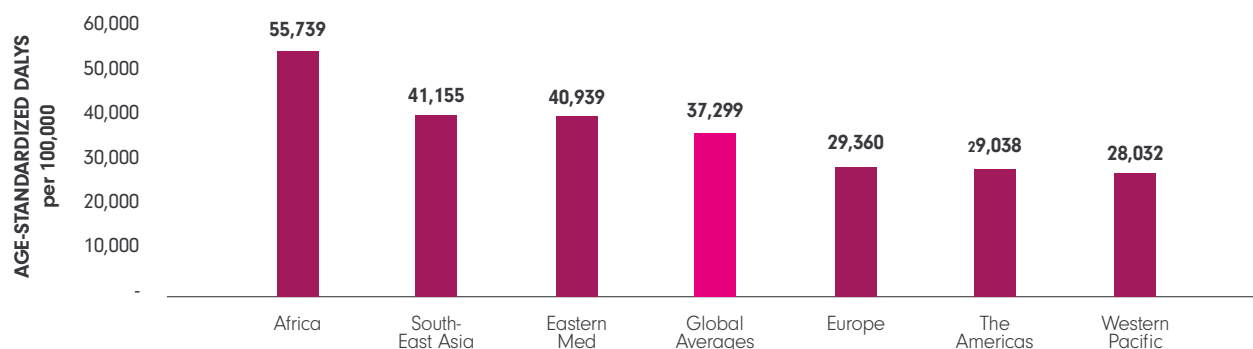


FIGURE 8. Male Age-Standardized DALY Rates per 100,000, per Region, 2016





A CLOSER LOOK AT THE LEADING CAUSES OF DEATHS AND DALYS

An analysis of the top 12 leading causes of DALYs and mortality among men highlights both regional and age differences, which are summarized below. A more in-depth regional distribution of disease burdens can be found in Annex 1. Table 1 on page 35 provides a ranking of these top 12 leading causes in terms of their contribution of the disease burden.

1 Cardiovascular Disease

Cardiovascular disease (CVD) – including ischemic heart disease, stroke, and hypertensive heart disease – is the leading cause of DALYs and mortality among men globally. This is largely due to an early initiation of, and sustained exposure to, behavioral risk factors, including poor diet, tobacco use, and alcohol consumption.^{73,74} In 2016, 330 per 100,000 males died from cardiovascular disease globally, translating to 30.9 percent of total male deaths. Furthermore, cardiovascular disease greatly compromises men’s functional

health, resulting in a total of 204,400,634 disability-adjusted life years (DALYs) in 2016. The regional stratification shows the highest age-standardized rates of DALYs and mortality in the Eastern Mediterranean, followed by South East Asia. There is a clear positive correlation between age and incidence of cardiovascular disease. According to Berry et al.⁷⁵, by the age of 45, men’s lifetime risk of developing CVD ranges between 27 and 42 percent. GBD data shows that the risk of developing cardiovascular disease increases significantly for men in the 50-to-69 and over-70 age groups; these men account for 90 percent of cardiovascular disease-related mortality.

2 Neoplasms (Cancers)

The most prevalent cancers among men globally are prostate; colorectal; tracheal, bronchus and lung; stomach; and bladder cancers. However, concentrations of specific cancers may differ by

region (Annex 1). The cancers with the highest mortality burden are tracheal, bronchus and lung; liver; stomach; colorectal; and prostate cancers. Tobacco use, poor diet, and alcohol and drug use are responsible for the majority of cancer cases globally. In 2016, globally, 172 per 100,000 males died from a cancer, accounting for 17.2 percent of total male deaths¹. The highest cancer mortality rates are found in the Western Pacific and Europe, followed by the Americas. Although less prevalent than the aforementioned cancers, testicular and penile cancers exclusively burden men. Like cardiovascular disease, cancer most burdens men over the age of 50.

3

Diarrhea, Lower-Respiratory, and Other Common Infectious Diseases

This category of diseases includes diarrheal diseases, intestinal infections, lower and upper respiratory infections, pneumonia, bronchitis, meningitis, encephalitis, diphtheria, whooping cough, tetanus, measles, and varicella (chickenpox). The most common risk factors associated with diarrhea, lower-respiratory and/or other common infectious diseases are poor water, sanitation, and hygiene. Other common risk factors are air pollution, malnutrition, and tobacco. In 2016, 81 out of 100,000 males died from one or a combination of these diseases, accounting for 8.2 percent of male deaths globally. The majority of cases are concentrated in two geographic regions, Africa and South East Asia. Although these diseases are commonly viewed as primarily affecting children, the 2016 GBD data shows about 60 percent of related deaths were among those older than age 15. This is not to minimize the effect these diseases have on younger boys, but rather to highlight the prevalence of these diseases throughout the life course. At the same time, in 2016, approximately 28 percent of all deaths of boys younger than five years of age were caused by diarrhea, lower-respiratory, and/or other common infectious diseases.

4

Chronic Respiratory Disease

This classification of infection includes chronic obstructive pulmonary disease, pneumoconiosis, asthma, interstitial lung disease, and other chronic respiratory infections. The main risk factors are tobacco use, air pollution, and occupational hazards (the latter primarily experienced by miners and factory workers). In 2016, 75 per 100,000 males died from chronic respiratory disease, accounting for 6.8 percent of men's deaths globally. There are regional disparities in prevalence of chronic respiratory disease, with high concentrations of cases in South East Asia and the Western Pacific. Due to the cumulative burden of exposure to the aforementioned risk factors, chronic respiratory diseases are more prevalent later in life. Indeed, 95 percent of cases were among males over age 50.

5

Diabetes, Urogenital, Blood, and Endocrine Diseases

Although the GBD data combines various diseases into this category, the cases among males are only diabetes and chronic kidney disease. The main risk factors for diabetes and chronic kidney disease generally fall into dietary and metabolic risk factors. In 2016, 55 per 100,000 males died from diabetes and chronic kidney disease, accounting for 5 percent of male deaths globally. The highest age-standardized rate of deaths per 100,000 male deaths is found in the Eastern Mediterranean region, followed closely by South East Asia. Diabetes, urogenital, blood, and endocrine diseases are consistently represented in the top five DALY burdens throughout the life course (from under-5 through over-70 age groups).

6

Neurological Disorders

This category of illness includes Alzheimer's disease and dementia, Parkinson's disease,

epilepsy and multiple sclerosis. Alzheimer's disease and dementia are the most prevalent of the neurological disorders listed. According to GBD data, risk factors for neurological disorders include alcohol use, high body-mass index, and tobacco use. In 2016, 46 per 100,000 males died from neurological disorders, accounting for 3.6 percent of the male deaths globally. Age-standardized rates of DALYs and mortality are relatively consistent across all six regions, with slightly higher rates in the Americas and Western Pacific regions. Due to their progressive nature, neurological disorders disproportionately affect the over-70 age group.

7 HIV/AIDS & Tuberculosis

Because of the high rate of co-infection, the GBD data set combines these two illnesses. Unsafe sex is responsible for the vast majority of HIV-related deaths, with alcohol and drug use increasing the risk of infection. Tuberculosis is often strongly correlated with alcohol, tobacco, and drug use, and high fasting plasma glucose. HIV and TB have a combined mortality rate of 38 per 100,000 males, accounting for 4.5 percent of male deaths globally. Africa bears a significant share of the burden, with HIV/AIDS and TB accounting for over 15 percent of total male deaths in the region. The majority of the deaths attributable to these diseases are of men over 50 years old. However, the highest DALYs rates per 100,000 are found among males aged 15 to 49.

8 Unintentional Injuries

This category includes falls, drowning, fire, poisonings, mechanical forces, accidental firearm discharge, animal contact, and other unintentional injuries. Risk factors include hazardous occupations, alcohol and drug use, and tobacco use. Thirty-four of 100,000 males died from unintended injuries, accounting for 3.8 percent of male deaths globally. The regional

distribution shows the greatest age-standardized deaths and DALYs from non-transport accidents per 100,000 males is in Africa and South East Asia¹. There is an uneven age distribution in this grouping of disease burden. The majority of deaths are in the over-70 age category, with 152 per 100,000 male deaths. The age category with the second highest prevalence is 50 to 69 years, with 42 per 100,000 male deaths. DALYs shows the highest rate of DALYs in the over-70 age group (3,341 per 100,000 males), followed by the under-5 age group (2,788 per 100,000 males).

9 Transport Injuries

Half of male transport-related deaths were occupational, and alcohol and drug use contributed to another large proportion. In 2016, 30 per 100,000 males died from transport injuries, accounting for 3.7 percent of male deaths globally. There is an elevated risk of transport injuries and deaths in the Eastern Mediterranean countries, followed by South East Asia and Africa. Approximately two-thirds of the reported deaths were among men aged 15 to 49 years; transport injuries are the third leading cause of death for that age cohort.

10 Neonatal Disorders

This category includes pre-term birth, encephalopathy, sepsis, and hemolytic disease. Malnutrition of the child was the only quantified risk factor in the 2016 GBD data. However, we know that access to medical care, literacy, socio-economic status, and other social determinants of health matter greatly. Twenty-eight per 100,000 males died from neonatal disorders, accounting for 3.3 percent of male deaths globally. This group of disorders most significantly affects Africa and the Eastern Mediterranean regions, where maternal and child health services are less accessible. In terms of mortality, neonatal disorders exclusively affect children under 5 years of age; however, the morbidity associated

with neonatal disorders, including stunted growth and limited cognitive function, is seen throughout the life course.

11 Cirrhosis and Other Chronic Liver Diseases

The two types of cirrhosis that burden males are cirrhosis caused by alcohol and cirrhosis caused by hepatitis C. According to the GBD data, nearly 60 percent of cirrhosis deaths are associated with alcohol consumption and the remaining 40 percent are drug-use related. Twenty-five per 100,000 males died from cirrhosis in 2016, accounting for 2.9 percent of males deaths globally. The regional distribution shows the Eastern Mediterranean region with the highest age-standardized mortality rate. However, Africa and South East Asia have the highest age-

standardized DALYs rates per 100,000 males. Due to its cumulative and chronic nature, cirrhosis and other chronic liver diseases disproportionately burden men over the age of 50.

12 Self-Harm and Interpersonal Violence

The primary risk factors associated with these categories are alcohol use, drug use, and child abuse. Twenty-four per 100,000 males died from self-harm or interpersonal violence, accounting for 2.9 percent of male deaths globally. The regional distribution of self-harm and interpersonal violence is heavily concentrated in the Americas and Europe. For self-harm and interpersonal violence, there is an elevated DALYs rate among males aged 15 to 49 years.

TABLE 1. Ranking of Men’s Disease Burden by Illness or Injury

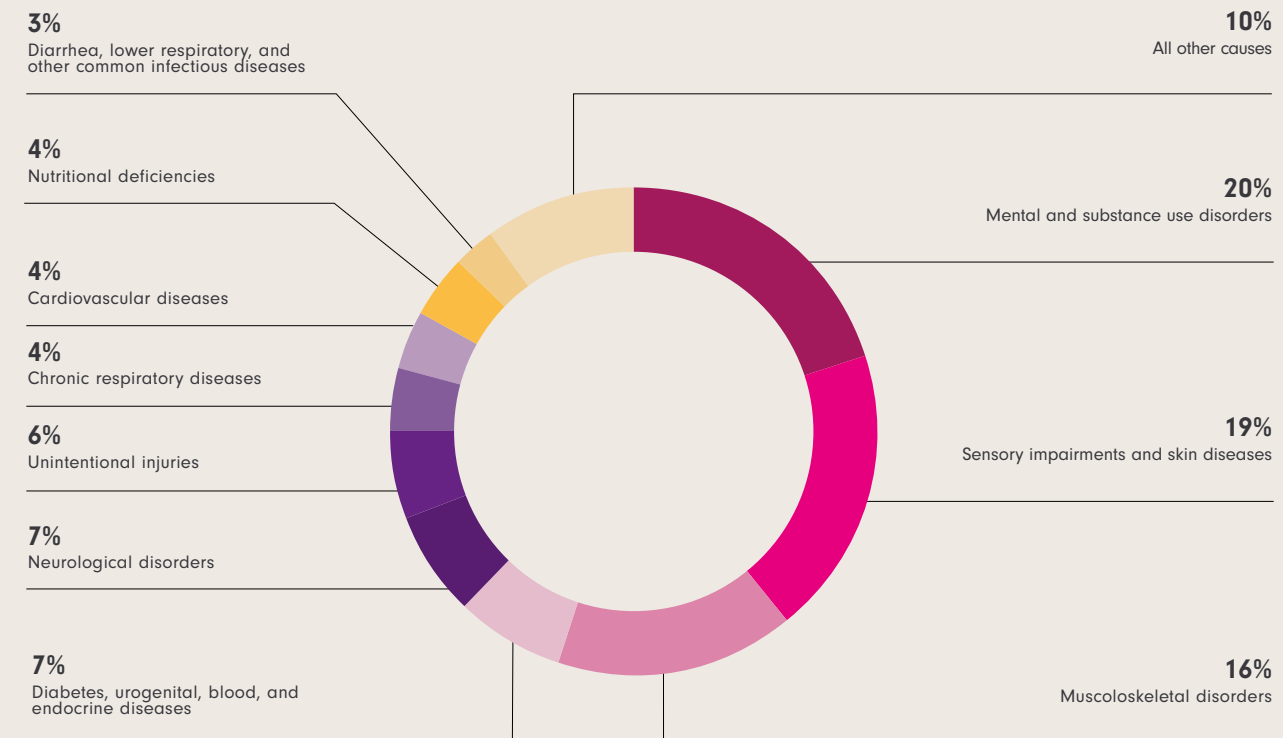
Illness or Injury	Mortality Ranking	DALYs Ranking
Cardiovascular Disease	1	1
Neoplasms (Cancers)	2	2
Diarrhea, Lower-Respiratory and Other Common Infectious Diseases	3	3
Chronic Respiratory Disease	4	10
Diabetes, Urogenital, Blood, and Endocrine Diseases	5	7
Neurological Disorders	6	13
HIV/AIDS & Tuberculosis	7	11
Unintentional Injuries	8	8
Transport Injuries	9	12
Neonatal Disorders	10	5
Cirrhosis and Other Chronic Liver Diseases	11	16
Self-Harm & Interpersonal Violence	12	14

SPOTLIGHT

Years Lost due to Disability

The global picture of morbidity is slightly different from that for mortality. Although there are some illnesses and injuries that are leading causes of both morbidity and mortality, about half are not. The three leading causes of years lost due to disability (YLD) are mental and substance use disorders, sensory impairments and skin diseases, and musculoskeletal disorders, together accounting for 45 percent of all YLDs among men globally.

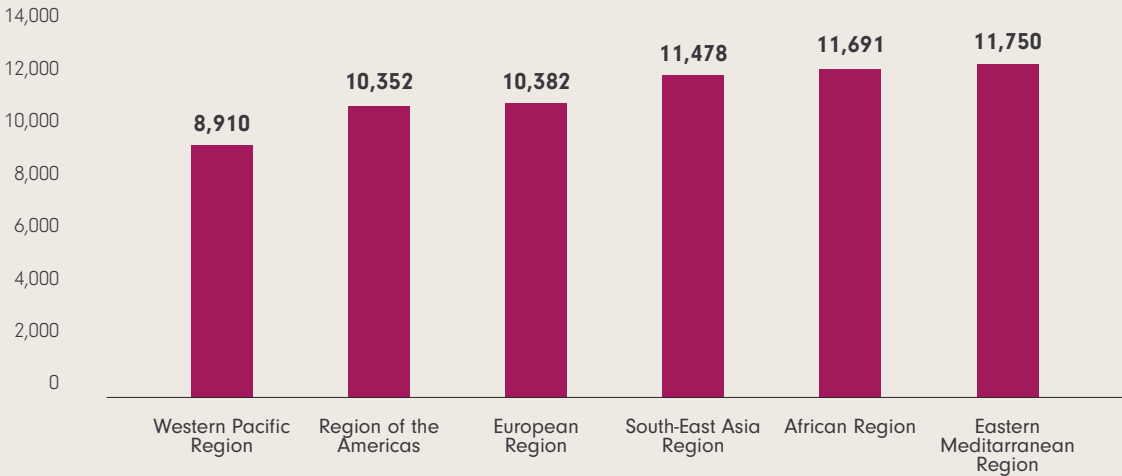
FIGURE 9. Leading Causes of Global Male YLDs by Percentage of Cause, 2016



YLD per Region

The regionally specific age-standardized rates of morbidity reveal something striking: a roughly even distribution of YLDs among men globally. This is markedly different from mortality rates, with those of Africa, South East Asia, and the Eastern Mediterranean regions disproportionately high. It is clear that, while men across the world are experiencing similar rates of morbidity over their lifetime, an array of social determinants of health mean that men in Europe, the Americas, and the Western Pacific regions are better equipped to survive illness or injury than are their male counterparts in other regions.

FIGURE 10. Male Age-Standardized YLD Rate per 100,000, per Region, 2016

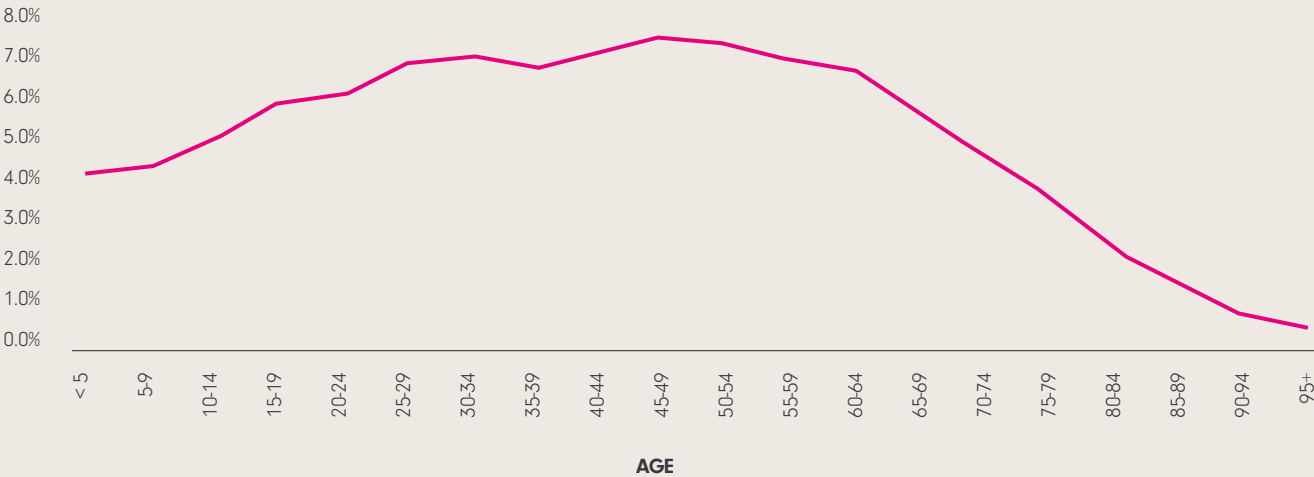


When do Men Experience Disability?

Morbidity data from the GBD study show a notable elevation in the percentage of YLDs experienced during adolescence and early adulthood. Around age 30, the percentage plateaus and remains consistent through mid-adulthood. Finally, towards the end of life, men are less likely to accrue disability and more likely to die from illness or injury.

This pattern of disease burden supports theories of clustering risk factors, co-morbidity, and the cumulative effect of risk behaviors engaged in over the life course. Adolescence and young adulthood are critical times for the development of masculine identity and the initiation of risk behaviors that can affect health later in life.^{76,77} These risk behaviors may include alcohol and tobacco use, occupational hazards, and poor diet, among others discussed later in the report. It stands to reason, therefore, that early intervention has the potential to yield significant long-term health benefits and change lives.

FIGURE 11. Percent of YLD Across the Male Life Course, Globally, 2016





RISK FACTORS FOR MALE MORBIDITY AND MORTALITY

The GBD data identifies risk factors to which specific disease burdens may be attributed. These factors are separated into three categories – metabolic, behavioral, and environmental. Our analysis identified six behavioral risk factors that, according to the GBD data, contribute to a significant proportion of male morbidity and mortality globally – *poor diet, tobacco use, alcohol use, drug use, occupational hazards, and unsafe sex*. This combination of risk behaviors account for 52 percent of all deaths and over one-third of all DALYs among men globally. Although not quantified by the GBD data, we choose to add limited health-seeking behavior as the seventh risk behavior in the report. In our analysis, we argue that limited health-seeking behavior compounds all causes of morbidity and mortality.

Table 2 shows the degree of association between each risk behavior (columns) and the leading causes of morbidity and mortality (rows). The dark beige

shading represents a very strong association between a risk behavior and a cause. The medium pink shading represents a moderate association, while the lightest pink signifies a slight association. The boxes that are not shaded indicate no connection between the risk behavior and cause, according to the GBD data set.

While the table above is a simplified representation of the complex relationships between these risk behaviors and illness or injury, it also conveys that each risk factor contributes to multiple diseases, and each disease may be caused or compounded by a combination of risk behaviors. An individual's risk of illness and injury depends on the concurrency and intensity of these risk behaviors, along with other biological and social factors. As previously noted, there are strong connections between the seven risk behaviors (the six represented in the table above, plus limited health-seeking) and masculine norms, to which this report turns next.

TABLE 2. Prevalent Risk Behaviors in Top 12 Cause of Morbidity and Mortality among Men (as per GBD data)

	Poor Diet	Tobacco Use	Alcohol Use	Drug Use	Occupational Hazards	Unsafe Sex
Cardiovascular Disease	Dark Pink	Medium Pink	Light Pink	White	Light Pink	White
Neoplasms (Cancers)	Light Pink	Dark Pink	Medium Pink	Light Pink	Dark Pink	White
Diarrhea, Lower-Respiratory Infection	Medium Pink	Medium Pink	Light Pink	White	Light Pink	White
Chronic Respiratory Disease	White	Dark Pink	White	White	Medium Pink	White
Diabetes	Dark Pink	Light Pink	Medium Pink	Medium Pink	Light Pink	White
HIV/AIDS & TB	White	Light Pink	Medium Pink	Medium Pink	White	Dark Pink
Unintentional Injuries	White	Light Pink	Dark Pink	Dark Pink	Dark Pink	White
Transport Injuries	White	Light Pink	Dark Pink	White	Dark Pink	White
Neurological Disorders	Light Pink	Light Pink	Medium Pink	White	White	White
Neonatal Disorders	Dark Pink	White	White	White	White	White
Self-Harm & Interpersonal Violence	White	White	Dark Pink	Light Pink	White	White
Cirrhosis and Other Chronic Liver Diseases	White	White	Dark Pink	Light Pink	White	White
Number of Illnesses Affected by Behavior	6/12	9/12	10/12	5/12	7/12	1/12

Table 2 shows the degree of association between each risk behavior (columns) and the leading causes of morbidity and mortality (rows). The dark pink shading represents a very strong association between a risk behavior and a cause. The medium pink shading

represents a moderate association, while the lightest pink signifies a slight association. The boxes that are not shaded indicate no connection between the risk behavior and cause, according to the GBD data set.



MAKING THE CONNECTIONS

2.

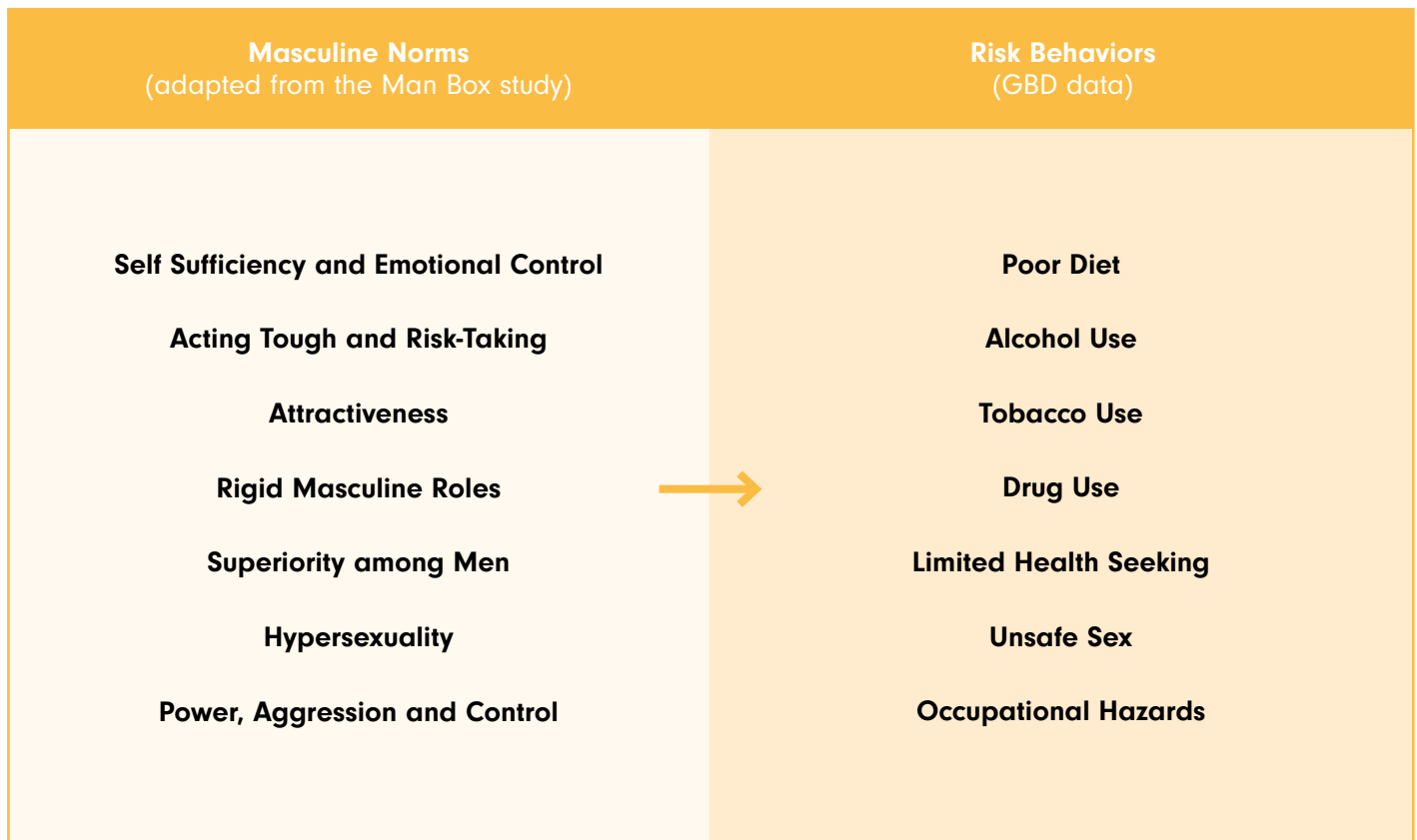
Masculine Norms, Risk Behaviors, and Health Outcomes

The greatest drivers of men’s poor health are behavioral and social, and these drivers, in turn, are directly affected by salient norms around masculinity. This section focuses on masculine norms – the rules and expectations that are associated with acceptable manhood in a given culture. As previously noted, this report looks at seven salient masculine norms adapted from Promundo’s recent Man Box publication.⁷⁸

In discussing masculinities, it is important to recognize

the plurality, contextual factors, and fluid nature of gender norms. Some men subscribe to these norms; some do not. Some men adhere to these norms in specific contexts or moments in their lives and not in others. Around the world, many men regularly engage in health-promoting and health-seeking behaviors, just as some women engage in risky behaviors. Norms are fluid, and the ways in which they are internalized by individual men are equally fluid. While some masculine norms are negative or have negative side effects, others can be positive and helpful. Nonetheless, rigorous research from multiple settings has affirmed that specific life conditions interact with masculine norms to shape men’s health behaviors and explain many of their health outcomes.

FIGURE 12. Making the Connections between Masculine Norms and Risk Behaviors



POOR DIET AND MASCULINITIES

Burden of Disease on Men

Poor diet accounts for 19 percent of all male deaths globally and is the most influential risk factor in men's health.⁷⁹⁻⁸² A poor diet can mean an excess of red or processed meat and fatty foods and a general lack of fruits, vegetables, and micronutrients.⁸³⁻⁸⁴ Poor diet is a significant contributor to 6 of the 12 leading causes of DALYs and mortality: cardiovascular disease, cancer, diarrhea, diabetes, neurological disorders, and neonatal disorders.⁸⁵⁻⁸⁷ Poor diet is a primary risk factor for excess weight and obesity, which burden more than

50 percent of males globally.⁸⁸ Global trends show a steady increase in unhealthy eating habits in the past two decades, with a parallel rise in the incidence of non-communicable diseases.⁸⁹ For boys under 5 years of age, malnutrition and growth failure are the too-common consequences of poor diet.

However, the majority of morbidity and mortality associated with poor diet is concentrated among males over the age of 50.⁹⁰ The highest rates of attributable deaths are in the Eastern Mediterranean^{ix}, followed by South East Asia.⁹¹

TABLE 3. Poor Diet Related Disease Burden among Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
The Americas	128	16.5%	2,717	9.5%
Africa	161	6.5%	3,390	2.8%
Western Pacific	199	23.4%	4,061	15.7%
Europe	199	24.4%	4,079	15.6%
SE Asia	220	18.6%	4,935	10.0%
Eastern Med	286	21.7%	6,044	10.6%
Global	196	19.0%	4,151	10.6%

ix The Eastern Mediterranean WHO region includes Afghanistan, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestine, Oman, Pakistan, Qatar, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

Diet-related diseases have a substantial effect on the physical and mental well-being of men. Emslie and Hunt⁹² conducted a qualitative analysis of cardiovascular disease patients and highlight their loss of physical strength, emotional health, financial security, independence, and social networks. Due to pain and loss of energy, men often spend less time with friends and family.⁹³

Although diet is often considered to be an individual choice, there are environmental and social factors at play, such as household structure, culture, tradition, social pressure, ethnicity, economic context, and gender. Social scientists have noted vast gender disparities in perceptions around food and eating habits across the world.⁹⁴⁻⁹⁸ These observations have resulted in a body of literature around the link between masculine norms and specific dietary habits.

Connections to Masculine Norms

In general, women have healthier diets than men do.^{99,100} The sex differences of food consumption are mainly quantity and content of specific foods. A study in the US found that men consume around 20 percent more calories than women do.¹⁰¹ Research conducted in various countries has found that women are more likely to eat vegetables and fruit and less likely to eat meat than men are.¹⁰²⁻¹⁰⁷ Additionally, women generally consume less food per sitting than men so, and are more likely to restrain their eating (e.g., because of dieting, eating disorders).^{108,109}

Eating has become gendered such that certain foods, portion sizes, or ways of cooking are often regarded as more feminine or more masculine. Researchers assert that “masculinity is presented through what is consumed, whereas femininity is presented through what is not consumed.”¹¹⁰ In Australia, Drummond and Drummond¹¹¹ found an early adoption of gendered food practices among older primary school boys. Throughout the life course, men have the opportunity to reaffirm their masculine identity in their food practices.¹¹²

Masculine norms also mean that men often relegate nutrition decisions to female partners or female family

members, and that men tend to view food as functional, valuing quantity and availability over nutrition.^{113,114} Levi, Chan, and Pence¹¹⁵ find a lower level of involvement and interest in food decisions in men than women. A participant in a study of college students in the US commented, “I don’t care what I eat as long as there’s a lot of it and it’s cheap.”¹¹⁶ The emphasis on functionality encourages some men to eat large portions of usually fatty, meat-heavy dishes that will satiate their appetites.

Studies have found that males and females rated larger portion sizes as more masculine.¹¹⁷⁻¹²¹ Researchers have also observed higher rates of meat consumption in males,¹²²⁻¹²⁴ and that even when men are choosing between two meat dishes, they are more likely to choose the fattier one.¹²⁵ Lastly, studies have found that food presentation and elegant plating tend to be regarded as more feminine.^{126,127}

The literature finds links between food consumption and various masculine norms, including physical strength, rationality, sacrifice, risk-taking, independence, self-discipline, and having a sense of control and power.¹²⁸⁻¹³⁷ The most common masculine norm associated with food is physical strength.

For many men, muscular strength is of paramount importance if they are to excel in “masculine” activities, such as manual labor and sports.^{138,139} Eating meat is commonly considered necessary in order to achieve this ideal physical condition.^{140,141}

In many societies around the world, meat became associated with masculinity in early history, an association that persists, specifically in the context of strength and virility.¹⁴² Nath¹⁴³ stresses the importance of meat as a symbol of manhood, strength, and empowerment. Researchers have found the integration of meat into multiple levels of men’s lives.¹⁴⁴ At the societal level, men hold the majority of jobs in the meat industry; at the community level, men are usually the designated grill masters for barbecues; and at the family level, the man’s role at the dinner table is to carve the meat.^{145,146} Studies have found that the more meat a man consumes, the more masculine he is perceived to be by others.¹⁴⁷⁻¹⁴⁹

While exploring self-identity and meat consumption, Jansen¹⁵⁰ found that men who strongly identified with hegemonic masculine norms were more attached to eating meat and less willing to give it up.

Similarly, in an analysis of Dutch, Chinese, and Turkish men, a study found a strong association between hegemonic views of masculinity and meat consumption¹⁵¹. Finnish carpenters were found to believe strongly that, because of their labor-intensive occupation, they needed to eat more meat and fewer vegetables.¹⁵² In Japan, Kimura et al.¹⁵³ conducted an experiment in which it was found that four out of six courses associated with men included meat, while none of the six associated with women included it. In Australia, research found similar connections to meat across all ethnic and socio-economic strata of men.¹⁵⁴

According to the hegemonic norms, vegetarian and vegan men are perceived to be actively challenging or not living up to ideals of masculinity.¹⁵⁵ Vegetarian men have reported negative experiences with regard to public perceptions of their decision not to eat meat.¹⁵⁶ Quantitative studies have shown mixed results on the association between vegetarianism and femininity.¹⁵⁷⁻¹⁶⁰ Ruby and Heine¹⁶¹ found males' perceptions of vegetarianism to be linked with connotations of weakness and more feminine qualities. Other studies found no association between vegetarianism and femininity,^{162,163} but no study has found a positive association between vegetarianism and masculinity. Thomas nuanced her analysis by looking at the different ways in which vegetarians and vegans are perceived vis a vis femininity and masculinity. Although the participants did not rate vegetarianism as particularly feminine, they tended to characterize veganism as less masculine. Furthermore, vegans who chose the lifestyle because of personal beliefs were perceived to be less masculine than those who were vegan for health reasons.¹⁶⁴

In a qualitative study in the US, Mycek¹⁶⁵ identified masculine norms at play in men's decisions to be vegetarian or vegan. There was a tendency among the male participants to explain their vegetarianism in rational and logical terms, at the same time distancing

themselves from emotional arguments.¹⁶⁶ Another theme emerged whereby the men supported their dietary choice with research and reference to experts – demonstrating the intentional and evidence-based nature of their decision. One of the participants chose to become a vegetarian because of his profession as an environmentalist. In an effort to earn respect from others for his decision, he employed a rational explanation.¹⁶⁷ The author argues that earning respect and jockeying for positional power is a salient masculine norm.¹⁶⁸

Men often use their eating habits to express a sense of independence and being in control. A participant in one study remarked, "I eat what I want, when I want."¹⁶⁹ In Canada, research found that men use the ability to cook to express self-sufficiency and independence.¹⁷⁰ Researchers have also highlighted men's use of food to reaffirm their adventurous and risk-taking masculine identity. For example, some men tout or show off their liking of extra spicy food or the kind of (often "exotic") foods that people may find strange.¹⁷¹ In addition, Holt and Thompson¹⁷² identify a sense of sacrifice and a "selfless hero" identity in relation to diet – research has found that a man's becoming a father or husband can dramatically shift his diet,¹⁷³ with some men reporting that they sacrificed their bad diet to appease the family's needs and desires.¹⁷⁴ Such sacrifice can affirm a masculine identity for men for whom "doing for others is the key to respectability and the moral way to prove one's manhood."¹⁷⁵

The majority of research finds that men tend to view dieting and food restriction, and worrying about nutrition in general, as more feminine, and muscularity and deliberately putting on weight as more masculine.¹⁷⁶⁻¹⁷⁸ In one study, certain styles of dieting and food restriction were linked to masculine norms – denoting self-control, self-discipline, and stamina.¹⁷⁹ Blashill's meta-analysis¹⁸⁰ of studies relating to muscular dissatisfaction, eating pathology, and gender roles finds a close association between masculine norms and pursuit of muscular strength. These norms include competitiveness, restricted emotions, violence, domination of women, and the pursuit of power and status.¹⁸¹

Structural Influences on Men's Nutritional Preferences

Media and advertisements perpetuate gender stereotypes associated with food.¹⁸²⁻¹⁸⁵ Men are often shown cooking meat, alone or with a group of men around a grill.¹⁸⁶ In Buerkle's¹⁸⁷ analysis of fast food commercials, he finds messaging that "suggests that by enjoying hamburgers, men can seize a supposedly stable component to masculinity, their natural desire for animal flesh." Mycek¹⁸⁸ observes gender differences in the ways two frozen meals, Hungry-Man and Lean Cuisine, are marketed – enacting masculine and feminine food-related stereotypes, respectively. Sports advertising and promotion, especially that featuring football players, perpetuates the association of masculinity with voracious appetites and meat.¹⁸⁹ At the same time, research finds a disconnect between public perception of athletes' diets and the reality.¹⁹⁰

In a content analysis of *Men's Health* magazine, Stibbe¹⁹¹ found strong associations between positive images of masculinities and "muscle-building images of meat," while vegetable consumption were depicted as effeminate. Moreover, there was no mention of the negative health impacts of red meat consumption, even in articles specifically about heart disease, cancer, or diabetes.¹⁹²

Impact of Men's Nutritional Preferences on other Men, Women, Children and Societies

Studies have found a spillover effect of men's unhealthy eating habits to their partners and children.¹⁹³⁻¹⁹⁵ The social environment and feeding patterns of children are almost exclusively controlled by their parents. Parents' poor dietary habits are often inherited by children and continued later in life, thus creating a generational cycle of health risks.¹⁹⁶ Additionally, research suggests that spouses tend to engage in similar eating behaviors.¹⁹⁷ Unfortunately, research on the impact of men's poor diet on the well-being of women, children, and society is limited.

The relationship between food and gender often affects the distribution of nourishment at the family level. In many countries around the world, social norms dictate that men be served more food and that they eat first.^{198,199} Studies in these countries find that men and/or children get the most food and that women feel they are fulfilling their duty in feeding their husband and children first. With regard to sons and daughters, however, it is likewise clear that sons eat first and eat most. These gender dynamics greatly affect the relative portion sizes and nutritional value of the food that men and women, boys and girls, consume.²⁰⁰

TOBACCO USE AND MASCULINITIES

Burden of Disease on Men

Of 100,000 males globally, 173 died from smoking-related illness in 2016.²⁰¹ It is the primary contributor to preventable death in the US and many other countries, killing one-third to one-half of lifetime male users.²⁰² On average, tobacco users die 15 years earlier than the national average.²⁰³ According to some estimates, tobacco use is expected to result in 80 million premature deaths among those Indian men who are now in the 0-to-34 age group.²⁰⁴ Smoking affects 9 of the 12 leading causes of DALYs and mortality among men – cardiovascular disease, cancer, diarrhea/LRI, chronic respiratory disease, diabetes, TB, transport injuries,

and unintentional injuries.²⁰⁵ The regions with the most smoking-related deaths are the Western Pacific and South East Asia.²⁰⁶ Older males are disproportionately affected by smoking, with the highest DALYs and mortality in the over-70 age group.²⁰⁷ The Global Adult Tobacco Survey analyzed data from a diverse sample of 22 countries and found the average age of tobacco-use initiation to be 17.4 years.²⁰⁸ However, the WHO cross-national study on Health Behavior in School-aged Children found that 22 percent of 15-year-olds reported first smoking at the age of 13 or younger, suggesting a high rate of tobacco-use initiation during adolescence.²⁰⁹ Morbidity and mortality rates are highest among men who initiate tobacco use early and continue use throughout the life course.²¹⁰

TABLE 4. Tobacco Use Related Disease Burden among Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Africa	105	4.9%	2,633	2.5%
The Americas	114	14.8%	2,507	8.7%
Eastern Med	175	14.4%	4,323	8.0%
Europe	178	21.9%	4,319	16.4%
SE Asia	187	15.7%	4,493	9.9%
Western Pacific	203	23.9%	4,201	16.1%
Global	173	17.6%	3,950	10.1%

Men lead women in tobacco use across all regions of the world.²¹¹ These sex differences are most visible in Asia, where males' smoking rates are up to 20 times those of females.²¹² Evidence suggests the greatest predictor of tobacco use is being a man.²¹³ A growing body of literature explores this sex-linked disparity through an analysis of gender and masculine norms.

Connections to Masculine Norms

For most of the 19th and 20th centuries, the vast majority of smokers were male, and tobacco use became socially recognized and accepted as a masculine behavior, particularly practiced in public spaces where men socialized.^{214,215} Relatedly, women who smoked were considered to be less respectable, or even "mannish." As time passed, advertisements, literature, and social norms solidified this connection between tobacco and male identity, as discussed further below.^{216,217}

The masculine norms that are most commonly associated with smoking are risk-taking, capacity for controlled and responsible consumption, independence, physical resilience to harmful substances, self-control, rationality, sexual virility, financial success, and bravery.²¹⁸⁻²²¹ In addition to masculine messaging, smoking is consistently portrayed with images of social belonging and popularity among male peer groups.^{222,223} In Indonesia, Morrow and Barraclough²²⁴ identified "smoking as a means to uphold traditional values while simultaneously emphasizing modernity and globalization." In other words, with tobacco use, boys and young men reaffirm their gender identity.²²⁵

Both quantitative and qualitative research has established a relationship between hegemonic masculine norms and smoking.²²⁶⁻²²⁹ One study found a 27 percent increase in the likelihood of being a smoker for each unit increase in score on the masculinity scale.²³⁰ Pachankis and Westmaas²³¹ conducted a study with young males, looking at the link between social conformity and smoking in the US. They found a prevalent desire to conform to male gender-role stereotypes and an increased consciousness of one's own masculinity to be strong predictors of tobacco use.²³² Qualitative studies

have highlighted the social and cultural significance of smoking among males. In Indonesia, young boys around the age of 10 or 12 are often introduced to cigarettes during the traditional religious ritual of circumcision.²³³ The cultural significance of this event reinforces the masculine connotations of cigarettes and further normalizes smoking among males.²³⁴ Young males in this study expressed that "if we don't follow our peers and smoke, they will call us feminine."²³⁵ This finding is consistent with other qualitative research conducted globally in which themes of social pressure and "fitting in" have been found.²³⁶⁻²³⁷

Structural Influences on Men's Tobacco Use

It has long been recognized that the tobacco industry exerts political influence and strategic marketing techniques to encourage men and boys to smoke. Around the world, tobacco companies have succeeded in portraying smoking as a culturally appropriate, even desirable, behavior.²³⁸ For example, in the US context, tobacco companies paint smoking as an individualistic expression of self-reliance and freedom.²³⁹ In more collectivist societies, they portray smoking as an activity that brings men together and builds social cohesion and relationships.²⁴⁰⁻²⁴¹ In the US, advertisements such as those featuring the iconic Marlboro Man celebrated tobacco smoking as emblematic of rugged masculinity.²⁴² Camel, too, leveraged preexisting notions of masculinity and rugged individualism with images of a burly, solitary adventurer and the slogan "Where a Man Belongs."²⁴³ Winston's "America's Best" ads featured muscular young men working tough, dangerous jobs. Other companies included picture cards or baseball cards in cigarette packets to appeal to boys and their burgeoning masculine identity.²⁴⁴

Hegemonic masculine norms interact with other social norms in patterns of smoking behavior across other demographics. For example, lesbian, gay, and bisexual individuals in the US use tobacco at a rate twice the national average.^{245,246} Smoking is more prevalent in certain regions and male-dominated spaces in the US. And studies have found greater rates of tobacco use among former military personnel.^{247,248} In terms of global disparities, Asia is most heavily burdened by

tobacco use.²⁴⁹ More broadly, the developing world is disproportionately affected, with 50 percent of its men smoking, compared with 35 percent of men in developed countries.²⁵⁰ There is a pronounced concentration of tobacco use among low-income, poorly educated men in nearly all countries.²⁵¹

Impact of Men's Tobacco Use on Other Men, Women, Children, and Societies

A man's tobacco use greatly affects his family's health and well-being. Women and children who live with male smokers are more likely to suffer from acute and chronic illnesses.^{252,253} Additionally, secondhand smoke from a father can negatively impact a pregnancy.^{254,255} Studies have found greater incidence of low birth weight, sudden infant death syndrome, acute lower-respiratory infections, asthma exacerbation, chronic respiratory infections, and middle ear infections among newborns who were exposed to secondhand smoke.^{256,257} Secondhand smoke has been associated with adverse cognitive functioning

and ADHD, decreased pulmonary function, and asthma induction in children.²⁵⁸ According to the US Surgeon General, living with a smoker increases a nonsmoker's risk of developing lung cancer by 20 to 30 percent.²⁵⁹ Many campaigns have focused on tobacco cessation for mothers, but little has been done to reduce men's smoking habits during pregnancy and early childhood.^{260,261}

The financial strain on a family from the frequent purchase of tobacco products, and subsequent tobacco-related illnesses, can often force families into poverty.²⁶² Women and children bear the financial burden of men's illness and death from tobacco use.²⁶³ In China, an average of 15.4 percent of monthly income was spent on tobacco products in 2004, resulting in the impoverishment of over 50 million people.²⁶⁴ In Bangladesh, men typically spent 18 times more on cigarettes than on health, and 20 times more than on education.²⁶⁵ In households with smokers, the family's nutrition and children's educational attainment suffer, which can have grave future implications for society.²⁶⁶

ALCOHOL USE AND MASCULINITIES

Burden of Disease on Men

Alcohol use is the risk behavior that contributes to the most causes of male DALYs and mortality – 10 of 12.²⁶⁷ Alcohol use can be a factor in cardiovascular disease, cancer, diarrhea/LRI, chronic respiratory disease, diabetes, HIV/TB, transport injuries, liver cirrhosis, unintentional injuries, self-harm/violence, and mental disorders.^{268,269} Older men bear the largest share of the disease burden associated

with alcohol use. Geographically, Europe and Africa have the highest age-standardized male death and DALY rates attributable to alcohol use.²⁷⁰ Best estimates for the average age of initiation of alcohol use ranges between 13 and 20 years, depending on sample sizes, geographic locations, and other criteria.²⁷¹⁻²⁷³ Like other risk behaviors, alcohol use is often initiated in adolescence and early adulthood and is likely to continue throughout the life course.²⁷⁴

TABLE 5. Alcohol Use Related Disease Burden among Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Eastern Med	9	.9%	375	.9%
SE Asia	48	5%	1,673	4.3%
The Americas	54	7.5%	2,290	8.3%
Western Pacific	78	10.1%	2,275	9.1%
Africa	84	5%	2,834	3.4%
Europe	104	12.3%	3,544	12.5%
Global	69	7.5%	2,244	6.2%

Connections to Masculine Norms

Across samples from 35 countries around the world, Wilsnack et al.²⁷⁵ found that men were consistently more likely than women to consume alcohol. Additionally, men were found to consume alcohol in higher volumes and with greater frequency than female drinkers.²⁷⁶ In the US, approximately 70 percent of men reported drinking in 2013, with excessive drinking more prevalent in young adulthood.^{277,278} Forty percent of men reported having experienced at least one negative event related to alcohol use in their lives.²⁷⁹ Lemle and Mishkind's²⁸⁰ seminal article in 1989 sparked the interest of the research community to improve our understanding of the link between hegemonic masculine norms and drinking behavior among men.²⁸¹⁻²⁹⁵

Alcohol use has been a symbol of manhood and manliness in most cultures for centuries.²⁹⁶⁻²⁹⁸ Research from a diverse set of countries – New Zealand, Russia, South Africa, the US, Canada, the UK, Nigeria, Australia, and others – has found common ties between masculine norms and alcohol use.²⁹⁹⁻³¹⁵ Lemle and Mishkind³¹⁶ found that alcohol frequently plays a significant role in the “entrance to manhood,” and thereafter the behavior naturally reaffirms one's masculinity. A recent UK study found that nearly 70 percent of young men considered drinking, especially heavy drinking, to be an important element of masculinity.³¹⁷ Research found, further, that men who subscribe to hegemonic masculine norms are more likely to drink to intoxication and to experience alcohol-related problems.³¹⁸

The qualitative literature reports that certain alcohol types and quantities are considered to be more masculine than others.³¹⁹⁻³²⁵ Colloquial language around alcohol use further reinforces masculine connotations, including “drink like a man,” and deeming a sweet or diluted drink a “woman's drink.”³²⁶ Male drinkers strongly preferred beer and hard liquor, which are perceived to be more masculine.³²⁷⁻³²⁹ Interviewees placed a strong emphasis on the manliness of drinking a large amount of alcohol, and more importantly, of the ability to “hold their liquor.”³³⁰⁻³³⁶

Masculine norms that have commonly been linked to alcohol use include risk-taking, aggressiveness, sexual prowess, competition and dominance, power and strength, self-confidence, and invincibility and courage.³³⁷⁻³⁴⁵ In interviews with college men, Peralta³⁴⁶ noted a strong

tendency to discuss alcohol use “as symbols of masculine strength, ability, stamina, and most important, power.” The literature affirms that a major motivator for drinking among males is a desire to conform to this socially constructed masculine identity.^{347,348}

Alcohol use has also been associated with social norms that reinforce male-dominated, competitive environments.³⁴⁹⁻³⁵² Hussman³⁵³ finds a strong correlation between competition and alcohol consumption. Men can assert their superiority by matching or out-drinking one another (e.g., “drinking you under the table”).^{354,355} Additionally, studies found that males who did not drink alcohol or drank only a little were marginalized.^{356,357} They were considered by others to be weak or not to belong.³⁵⁸ However, if the non-drinking males were engaged in other hegemonically masculine behaviors, mainly pursuing women or playing sports, their involvement in these activities compensated for their lack of drinking.³⁵⁹

Another major theme emerging from the literature is that alcohol use is connected to sexual conquest and risk-taking. Studies in the US have found that men who embrace norms that encourage risk-taking, competitiveness, and having many sexual partners at the same time are more likely to engage in heavy drinking.^{360,361} In a quantitative study conducted in Canada, Hussman³⁶² also found a strong correlation between being a “playboy” and alcohol use. In Nigeria, a study found that alcohol was used to lower inhibition and “boost confidence to initiate sexual relationships.”³⁶³ The common expression “liquid courage,” meaning alcohol, was cited throughout the literature in the context of alcohol's effect on risk-taking behavior.³⁶⁴ The proclivity to become competitive while under the influence of alcohol, paired with a tendency for increased risk-taking, can easily lead to aggression, violence, and unsafe sexual encounters.^{365,366}

Iwamoto and Corbin³⁶⁷ explore expectations and uses of alcohol consumption. Alcohol is used to decrease inhibitions, as a social lubricant, to reduce tension and stress, and to enhance sexual performance.³⁶⁸ Alcohol is often used to cope with negative emotions, anxiety, and stress.³⁶⁹ This sort of self-medication with alcohol is connected to the widespread masculine norm that men should be emotionally self-sufficient and controlled.

Masculine norms interact with poverty, ethnicity, and context-specific norms that may encourage or discourage

male drinking. For example, a study of young men in the UK revealed variation in masculine identities.³⁷⁰ When articulating their reason not to drink, some men in the study cited alternative masculine values such as individuality, rationality, and integrity,³⁷¹ making the important point that while some modes of masculinity are correlated with heavy drinking, others can be linked to abstinence or moderation.³⁷² In its sample, the study found drinking to be more prevalent among white British men than among black and Asian men.³⁷³ Culture and religion were highlighted as important factors in men's alcohol use.³⁷⁴ Muslim men were far less likely to associate masculinity with alcohol use.³⁷⁵ Conversely, in Russia, the integration of alcohol into cultural and social life, including family and community ceremonies, has led to extremely heavy consumption that goes beyond issues of male identity.³⁷⁶ In the US, researchers have found links between male-dominated institutions, such as fraternities, athletic teams, law enforcement, and the military, and increased alcohol use and its related problems.^{377,378,379}

Structural Influences on Men's Alcohol Use

There are various structural factors that may influence men's alcohol use, including corporate marketing, socioeconomic status, and cultural norms, as well as levels of discrimination and stigma in society.³⁸⁰ There is strong evidence that the alcohol industry reinforces hegemonic masculine norms.³⁸¹ Alcohol marketing campaigns have successfully appealed to young male consumers with evocations of "a manual of masculinity...by drawing from Western societies' acceptance of the consumption of alcohol as a "rite of passage" for young men."³⁸² Targeted advertising and the popularity of alcohol at "male activities," such as sporting events, has further solidified its importance to male identity.^{383,384}

Research has found that the stress experienced by members of minority groups as a result of discrimination and social stigma increase the likelihood of alcohol use.^{385,386} This toxic stress may result from discrimination based on sexual orientation, race, immigration status, or other social determinants of health. One study found that individuals who reported experiencing discrimination based on race, gender, or sexual orientation were almost four times as likely than average to consume alcohol and other substances.³⁸⁷ Additional research suggests that poverty and low socioeconomic status are risk factors for alcohol use and alcohol-use disorders.^{388,389}

Impact of Men's Alcohol Use on Other Men, Women, Children, and Societies

The interpersonal, social, and financial costs associated with men's alcohol consumption are steep.³⁹⁰ The literature demonstrates a clear correlation between alcohol consumption and physical and sexual aggression/violence.³⁹¹⁻³⁹³ Estimates are that 50 to 70 percent of all violent crime involves alcohol.^{394,395} Alcohol is also a major contributor to other anti-social behaviors and crime (drunk driving, vandalism).^{396,397} Additionally, findings from 95 countries show that up to 58 percent of traffic accident fatalities are attributable to alcohol.^{398,399} Although this public health challenge affects all members of society, young males are disproportionately burdened by alcohol-related traffic accidents.

Alcohol use is also associated with risky sexual behavior and sexual coercion.⁴⁰⁰⁻⁴⁰² In Nigeria, findings suggest a high rate of unplanned sexual activity and rape under the influence of alcohol.⁴⁰³ In a study in Canada, 65 percent of the 10,000 students reported engaging in unplanned sexual activity while drinking.⁴⁰⁴ Risky sexual behavior can lead to unintended pregnancy, HIV/AIDS, and other sexually transmitted infections.^{405,406}

The link between intimate partner violence and alcohol use is well-established. Data show that women whose husbands "sometimes get drunk" have an 81 percent greater risk of experiencing violence, and 500 percent greater risk if he "often gets drunk", compared to those who "never get drunk".⁴⁰⁷ Studies find similar trends with violence against children and fathers who consume alcohol.^{408,409} Minority groups of men, particularly gay men, are also vulnerable to male aggression in which alcohol, homophobia, and masculine norms are also factors.⁴¹⁰

The costs of alcohol use include health care costs, law enforcement costs, and other direct social costs (property damage, social services, etc.).⁴¹¹ In an economic review from 1992 to 2007, every country spent more than 1 percent of GDP per person on alcohol-attributable costs.⁴¹² Generally, low-income countries bear a higher disease burden per unit of alcohol consumption than high-income countries do.⁴¹³ The indirect costs from productivity losses were a key contributor to the total cost of alcohol use - ranging from 49 percent in Canada to 95 percent in Thailand.⁴¹⁴ Within families, men often spend money on alcohol rather than providing for the needs of their families.⁴¹⁵

DRUG USE AND MASCULINITIES

Burden of Disease on Men

Drug use impacts five of the twelve leading causes of DALYs and mortality – cancers, HIV and TB, liver cirrhosis, self-harm/violence, and mental disorders.⁴¹⁶ The mortality rate from drug use increases with age. DALYs impacts 15 to 49 year olds the most.⁴¹⁷ Europe and the Americas have the highest age-standardized rate of drug use related DALYs and mortality globally.⁴¹⁸ The individual health risk

of drug use differs by the type of drug and frequency of its use. Addiction and dependency are commonly associated with sustained drug use. The United Nations Office on Drugs and Crime⁴¹⁹ reports that 11 percent of the 29.5 million drug users worldwide suffer from a drug-use disorder characterized by dependence or a need for treatment. The 2017 World Drug Report highlights opioids, including heroin, as causing the greatest health burden globally in terms of both premature deaths and drug use disorders.⁴²⁰

TABLE 6. Drug Use Related Disease Burden among Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
SE Asia	5	0.6%	347	1%
Africa	7	0.5%	434	0.6%
Western Pacific	7	1.0%	448	1.8%
Eastern Med	10	1.1%	723	2%
The Americas	15	1.9%	995	3.6%
Europe	17	2.2%	923	3%
Global	10	1.1%	583	1.7%

A review of the cardiovascular impact of illicit hard drugs^x found that cocaine, opiates, and methamphetamines had substantial, and sometimes fatal, cardiovascular side effects.⁴²¹ People who inject drugs (PWID) are the users most at-risk of contracting life-threatening infectious diseases, including hepatitis, HIV, and TB,⁴²² which means their partners and families are at greater risk, as well. According to a meta-analysis, heroin injectors have an increased HIV incidence rate ratio of 2.8 compared with non-injectors.⁴²³ Additionally, PWID are most at risk of both fatal and non-fatal drug overdoses.⁴²⁴ Incarceration disproportionately affects drug users, further increasing their risk of respiratory infection, HIV, and TB.⁴²⁵ And because a great deal of interpersonal and organized violence is linked with drug use and distribution, drug users are particularly vulnerable to violence.

Connections to Masculine Norms

In studies across the world, illicit drug use is consistently more prevalent among men than among women.⁴²⁶⁻⁴²⁹ The United Nations Office on Drugs and Crime reports that men are three times more likely to use illicit drugs than women are.⁴³⁰ A study in Ireland found the widest gender gap among adults aged 25 to 34, with a 20 percent difference between the sexes.⁴³¹ Researchers have found a more pronounced gender gap in illicit drug use than in alcohol use.⁴³² In the US, adolescent boys use more types of drugs, and at a higher frequency, than their female counterparts.⁴³³ Similarly, studies have noted that the majority of drug dealers are male.⁴³⁴⁻⁴³⁶ Although there are other factors that contribute to involvement in drug use and distribution, the literature has established masculine norms as a substantial contributor to these behaviors.⁴³⁷

Qualitative research has found a hierarchy of masculinity with regard to drugs.⁴³⁸⁻⁴⁴⁰ For example, soft drugs, such as cannabis, are seen as less masculine than harder drugs like heroin.^{441,442} Additionally, performance-enhancing drugs such as steroids have a high degree of associated masculinity.⁴⁴³ Overall, the literature foregrounds the shared use of drugs as a means to participate in a “collective dimension of masculinity.”⁴⁴⁴ Common themes

of strength, risk-taking, belonging, emotional control, competition, individuality, and aggressiveness have been linked across multiple types of drugs.⁴⁴⁵⁻⁴⁵² The literature can be divided into three distinct categories of drug use – initiating use, continuing use, and drug dealing.

The introduction and initiation of drug use often serves as an affirmation of masculinity or masculine identity.⁴⁵³ Darcy⁴⁵⁴ posits that it marks a transition from childhood to manhood, and represents and reinforces friendship, solidarity, and affiliation. The initiation acts as a social test in which the new user proves his masculinity in order to gain or maintain status among a group of other men or boys.⁴⁵⁵

Social pressures play an integral role in the initiation of illicit drug use among young men. Among Asian American students, adolescents whose peers used substances were three times more likely to use illicit drugs and four times more likely to smoke cannabis.⁴⁵⁶ Through a statistical analysis, the study determined that peer use accounted for 27 percent of the variance in illicit drug use.⁴⁵⁷ Other researchers have identified senses of conformity and belonging to a socially constructed “masculine cool” as potent factors in drug use.⁴⁵⁸ In a qualitative study in Ireland, one participant said using drugs “make[s] him feel like one of the guys.”⁴⁵⁹ Relatedly, researchers in the study of young Asian American men found that young males use drugs as a coping strategy to suppress underlying emotional vulnerabilities, while avoiding looking weak to peers.⁴⁶⁰ Indeed, Kulis et al.⁴⁶¹ found that male students who adhered to hegemonically masculine norms, including risk-taking and a desire for power and control, were more likely to initiate drug use.

The literature confirms that males who engage in consistent drug use embrace various masculine norms. The notion of strength and physical tolerance was a common theme. A man’s ability to remain stoic and seemingly invulnerable while under the influence of drugs increased his perceived masculinity.⁴⁶³ Self-control, both physical and emotional, emerged as a masculine norm strongly related to drug use.^{464,465} Additionally, setting a premium on masculine-associated qualities like physical

x The term “hard drug” generally refers to opioids, anxiolytics/hypnotics, amphetamines, cocaine, hallucinogens, volatiles, and GHB. For an analysis, see Janik, P., Kosticova, M., Pecenek, J., Turcek, M. (2017). Categorization of psychoactive substances into “hard drugs” and “soft drugs”: a critical review of terminology used in current scientific literature. *The American Journal of Drug and Alcohol Abuse*, 43(6), 636-646.

strength and muscularity is highly correlated with use of performance enhancing drugs.⁴⁶⁶ In Nepal, aggression is associated with use of hard drugs.⁴⁶⁷ Other researchers have observed pronounced aggressive behavior among drug users in two high schools in Mexico.⁴⁶⁸

In Mexico, Applewhite⁴⁶⁹ recognized a male tendency to engage in risky behavior in order to conform to socially-constructed notions of masculinity in Mexican culture. This norm, in which strength and physical tolerance are valued, leads some users to challenge and even push beyond their personal threshold, and sometimes to overdose.

Drug dealing and trafficking are spaces in which masculine norms and identities are constructed. Brown⁴⁷⁰ posits that the most idealized masculine norms around drug dealing are toughness, aggressiveness, and being street-smart. In New Zealand, Norway, and the UK, qualitative researchers have identified risk, criminality, violence and intimidation, and networks and trust as key aspects of drug dealing.⁴⁷¹ Findings suggest that the main motivators for drug dealing are the perceived benefits of reputation, winning, and financial gain.⁴⁷²

In Ireland, non-drug users were interviewed to gauge their perceptions of drug use as it relates to masculinity.⁴⁷³ The participants identified two instances in which drug use would significantly reduce one's masculinity – if the drugs negatively affected a man's productivity or role as a provider, and if the drugs negatively affected his physical appearance (e.g., the wasting effect of sustained heroin use). In most other instances, the non-drug users identified drug users as masculine.⁴⁷⁴

Structural Influences on Men's Drug Use

There are a multitude of other structural factors that can contribute to men using and/or selling drugs.⁴⁷⁵ Hawkins, Catalano, and Miller identified three main contextual factors in drug use among adolescents – laws and norms favorable to behavior; availability; and extreme economic deprivation.⁴⁷⁶ Legal frameworks and policies can greatly impact the use of licit and illicit drugs. Additionally, drug-related criminalization and incarceration rates affect

subsequent behavior. Drug use is positioned within a larger context of drug supply and trade. Studies have shown greater availability to be linked with greater rates of usage.⁴⁷⁷ People who are socially and economically marginalized and disaffected from society are the most at risk of drug use. Structural disadvantages, limited opportunities, and overall deprivation are key factors in drug use initiation and continuation. Furthermore, weak family and social bonds, psychological distress, lack of employment opportunities, and few community resources have been identified as structural risk factors in problematic drug use.⁴⁷⁸ Similar to tobacco and alcohol use, illicit drug use has been positively correlated with discrimination, structural stigma, and internalized oppression among minority groups.^{479,480}

Impact of Men's Drug Use on Other Men, Women, Children, and Societies

Studies have shown that adverse childhood experiences, particularly parental drug use, can increase the likelihood of future use as an adult.⁴⁸¹ Additionally, research has found a strong correlation between parental drug use and improper parental practices.^{482,483} Researchers found that fathers who engaged in substance abuse scored lower on the Parental Monitoring Scale than fathers who did not.⁴⁸⁴ Child neglect is a common challenge associated with drug-use disorder. US estimates show 50 percent to 80 percent of children removed from homes due to neglect have at least one parent who abuses drugs.⁴⁸⁵

Like alcohol consumption, drug use is associated with higher rates of aggression and intimate partner violence.⁴⁸⁶⁻⁴⁸⁸ In a meta-analysis of drug-related intimate partner violence, researchers found strong correlations between use of a variety of drugs and psychological, physical and sexual aggression.⁴⁸⁹ Cocaine, opiates, other (e.g., steroids, inhalants, etc.), and mixed drug use consistently ranked most associated with aggression. In a sample of black men who have sex with men (MSM) in New York City, Wu et al.⁴⁹⁰ found a significantly greater likelihood of ever having perpetrated violence against a partner, among those who were using rock/crack cocaine and/or methamphetamine, and a suggestive association

with IPV among heroin users.

Males who inject drugs carry a heightened risk of contracting HIV, hepatitis B virus, and hepatitis C virus, and of subsequently infecting their partners.^{491,492} Furthermore, studies have found correlations between high-risk sexual behavior among injection drug users, thus exacerbating their risk of contracting sexually transmitted diseases.⁴⁹³

Finally, drug use and drug trafficking are associated with interpersonal and organized violence and as such place a heavy economic and social burden on societies.^{494,495} Homicide and other drug-related crimes are prevalent in most countries in the world. However, violence occurs on a larger scale within drug organizations, most notably in Latin America. In Mexico, 50,000 drug-trafficking related deaths were registered in 2011.⁴⁹⁶

OCCUPATIONAL HAZARDS AND MASCULINITIES

Burden of Disease on Men

Occupational hazards account for nearly 4 percent of total male deaths globally.⁴⁹⁷ Seven of the top 12 diseases among men can be affected by occupational hazards – cardiovascular disease, cancer, diarrhea/LRI, chronic respiratory disease, diabetes, transport injuries, and unintentional injuries.⁴⁹⁸ Occupational hazards are broken down into three main categories: injuries, particulates, and carcinogens. According to Takala et

al.⁴⁹⁹, the 2008 global burden of workplace illness and injuries consisted primarily of cancers (32 percent), circulatory diseases (23 percent), communicable diseases (17 percent), and accidents and violence (18 percent). The 15 to 49 age category shows the highest prevalence of injuries; however, the 50 to 69 and over-70 age categories carry the greatest burden of occupational particulates and carcinogens.⁵⁰⁰ Men in South East Asia and the Western Pacific regions are the most affected by occupational hazards.⁵⁰¹

TABLE 7. Occupational Related Injury Burden among Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Africa	25	1.6%	1,552	2%
Eastern Med	32	3.4%	1,582	3.8%
The Americas	32	4.2%	1,293	4.6%
Europe	32	3.8%	1,292	4.6%
Western Pacific	40	4.9%	1,447	5.7%
SE Asia	47	4.3%	1,887	4.7%
Global	37	3.9%	1,533	4.2%

At the individual level, occupational hazards contribute to various types of cancers, lower back pain, cardiovascular disease, poor mental health, chronic respiratory infection, and injuries. Taiwanese farmers and gardeners are twice as likely to develop esophageal cancers as non-agricultural workers.⁵⁰² Similarly, a global systematic review found that male farm workers suffered a greater rate of prostate cancer than the general population.⁵⁰³ In Nigeria, one study found nearly 70 percent of fishermen experienced lower back pain due to their occupation.⁵⁰⁴ In Canada, researchers found an increased concern about cardiovascular disease among truck drivers due to their lifestyles on the road.⁵⁰⁵ Guillien et al.⁵⁰⁶ cite a two-fold greater likelihood of developing Chronic Obstructive Pulmonary Disease among US dairy farmers due to exposure to organic dusts. In the US, suicide rates are the highest among male farmers, fishermen, and foresters compared to other professions.⁵⁰⁷

In all regions of the world, men are disproportionately burdened by work-related illness and injury.⁵⁰⁸⁻⁵¹⁰ In Europe, men account for 54 percent of the workforce; however, research shows that 96 percent of fatal and 76 percent of non-fatal accidents in the workplace involve men.⁵¹¹ Similar statistics show high percentages of workplace fatalities involving men in Canada (97 percent), the United States (92 percent) and Australia (96 percent).⁵¹² In Australia, researchers found that male farmers are at a significantly greater risk of suicide than female farmers, as well as than the general population – highlighting poor mental health as a possible occupational hazard.⁵¹³

Connections to Masculine Norms

Researchers theorize this disproportionate burden of occupational hazards on men is largely due to the gendered division of occupations, and a further division of labor within specific occupations.^{514,517}

Men are more likely than women to work in occupations with a higher risk of injury or illness, such as the military, farming, fishing, construction and other trades, mining, truck driving, law enforcement, and firefighting.⁵¹⁸ In the agricultural sector, studies have found that men in some settings work longer hours in the fields and engage

in riskier tasks, including the use of machinery and tractors.⁵¹⁹

In most regions of the world, work is an integral component of male identity, providing purpose and a means to provide for themselves and their families.⁵²⁰ Stergiou-Kita et al.⁵²¹ cite studies among men in South Africa, Australia, Pakistan, and Latin American that find a shared desire to fulfill a breadwinner role. Studies have linked unemployment with mental health concerns, including depression, substance abuse, and suicide.⁵²² Researchers also find a common “pursuit of profit over health and safety” among a diverse range of workers,⁵²³ particularly in occupations where financial gain is linked with physically demanding, dangerous, and competitive work.⁵²⁴ By prioritizing financial gain and productivity, workers subscribe to masculine values that encourage them to “perform at maximum physical capacity, tolerate adverse work conditions and sacrifice their bodies, their health, and their safety to get the job done.”⁵²⁵

Across a wide array of male-dominated occupations, researchers have discovered common themes of masculinity associated with occupational injury and illness. The most prevalent relevant norms include heroism, emotional and physical strength, risk-taking, perseverance through pain, providing for the family, financial gain, stoicism, self-reliance, poor coping strategies, and a lack of health-seeking behavior.⁵²⁶⁻⁵³³

Globally, as part of their occupations, many men engage every day in high-risk activities at rates higher than women. Neilson⁵³⁴ discusses the management and acceptance of risk among young men in Denmark. Two electricians he interviewed interpreted risk as “exciting.”⁵³⁵ Although they recognized the potential consequences of these behaviors, they reported a sense of excitement that enhanced their working experience.⁵³⁶ In many occupations, workers have normalized risk-taking and “see tragedies as a normal part of the job.”⁵³⁷ Thurnell-Read and Parker⁵³⁸ highlight the celebration of heroism, courage, and fearlessness in male dominated occupations. Other studies on firefighting⁵³⁹, roofing⁵⁴⁰, oil drilling⁵⁴¹⁻⁵⁴³ and mining^{544,545}, have found that injuries are seen as a “badge of honor,” further normalizing and encouraging risk-taking in these

professions. The normalization and socialized perception of a risky profession celebrates men who embrace risk and looks down upon those who do not.^{546,547}

Adherence to norms of physical strength and toughness is also closely correlated with physically risky male-dominated occupations and their resulting illnesses and injuries.⁵⁴⁸⁻⁵⁵¹ Perseverance through pain without showing weakness is highly valued in labor-intensive professions like farming, fishing, construction, and professional sports.⁵⁵²⁻⁵⁵⁶ The masculine norm of “working through the pain” – whether emotional or physical – severely deters men from engaging in health-seeking behavior. Chavez and Altman⁵⁵⁷ find that fear of termination and lack of job security mean that workers avoid reporting physical injury. Other researchers highlight a fear of showing weakness or of wasting others’ time with “minor issues.”⁵⁵⁸ With regard to mental health issues, there is a widespread reluctance to discuss them in the farming, military, protective services, and mining industries, among others.⁵⁵⁹ Paton⁵⁶⁰ echoes this sentiment in his research: “Many men work in industries where a macho culture prevails or where a competitive environment may exist that prevents them from feeling able to be open.” In Australia, norms around stoicism and emotional control among farmers have led to elevated rates of depression and suicide, among a range of other destructive behaviors.⁵⁶¹

Structural Influences on Men’s Occupational Injuries

Beyond individual attitudes around masculinities, environmental and structural factors play a key role in occupational injuries. At the structural level, socioeconomic status, minority status, immigration status, and job security greatly influence the occupational well-being of workers. Men who experience economic constraints or low job security are far less likely to report injury, call attention to safety problems and irregularities, or stay home when injured, for fear of losing their jobs.⁵⁶²

Organizational norms and managerial support are imperative for ensuring a culture and climate of safety.⁵⁶³

Social support from supervisors and co-workers has been shown to reduce occupational injuries. High-reliability organizations (HROs) are “designed to avoid catastrophes despite operating in dangerous, technologically complex environments” by encouraging behaviors and attitudes that promote safety.⁵⁶⁴ Additionally, such organizations encourage men to deviate from conventional masculine scripts that can put them at greater risk. Filteau⁵⁶⁵ argues that these companies and their employees are proving the possibility of constructing a new hegemonic masculinity that values collectivism and prioritizes safety. Nielsen and colleagues discuss the potential for masculinity to be beneficial to workplace safety. They found that workers who were supported by their employers and felt secure in their jobs were able to be more assertive and were more likely to bring up safety concerns.⁵⁶⁶ The authors conclude that organizational initiatives that support employees, and promote collective goals and the decoupling of masculinity and competence can have a positive effect on safety in the workplace.

Impact of Men’s Occupational Injuries on Other Men, Women, Children and Societies

The societal impact of men’s high rates of occupational illness and injury is far-reaching. Dembe⁵⁶⁷ analyzes the impact on family and friend relationships, community involvement, and individual well-being, and argues that the social and economic consequences are intertwined and complex. The consequences of occupational injuries extend into victims’ workplaces, homes, and the broader community’s hospitals, courts, and other structures and institutions.⁵⁶⁸ Some of the social and financial consequences involve workers’ compensation, medical expenses, reduced daily functioning, and stress.⁵⁶⁹ At the household level, families who depend on a man’s salary are vulnerable to the wages lost as a result of workplace injury. Additionally, an impaired ability to function in caregiving and household duties places a greater burden on other members of the family. In 2008, the total estimated costs associated with workplace injury in the US were approximately \$250 billion.⁵⁷⁰ In Singapore, related costs are equivalent to 3.8 percent of the country’s GDP.⁵⁷¹

UNSAFE SEX AND MASCULINITIES

Burden of Disease on Men

Unsafe sex contributes to one of the leading causes of DALYs and mortality – HIV/AIDS.⁵⁷² The greatest burden of this risk factor falls on Africa, where HIV/AIDS accounts for 8.4 percent of total deaths in the region.⁵⁷³ The global prevalence of unsafe sex is highest among males aged 15 to 49 and decreases with age. Every year, around the world, unsafe sex leads to sexually transmitted infections

that result in a reduced quality of life as well as death for millions.⁵⁷⁴ According to the WHO, approximately 357 million people aged 15 to 49 are diagnosed with one of four curable sexually transmitted infections^{xi} annually.⁵⁷⁵ Incidence of sexually transmitted viruses is estimated to be even higher, with approximately 417 million people diagnosed with herpes simplex type 2 every year. Additionally, some types of the human papillomavirus (HPV) are known to cause penile, anal, and oropharyngeal cancers among males.⁵⁷⁷

TABLE 8. Unsafe Sex Related Disease Burden among Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Africa	1	.2%	140	.4%
Eastern Med	3	.3%	157	.5%
The Americas	2	.3%	128	.5%
Europe	6	.8%	333	1%
Western Pacific	6	.9%	306	1.1%
SE Asia	96	8.4%	4,575	6.7%
Global	13	1.6%	663	2%

Connections to Masculine Norms

Many researchers have explored the ways in which masculinity is tied to risky sexual behaviors. In one study, the authors posit that a man's sexual capacities are an indicator of his masculinity.⁵⁷⁸ In a quantitative study in the United States, researchers found that men who perceive themselves to be particularly masculine were more likely to engage in unprotected sex with multiple partners, and subsequently to be diagnosed with a sexually transmitted infection (STI).⁵⁷⁹ Additionally, men who are insecure in their masculinity but who greatly value being perceived as masculine are at an elevated risk of engaging in risky sexual behavior. These findings add to the existing body of literature that documents an association between norms of masculinity and risky sexual behavior across the world.

Masculine norms that encourage unsafe sex include risk-taking, control over women (or over other partners of other gender identities), competition, strength, power, social status, sexual prowess, invincibility, insatiable sexual appetite, independence, low health-seeking, and self-esteem and body image.⁵⁸⁰⁻⁶⁰⁷ Masculinity manifests itself in a variety of risky sexual behaviors, including multiple concurrent partners, low condom use, early sexual debut, and inequitable sexual decision-making.

Multiple Concurrent Partners as Masculine

Researchers have linked masculinity with the desire to have multiple concurrent sexual partners.⁶⁰⁸⁻⁶²¹ There is a widespread masculine notion that values sexual conquest over intimacy and monogamy.⁶²² In studies carried out in the Dominican Republic and South Africa, men who were more concerned about being perceived as masculine were more likely to have had two or more sexual partners in the preceding 30 days.^{623,624} In the US, researchers found that engaging in multiple concurrent partnerships was an almost universally endorsed norm among their sample of Latino and African American gang members.⁶²⁵ Schmidt-Sane⁶²⁶ described the effect of economic instability on high-risk sexual behavior, in which men who felt inadequate in their provider role commonly turned to female sex workers

and casual sexual partners to validate their masculinity.⁶²⁷ The masculine norms most closely related to concurrency are competition, sexual prowess, and power over women. In discussions of concurrency, sex emerges as a means to avoid humiliation and prove one's masculinity. Studies in Uganda, Australia, Tanzania, Paraguay, and South Africa, have explored competition for status within peer groups and its influence on partner concurrency and early sexual debut.⁶²⁸⁻⁶³⁵ A recurring theme in the literature emphasizes men's insatiable sexual appetite as a justification for concurrent partnerships.⁶³⁶⁻⁶³⁸ Fleming, DiClemente, and Barrington⁶³⁹ observe that notions of males being "hardwired" for sex and needing to "spread their seed" largely manifest in unprotected sex with multiple women partners; researchers emphasize the masculine script that men should always want to have sex.^{640,641} One study participant stated, when talking about unwanted sexual encounters, that he "had no choice" because he is "a boy."⁶⁴² The literature posits that high-risk sexual behaviors stem, in part, from a desire for power and control over women.⁶⁴³⁻⁶⁴⁷ In Uganda, one of the participants stated that managing more than one partner at a time demonstrated stamina, power, and dominance over women.⁶⁴⁸ Other studies support this finding that masculine norms have socialized men to seek dominance and control in sexual relationships, to objectify women and to use sexual performance as a benchmark for manhood.⁶⁴⁹ Rhodes et al.⁶⁵⁰ found that by increasing their number of sexual partners, gay and bisexual men may be attempting to shore up their sense of masculinity or compensate for feelings of femininity, which was perceived as a negative attribute.

Unprotected Sex as Masculine

The male latex condom is one of the most effective methods of reducing transmission of sexually transmitted diseases and preventing pregnancy.⁶⁵¹ However, studies in Africa, North America and South America find that resistance to the consistent use of condoms remains high among men worldwide. Research from Uganda found 79 percent of men in the sample reported not having used a condom the last time they had sex; and 77 percent reported never using a condom with their regular partner.⁶⁵² All of the 80 participants expressed that they preferred sex without a condom and

xi The four curable sexually transmitted infections referred to are: chlamydia trachomatis (131 million), neisseria gonorrhoeae (78 million), syphilis (6 million), and trichomonas vaginalis (142 million).

thought it “worth the risk.”⁶⁵³ In Ghana, participants evinced a low perception of HIV-infection risk, expressing masculine norms of invincibility and strength.⁶⁵⁴ Many studies posit that aversion to condoms stems from a masculine ideal of sexual performance.⁶⁵⁵⁻⁶⁵⁹ Fleming and colleagues find that “condoms represent a potential disruption to a man’s ability to perform sexually and thus a potential barrier for some men to demonstrate sexual capacity and achieve the masculine norm.”⁶⁶⁰ In a detailed systematic review of sexual risk among men who have sex with men (MSM), Zeglin⁶⁶¹ finds that unprotected anal sex strongly correlates with masculinity ideology. Further research explores the perceived risk of HIV infection among MSM who “bareback” (engage in sex without a condom) and finds that notions of intimacy and relational power are important factors in condom use.^{662,663}

Other Aspects of Sexual Behavior as Masculine

Various studies have associated notions of masculinity with early sexual debut and manhood with being sexually active.⁶⁶⁴⁻⁶⁶⁶ In the US, one young male remarked “I got my manhood that day” referring to his first sexual experience.⁶⁶⁷ Among men who have sex with men, the literature finds masculinity and penis size to be significant predictors for “being a top.”⁶⁶⁸ Body image and muscularity are also found to predict high-risk sexual behavior among gay and bisexual men.⁶⁶⁹ Studies found that “a desire to be bigger and more muscular, or a disappointment in one’s musculature, may indeed play a role in HIV sexual risk behaviors.”⁶⁷⁰ Similar articles find low self-esteem and ridicule experienced as a homosexual boy manifesting into sexual risk-taking as an adult.⁶⁷¹

Structural Influences on Men’s Unsafe Sex

Structural factors that influence men’s unsafe sex include lack of availability of family planning methods, insufficient access to confidential STI screening and treatment, and stigma and discrimination.⁶⁷² Health systems, structures, and policies also often marginalize MSM and other minority groups.⁶⁷³ In some countries, for example, policies criminalize homosexuality or exclude MSM from national monitoring programs and services, which results in higher incidence rates of HIV and subsequent health burdens.⁶⁷⁴ Male sex workers

also experience social stigma and legal discrimination and are often marginalized from sexual health services.⁶⁷⁵

Access to comprehensive evidence-based sexual education has been shown to reduce men’s (as well as women’s) unsafe sexual behaviors.⁶⁷⁶ At the same time, evidence suggests that significant exposure to adult-oriented and sexually explicit content via media (TV, social media, music, videos, magazines, etc.) can contribute to adolescents engaging in risky sexual behavior.⁶⁷⁷ Studies have found that some adolescents who regularly interact with media that contain a significant proportion of sexual content are more likely to engage in early sexual intercourse.⁶⁷⁸ In one study in the US, three quarters of adolescents said that one reason young people have sex is because media have normalized this behavior.⁶⁷⁹

Impact of Men’s Unsafe Sex on Other Men, Women, Children, and Societies

The consequences of unsafe sex have profound impacts on men, women, and children. However, it places a disproportionate burden on women. Women experience more symptomatic STIs and a greater burden from unintended pregnancy. Syphilis infections during pregnancy result in more than 300,000 fetal and neonatal deaths each year.⁶⁸⁰ Annually, approximately 264,000 women die from cervical cancer, caused by the human papillomavirus.⁶⁸¹ Some infections, like gonorrhea and chlamydia, are leading causes of female infertility worldwide.⁶⁸² There are a host of physical, psychological, and social consequences of STIs that compromise quality of life. Additionally, there is an individual and societal cost of paying for screening and treatment programs. In a cost analysis of WHO’s Global STI Control Strategy, researchers have estimated that the implementation of the strategy will cost the health sectors of 117 low- and middle-income countries \$18.1 billion between 2016 and 2021.⁶⁸³

Rape and sexual violence are the most violent forms that unsafe sex can take. The WHO estimates that 35.6 percent of women globally have ever experienced non-partner sexual violence, physical or sexual violence by an intimate partner, or both.⁶⁸⁴ The individual and societal impacts of sexual violence are profound, and include depression and anxiety, alcohol use disorders, unplanned pregnancies, unsafe abortions, suicide, and STIs.^{685,686}



LIMITED HEALTH-SEEKING AND MASCULINITIES

Burden of Disease on Men

Because health-seeking behavior is necessary for the prevention, early detection, and treatment of disease, researchers have identified an aversion to care as a major barrier to improving men's well-being.^{687,688} It is difficult to find global statistics on the impact of limited health-seeking behavior on men's health. However, we know that delays in seeking care result in later-stage and more complicated diagnoses.^{689,690} The gender disparities in health-seeking behavior largely account for the difference in men's and women's life expectancies.⁶⁹¹

Researchers have identified the under-utilization of primary care services by men as a problem in many countries.^{692,693} In Europe, infrequent use of, and late presentation to, health services has been associated with men suffering high levels of otherwise-preventable health conditions and having reduced treatment options.⁶⁹⁴ Studies in sub-Saharan Africa have reported similar findings with regard to HIV services, finding that men are less likely than women to get tested for HIV and receive treatment, and more likely to die once they begin treatment.⁶⁹⁵⁻⁶⁹⁷ In a multinational analysis, Peltzer et al.⁶⁹⁸ identified a trend in which older men delay seeking help until late stages of disease. The authors

found that more men than women reported use of in-patient hospitalizations in the previous three years, but more women reported use of out-patient services in the preceding year.⁶⁹⁹

Connections to Masculine Norms

Health-seeking behavior refers to a process whereby an individual reaches out to a formal (e.g., health care professional) or informal (e.g., friend, relative) source of help regarding a health concern.⁷⁰⁰ Even after accounting for pregnancy and related care, men seek health care for physical and mental health concerns less frequently than women.^{701,702} This is a consistent trend across a diverse set of health concerns, through formal and informal outlets, and among men of different ages, nationalities, and races.^{703,704} Furthermore, studies have shown that men who do seek care ask fewer questions and have shorter consultation times than women.^{705,706}

As previously discussed, health literacy and engagement with health concerns are generally perceived as feminine, and therefore complicate a man's willingness to admit a need for health services.⁷⁰⁷⁻⁷⁰⁹ Courtenay⁷¹⁰ argues that a key tenet of masculinity is a denial of weakness and the need for help. Illustrating this connection, he states,

“the most powerful men among men are those to whom health and safety are irrelevant...by dismissing their health care needs, men are constructing gender. When a man brags, “I haven’t been to the doctor in years,” he is simultaneously describing a health practice and situating himself in a masculine area”.⁷¹¹ The actions associated with health-seeking behavior, including relying on others, admitting a need for help, and recognizing emotional problems, run counter to dominant masculine norms around self-reliance, physical toughness and emotional control.⁷¹²

Across samples in numerous countries, studies have found a strong correlation between traditional masculine norms – the aforementioned Man Box – and emotional difficulties, limited self-disclosure, and an overall negative view of help seeking.⁷¹³⁻⁷¹⁷ Throughout qualitative studies and systematic reviews, common masculine norms of power and control, self-reliance, emotional stoicism, and strength and toughness have been connected to men’s general aversion to health seeking behavior.⁷¹⁸⁻⁷²³

Masculine norms that encourage men to be powerful and in control squarely oppose health seeking behavior. Addis and Mahalik⁷²⁴ state that “by complying with a request to get professional help, a man may experience a loss of control over the decision-making process.” By choosing to not seek help, men retain their autonomy and control over the situation, even if it is at a cost to their health. One interviewee explained: “The more masculine man is defined by a man who doesn’t share stuff with other people. He can sort it out himself. He’s totally in control. He doesn’t need anyone else.”⁷²⁵ Notions of male self-reliance and independence are closely tied to a lack of health-seeking behavior.⁷²⁶⁻⁷²⁹ Researchers have posited that the fear of feeling dependent on others for help causes men to handle health concerns privately.⁷³⁰

The notion of emotional stoicism and control is often cited as a link between masculine norms and health-seeking behavior. Wenger⁷³¹ explores men’s help-seeking during cancer diagnosis; many of the study participants mentioned social norms around displaying emotion – plainly, “it’s not manly to show our emotion.”⁷³² In the face of a diagnosis and treatment regimen, it was still

imperative that patients “man up” to cancer and hide their doubt, fear, and pain.⁷³³ Common colloquialisms, such as “boys don’t cry” or “take it like a man,” both reflect and perpetuate the expectation of strong, stoic men who do not express emotion.⁷³⁴ In a systematic review, ten articles present further evidence of the strong relationship between restricted emotional expression and reluctance to seek health advice.⁷³⁵ For men who subscribe to hegemonic masculine norms, to engage in health-seeking behavior is often to demonstrate unacceptable vulnerability and weakness.⁷³⁶

Notions of physical strength and toughness are frequently mentioned in the literature as barriers to men’s health-seeking behavior. In a qualitative study, O’Brien et al.⁷³⁷ identified a common tendency among participants to belittle illness or mental health issues. Many of the participants did not want to “waste the doctor’s time” about a “minor complaint.”⁷³⁸ With regard to this reluctance, one participant said, “You don’t want to make a fuss because it’s a macho thing just to say you’re being the strong silent type...you’ll endure it, you can take it. So, if there is something wrong, you won’t talk to anyone about it. You have to be bedridden or half dead before you’ll go [to the doctor’s].”⁷³⁹ Additional articles cite symptom minimizing as a significant barrier for seeking care.^{740,741} Deciding not to seek help allows them to demonstrate their physical strength and ability to endure pain.

Men’s limited health literacy and low self-awareness regarding health risks pose considerable barriers to health promotion and individual health-seeking behavior.⁷⁴² Studies from upper- and middle-income countries have found that men in general have lower levels of health literacy than do women.⁷⁴³⁻⁷⁴⁵ In one study of UK bus drivers, a significant percentage did not realize their degree of adiposity, as well as their risk of type-2 diabetes. The participants underestimated their waist circumference by an average of eight centimeters.⁷⁴⁶ Furthermore, three-quarters of the sample were unaware that an increased waist circumference is a significant risk factor for type-2 diabetes.⁷⁴⁷ In Oman, men were found to be significantly less able than women to recognize cancer symptoms.⁷⁴⁸

Some researchers have explored the motivations of men who seek care despite masculine norms that discourage such behavior. Vogel et al.⁷⁴⁹ found that 70 percent of study participants who sought help were told directly by someone else to do so. Of these participants, 47 percent reported that mothers encouraged them, while only 5 percent reported that fathers did.⁷⁵⁰ In a subsequent study, researchers found that men who adhere to more hegemonic masculine norms were less likely to encourage other men to talk about mental health struggles or to refer them to seek help.⁷⁵¹ Some men, in seeking health care, are prioritizing the preservation of their masculinity.⁷⁵² For example, men were more likely to seek care when an illness or injury could impede their ability to work or provide for their families.⁷⁵³ Additionally, they were more likely to seek help if the illness or injury might negatively affect their sexual performance.⁷⁵⁴ Some researchers have put forth an opposing view that men do seek health services, especially when faced with symptoms.^{755,756} Despite the common reluctance among men to seek health services, some men are “action men” and pride themselves on being responsible and able to problem-solve and remain in control.⁷⁵⁷ Wenger⁷⁵⁸ takes a more dynamic approach, characterizing health-seeking behavior as an ongoing and interactive process instead of a binary decision.

Structural Influences on Men’s Health-Seeking

As earlier noted, health service delivery systems around the world have generally struggled to meaningfully engage men and boys in their own health. Where interventions have taken place to specifically target men, these have often been stand-alone or small-scale, rather than mainstream.⁷⁵⁹ Grace, Richardson, and Carroll⁷⁶⁰ suggest that men may be reluctant to seek help because of service providers’ perceived negative attitudes towards them. They advocate for gender-sensitive approaches to health care provision that engage males rather than problematize them,⁷⁶¹ such as specific government strategies, in Brazil and other countries, that target men within the antenatal care system.⁷⁶² Given that not all men are treated equally within existing systems and policies,

it remains important to be mindful and inclusive of all genders when advocating for universal health coverage around the world.

There is a growing body of literature that looks at disparities in health-seeking rates among specific at-risk, low-income, or historically disadvantaged groups of men. Among a US sample, researchers found that Hispanic and African American men show lower self-efficacy around health systems and care than white men do.⁷⁶³ Additionally, African American men are more likely than white men to present with advanced stages of prostate cancer.⁷⁶⁴ When they did go, the men reported that they were uncomfortable with the tone physicians used to talk to them and that, while providers often recommended lifestyle and behavior changes, they offered little useful information as to how. Following receipt of care, spouses, medical test results, and men’s own desire to fulfill social roles were key motivating and instrumental factors in their following medical advice.⁷⁶⁵ Finally, a recent report from the American Psychological Association found that men’s ability and willingness to seek health care is largely influenced by a range of social determinants of health, including race, sexual orientation, access to health care, socio-economic status, social networks, and education level.⁷⁶⁶ Structural factors, including at the systems and policy levels, play major roles in men’s ability, means, and motivation to seek health care services.

Impact of Men’s Poor Health-Seeking on Other Men, Women, Children, and Societies

Men are more likely than women not to seek health services until later stages of illness.^{767,768} This tendency by many men to delay health seeking has consequences for women and children: Women bear the burden of caregiving; and, as with occupational hazards, families who depend on a man’s salary are vulnerable economically as a result of his severe illness or death. The health and social costs of delayed health-seeking among men are thus an important area for further research.

WAYS FORWARD

3.



RECOMMENDATIONS FOR HEALTHIER MEN, HEALTHIER FAMILIES, AND HEALTHIER MASCULINITIES

Currently, few international policies and programs related to health and well-being include a gendered discussion of men's health, nor recognize the connections between masculine norms, men's health, and the health and well-being of women and children.⁷⁶⁹ In Hawkes and Buse's⁷⁷⁰ analysis of major global health institutions, including the World Health Organization, they found a distinct absence of "policies and programs focused on the prevention of and care for the health needs of men."

National governments, global health institutions, researchers, civil society organizations, corporations, and activists should act to strengthen the response to men's health – alongside efforts to improve the health of women and children, and as a part of broader efforts to create healthier, thriving societies. Any efforts that

address men's health should build on men's positive health practices and desire for health care, and the importance of taking care of themselves for their own well-being and those around them, rather than pathologize men or masculinity as inherently problematic or toxic. It is important to recognize and leverage the fact that many men are already striving to take care of their individual health and well-being, and often access health care via their support for the health and well-being of their partners or children. In addition, in advancing men's health practices, it is important to address not only attitudes and practices at the individual level, but also men's lack of inclusion in health policies, structures, and services. Efforts to include men's health in the national healthcare sector should be supported by civil society, by additional research, and by the support of donors

and international agencies. Resources that have been dedicated to women's and girls' health programs should not be reallocated or reduced due to these efforts. Accordingly, we recommend the following:

National and local governments should...

- Ensure that health policies and services proactively address barriers to men's use of services, including hours of operation and staff composition, and increase the provision of health services that proactively seek out men and women, including in the workplace and in community settings.
- Develop and implement multisectoral health and well-being policies that consider how masculinities and other social, economic, and cultural factors shape the health outcomes of men.
- Integrate the awareness of harmful masculine norms into occupational safety policies in an attempt to promote healthy ideas of manhood.
- Promote policies and create gender-sensitive programs that, by questioning the underlying masculine norms that contribute to the behaviors (such as tobacco use, drunk driving, etc.), reduce risk-taking and harmful behavior among men.
- As part of broader work on gender and health, develop and appropriately fund national and regional men's health strategies that ensure specific consideration of minority and socially excluded groups of men.^{771,772}
- Build the capacity of health care personnel to understand masculinities and men's health needs and to incorporate them into their diagnostic, referral, and treatment practices.

Global and regional health institutions and bodies should...

- Adopt specific global commitments and accompanying frameworks and strategies to better address the links between masculinities and men's ill health.

- Encourage each WHO region to develop a framework for masculinities and health - building on the WHO Europe and PAHO strategies - with priorities for that region based on specific local male health needs and masculine norms.
- Provide health ministries with best-practice tools to strengthen their focus on masculinities and health, including case studies of existing men's health policies (or policies that implicate men's health) and programs.

Researchers, scholars, and academic institutions should carry out additional research on...

- The effectiveness of different health-promotion approaches for male engagement, behavior change, and health-care service provision throughout the life cycle.
- The impact of existing men's health policy frameworks - what works, what doesn't, and what led to the institutionalization of such policies in the first place.
- Alternative and existing healthy masculinities that could promote healthy behavior, such as responsibility and self-control, and as well as men's positive involvement as fathers and caregivers.
- The ways in which masculinities affect the health of men with diverse sets of backgrounds (e.g. socioeconomic status, race/ethnicity, age, etc.) and the mechanisms that link masculine norms to specific health behaviors.^{773,774,775}
- Masculinities, masculine norms, and their link to health outcomes on a comparative and global level. This might include the use of standardized attitude scales and linking those to national-level health surveys.
- The impact of men's health-related behaviors and poor health on women and families and the relational nature of health practices and gender dynamics at the household level.

- The specific health needs, attitudes, and practices of adolescent boys and young men.
- Strategies for reducing the burden of premature mortality from non-communicable diseases among men ages 30 to 70.
- The normative behavior and practices of men who already effectively take care of their health, in other words, taking a “positive deviant” approach to research on men’s health where appropriate.

Civil society organizations, practitioners and advocates in public health should design and implement evidence-based and gender-transformative programs and advocacy,^{776,777} that...

- Test and implement gender-transformative, behavior-change interventions related to the seven risk behaviors outlined in this report, including primary, secondary, and tertiary prevention strategies.
- Educate boys and men with gender-transformative, positive messaging about their health and encourage critical reflection on their own behavior and its links to masculine identity and norms.
- Leverage existing male social networks to model positive health-related behavior among peer groups.
- Collaborate with women’s rights organizations to ensure a relational focus on men’s health framework as part of national and global health policy agendas.
- Build the capacity of medical and health care personnel to understand masculinities and incorporate this understanding into their diagnostic,

referral, and treatment practices.

- Promote a stronger focus on men’s health and masculinities in national, regional, and global health and gender-equality responses.

Donors should...

- Strengthen the focus on masculinities and men’s health in their work without diluting resources for women’s health, and look for ways that engaging men in their own health needs can also support better outcomes for women (for example, related to sexual health).
- Support research, programming, and advocacy that address the impact and cost of men’s ill health on men themselves, on women, children, and societies.

Corporations and other employers should...

- Adopt social/corporate responsibility strategies that affirm and support the advancement of health and well-being for all, including by promoting healthy masculinities.
- Partner with civil society, governments, practitioners, and researchers to strengthen national and global frameworks and responses to advance health and well-being for all, including men and boys.
- Offer comprehensive, affordable health-care plans that support preventive medicine and cover mental health and substance abuse services, as essential health benefits.
- Provide flexible working conditions, hours, and comprehensive, paid leave so that all employees may take time as needed to care for their own health and the health of their families.

ANNEX 1: REGIONAL DISTRIBUTION OF TOP 12 CAUSES OF DALYS & MORTALITY

Cardiovascular Disease

TABLE 9. Cardiovascular Disease Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
The Americas	227	28.5%	4,272	14.59%
Africa	297	11.2%	5,688	4.75%
Western Pacific	329	36.7%	5,936	22.01%
Europe	338	41.2%	6,446	22.47%
South East Asia	378	29.7%	7,602	16.20%
Eastern Med	468	33.3%	8,843	14.96%
Total	330	30.9%	6,328	15.7%
	# of Deaths: 9,269,796		# of DALYs: 204,400,634	

TABLE 10. Cancer Disease Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
South East Asia	105	9.2%	2,404	5.5%
Eastern Med	116	9.8%	2,703	5.3%
Africa	146	6.67%	3,213	3.1%
The Americas	161	20.9%	3,260	11.3%
Europe	199	24.6%	4,162	15.7%
Western Pacific	210	26.3%	4,572	17.9%
Total	172	17.2%	3,668	9.4%
	# of Deaths: 5,172,192		# of DALYs: 122,665,250	

TABLE 11. Global Cancer Burden by Type for Men, 2016 (DALYs and Mortality)

Cancer Type	Deaths per 100,000	DALYs per 100,000
Tracheal, bronchus, and lung	39	776
Liver	18	451
Stomach	18	361
Colorectal	16	299
Prostate	15	212
Esophageal	10	210

TABLE 12. Global Cancer Burden by Type for Men, 2016 (Prevalence)

Cancer Type	Prevalence per 100,000
Prostate	196
Colorectal	116
Tracheal, bronchus, and lung	59
Stomach	47
Bladder	47

TABLE 13. Cancer Burden by Type and Region for Men, 2016

Region	Cancer Type (ranked within region based on mortality)	Deaths per 100,000	DALYs per 100,000	Cancer Type (ranked within region based on prevalence)	Prevalence per 100,000
Africa	Prostate	37	576	Prostate	127
	Liver	19	494	Colorectal	26
	Tracheal, bronchus, and lung	13	272	Bladder	14
	Colorectal	11	207	Non-Hodgkin lymphoma	12
	Stomach	11	216	Stomach	12
Americas	Tracheal, bronchus, and lung cancer	36	679	Prostate	459
	Prostate	22	329	Colorectal	143
	Colorectal	17	324	Malignant skin melanoma	61
	Stomach	11	220	Tracheal, bronchus, and lung	58
	Pancreatic	9	170	Bladder	56

Region	Cancer Type (ranked within region based on mortality)	Deaths per 100,000	DALYs per 100,000	Cancer Type (ranked within region based on prevalence)	Prevalence per 100,000
Eastern Mediterranean	Tracheal, bronchus, and lung	50	1,049	Prostate	340
	Colorectal	23	436	Colorectal	184
	Prostate	21	297	Bladder	97
	Stomach	15	308	Tracheal, bronchus, and lung	72
	Pancreatic	11	228	Malignant skin melanoma	52
Europe	Tracheal, bronchus, and lung	50	1,049	Prostate	340
	Colorectal	23	436	Colorectal	184
	Prostate	21	297	Bladder	97
	Stomach	15	308	Tracheal, bronchus, and lung	72
	Pancreatic	11	228	Malignant skin melanoma	52
South East Asia	Tracheal, bronchus, and lung	18	377	Prostate	40
	Stomach	9	211	Lip and oral cavity	38
	Liver	8	180	Colorectal	26
	Prostate	8	107	Tracheal, bronchus and lung	18
	Colorectal	7	156	Larynx	15

Region	Cancer Type (ranked within region based on mortality)	Deaths per 100,000	DALYs per 100,000	Cancer Type (ranked within region based on prevalence)	Prevalence per 100,000
Western Pacific	Tracheal, bronchus, and lung	55	1,082	Colorectal	143
	Liver	36	930	Prostate	103
	Stomach	31	608	Stomach	96
	Esophageal	18	358	Tracheal, bronchus and lung	90
	Colorectal	16	324	Liver	63

Diarrhea and Lower-Respiratory Infection

TABLE 14. Diarrhea, Lower-Respiratory, and Other Common Infectious Diseases Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Europe	29	3.2%	1,087	3.1
Western Pacific	35	3.3%	1,175	3.2
The Americas	41	5.0%	1,294	4.2
Eastern Med	69	8.0%	3,102	9.7
SE Asia	145	11.4%	4,367	10.7
Africa	246	20.3%	8,956	20.1
Total	81	8.2%	3,452	9.4%
	# of Deaths: 2,452,371		# of DALYs: 121,959,004	

4 Chronic Respiratory Disease

TABLE 15. Chronic Respiratory Infection Disease Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Europe	38	4.6%	868	3.1%
The Americas	47	5.8%	1,078	3.6%
Africa	51	1.9%	1,279	1.3%
Eastern Med	67	4.6%	1,616	2.9%
Western Pacific	81	8.5%	1,474	5.2%
SE Asia	140	10.1%	3,125	6.2%
Total	75	6.8%	1,647	4.0%
	# of Deaths: 2,029,877		# of DALYs: 52,593,915	

5 Diabetes and Chronic Kidney Disease

TABLE 16. Diabetes, Urogenital, Blood, and Endocrine Diseases Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Europe	32	3.8%	1,197	4.3%
Western Pacific	34	3.9%	1,374	5.2%
The Americas	67	8.6%	2,162	7.5%
Africa	80	3.8%	2,628	3.0%
SE Asia	86	6.6%	2,499	5.6%
Eastern Med	87	6.5%	2,850	5.6%
Total	55	5.3%	1,939	5.0%
	# of Deaths: 1,590,996		# of DALYs: 65,599,550	

TABLE 17. Neurological Disorders Disease Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
SE Asia	37	2.2%	1,280	3.1%
Africa	41	1.3%	1,252	1.6%
Europe	46	5.4%	1,367	4.6%
Eastern Med	46	2.4%	1,468	3.2%
Western Pacific	49	4.5%	1,126	3.8%
The Americas	49	5.9%	1,326	4.4%
Total	46	3.6%	1,290	3.3%
	# of Deaths: 1,092,368		# of DALYs: 42,548,351	



HIV/AIDS and Tuberculosis

TABLE 18. HIV/AIDS and Tuberculosis Disease Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
The Americas	9	1.3%	410	1.5%
Europe	9	0.9%	412	1.3%
Western Pacific	10	1.3%	378	1.4%
Eastern Med	29	2.7%	807	1.9%
SE Asia	60	6.0%	1,881	4.9%
Africa	203	15.7%	8,058	12.0%
Total	38	4.5%	1,589	4.6%
	# of Deaths: 1,349,394		# of DALYs: 59,463,572	

8 Unintentional Injuries

TABLE 19. Unintentional Injury Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
The Americas	25	3.3%	1,455	5.0%
Eastern Med	28	3.5%	1,678	4.6%
Europe	29	3.2%	1,979	6.4%
Western Pacific	30	3.5%	1,622	5.5%
SE Asia	47	4.6%	2,130	5.6%
Africa	50	3.9%	2,368	4.2%
Total	34	3.8%	1,876	5.2%
	# of Deaths: 1,123,729		# of DALYs: 67,986,957	

9 Traffic Accidents

TABLE 20. Traffic Accident Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Europe	17	1.7%	1,003	3.0%
The Americas	27	3.8%	1,432	5.1%
Western Pacific	29	3.9%	1,495	5.6%
Africa	33	2.8%	1,466	2.5%
SE Asia	35	4.3%	1,724	4.9%
Eastern Med	49	6.8%	2,361	6.8%
Total	30	3.7%	1,559	4.5%
	# of Deaths: 1,100,563		# of DALYs: 58,956,603	

10 Neonatal Disorders

TABLE 21: Neonatal Disorders Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Europe	9	0.6%	900	1.9%
Western Pacific	12	0.8%	1,111	23.0%
The Americas	13	1.5%	1,227	3.7%
SE Asia	31	3.7%	2,971	7.8%
Eastern Med	33	6.7%	3,049	11.1%
Africa	44	10.2%	3,892	13.9%
Total	28	3.3%	2,575	7.1%
	# of Deaths: 982,592		# of DALYs: 91,772,479	

11 Cirrhosis and Other Liver Diseases

TABLE 22. Cirrhosis and Other Liver Disease Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Western Pacific	17	2.3%	478	2.0%
Europe	24	2.9%	761	2.7%
The Americas	26	3.7%	759	2.8%
SE Asia	32	3.4%	1,003	2.6%
Africa	36	2.0%	1,020	1.2%
Eastern Med	40	3.3%	916	1.8%
Total	25	2.9%	766	2.1%
	# of Deaths: 856,804		# of DALYs: 27,765,559	

TABLE 23. Self Harm and Violence Burden for Men, by Region, 2016

Region	Deaths per 100,000	% of total Deaths	DALYs per 100,000	% of total DALYs
Eastern Med	15	2.3%	3,001	8.6%
Western Pacific	21	2.6%	2,647	9.9%
SE Asia	28	3.4%	3,109	8.9%
Africa	31	2.6%	3,273	5.2%
Europe	46	5.0%	4,074	12.8%
The Americas	53	7.4%	4,850	17.6%
Total	31	3.7%	3,360	9.8%
	# of Deaths: 1,124,985		# of DALYs: 127,105,582	

ANNEX 2: COMPARATIVE DALYS & MORTALITY RATES – MALE AND FEMALE

The tables below display data from the Global Burden of Disease (GBD) data set regarding age-standardized DALYs and mortality rates per 100,000 people for all of the categories measured. The rankings reflect the

entire population's burden – both males and females. In addition to having a higher overall rate of DALYs and mortality, men bear a higher burden with regard to many of the causes.

TABLE 24: Global Age-Standardized Mortality Rates, by Sex, 2016

Cause of Mortality	Male Deaths per 100,000	Female Deaths per 100,000	Rate Ratio Men vs Women
All Causes	1,002	690	1.5
Cardiovascular diseases	330	233	1.4
Neoplasms	172	104	1.7
Diarrhea, lower-respiratory, and other common infectious diseases	81	67	1.2
Chronic respiratory diseases	75	42	1.8

Cause of Mortality	Male Deaths per 100,000	Female Deaths per 100,000	Rate Ratio Men vs Women
Diabetes, urogenital, blood, and endocrine diseases	55	45	1.2
Neurological disorders	46	48	1.0
HIV/AIDS and tuberculosis	38	24	1.6
Unintentional injuries	34	19	1.8
Neonatal disorders	28	22	1.3
Transport injuries	30	9	3.3
Cirrhosis and other chronic liver diseases	25	11	2.3
Self-harm and interpersonal violence	24	9	2.7
Digestive Diseases	19	14	1.4
Neglected tropical diseases and malaria	12	12	1.0
Other non-communicable diseases	10	9	1.1
Nutritional deficiencies	6	5	1.2
Mental disorders	7	2	3.5
Other communicable, maternal, neonatal and nutritional diseases	5	4	1.3
Maternal disorders	0	6	N/A
Forces of nature, conflict, and terrorism	3	1	3.0
Musculoskeletal disorders	1	2	0.5

TABLE 25: Global Age-Standardized DALYs Rates, by Sex, 2016

Cause of DALYs	Male DALYs per 100,000	Female DALYs per 100,000	Rate Ratio Men vs Women
All Causes	37,299	30,208	1.2
Cardiovascular diseases	6,328	4,119	1.5
Diarrhea, lower-respiratory, and other common infectious diseases	3,452	3,108	1.1
Neoplasms	3,668	2,467	1.5
Other non-communicable diseases	2,726	2,792	1.0
Neonatal disorders	2,575	2,139	1.2
Mental disorders	2,254	2,085	1.1
Musculoskeletal disorders	1,654	2,172	0.8
Diabetes, urogenital, blood, and endocrine diseases	1,939	1,860	1.0
Unintentional injuries	1,876	1,092	1.7
Neurological disorders	1,290	1,662	0.8
HIV/AIDS and tuberculosis	1,589	1,127	1.4
Chronic respiratory diseases	1,647	1,107	1.5
Neglected tropical diseases and malaria	1,063	1,038	1.0
Transport injuries	1,559	519	3.0
Nutritional deficiencies	711	980	0.7
Self-harm and interpersonal violence	1,105	444	2.5

Cause of DALYs	Male DALYs per 100,000	Female DALYs per 100,000	Rate Ratio Men vs Women
Cirrhosis and other chronic liver diseases	766	301	2.5
Digestive diseases	543	430	1.3
Other communicable, maternal, neonatal and nutritional diseases	353	303	1.2
Maternal disorders	0	366	N/A
Forces of nature, conflict, and terrorism	201	98	2.1

The tables below compare age-standardized DALYs and mortality rates among males and females for six risk behaviors. As stated in this report, men are more likely to engage in these behaviors, and therefore more burdened

by their outcomes. According to GBD data, men are 4.6 times as likely to die from alcohol use, globally. Unsafe sex is the only behavior analyzed that disproportionately burdens women.

TABLE 26: Global Age Standardized Mortality Rate, per Risk Behavior, per Sex, 2016

Risk Behavior Mortality	Male Deaths per 100,000	Female Deaths per 100,000	Rate Ratio Men vs Women
Poor diet	196	128	1.5
Tobacco use	173	55	3.2
Alcohol use	69	15	4.6
Drug use	10	3	3.3
Occupational hazards	37	10	3.7
Unsafe sex	13	17	0.8

TABLE 27: Global Age Standardized DALYs Rate, per Risk Behavior, per Sex, 2016

Risk Behavior DALYs	Male DALYs per 100,000	Female DALYs per 100,000	Rate Ratio Men vs Women
Poor diet	4,151	2,503	1.7
Tobacco use	3,950	1,254	3.2
Alcohol use	2,244	492	4.6
Drug use	583	259	2.3
Occupational hazards	1,533	564	2.7
Unsafe sex	663	770	0.9

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