







# PERSONS WITH DISABILITIES IN CAMBODIA: FINDINGS FROM THE CAMBODIA DEMOGRAPHIC AND HEALTH SURVEY, 2014 & 2021-22





A wide range of factors determine the capacity of persons with disabilities to participate fully and equally, including individual factors, living and working conditions, general socio-economic, cultural and environmental conditions and access to health care services. The World Report on Disability (2011)<sup>1</sup> showed that globally, many persons with disabilities experience worse socio-economic outcomes than persons without disabilities.

This report presents a comprehensive analysis of the well-being of persons with disabilities in Cambodia using the Cambodia Demographic and Health Survey (CDHS) fielded in 2021-2022. The analysis provides information on disability prevalence within the Cambodian population, provides an analysis of inequalities ("disability gaps") experienced by persons with and without disabilities across a number of well-being indicators and how their situation has evolved since the previous round of CDHS in 2014.

This secondary analysis was funded by the Australian Department of Foreign Affairs and Trade (DFAT) through the Australia Cambodia Cooperation for Equitable Sustainable Services (ACCESS) program and in close collaboration with the Cambodian National Institute of Statistics (NIS), Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY), and Disability Action Council (DAC).

The findings illustrate progress made by the Royal Government of Cambodia in key sectors to progress the rights of persons with disabilities. In overall, persons with disabilities have not 'been left behind' in the development process for a majority of sectors, however 'the gap' or level of inequality has overall remained the same or deteriorated, indicating a need to renew efforts to ensure persons with disabilities can equally benefit from the Country's economic and social development.

We are confident this report will be useful to a wide range of Ministries and institutions, including the Government Institutions, Development Partners, Non-Governmental Organisations, Organisations of Persons with Disabilities, Private Institutions, policy-makers, program implementers and researchers in their efforts for improved well-being for all persons with disabilities living in Cambodia and to leave no one behind.

Her Excellency Hang Lina

Delegation of the Royal Government of Cambodia in-charge of Director General of the National Institute of Statistics His Excellency Em Chan Makara

Secretary of State, Ministry of Social Affairs, Veterans and Youth Rehabilitation, and Secretary General of Disability Action Council This analysis was conducted by the consultant Dr Michael Palmer, with close collaboration and support provided by HE. Sok Kosal, Deputy Director General of the National Institute of Statistics (NIS), Ministry of Planning, Cambodia and Mr. Phan Chinda, Deputy Director General of the same institution. This analysis also benefited from the support and guidance of HE. Yeap Malyno, Director General of the General Department of Social Policy of Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) and HE. Vorn Koy, Deputy Secretary General of the Secretariat General of Disability Action Council (DAC-SG).

We would like to express our appreciation to the above team as well as to the team of the Australia Cambodia Cooperation for Equitable Sustainable Services (ACCESS) program phase 1, especially to Dr. Chou Vivath, Disability Lead and Dr. Khim Keovathanak, Monitoring Evaluation and Learning Manager, Mrs Anne Rouve-Khiev, Team Leader, and Ms Sarah Dyer, Strategic Disability Advisor for their technical guidance and support for the successful completion of this analysis report.

The development and publication of this report would not have been possible without the generous financial support of the Australian Department of Foreign Affairs and Trade (DFAT) through ACCESS.

# **EXECUTIVE SUMMARY**

This report provides a comprehensive analysis of the well-being of persons with disabilities in Cambodia using the Cambodia Demographic and Health Survey (CDHS) fielded in 2021-2022. The analysis provides information on disability prevalence within the Cambodian population. Further, this report provides an analysis of inequalities ("disability gaps") experienced by persons with and without disabilities in deprivation in multiple dimensions of well-being¹ and in the specific dimensions of education, health, employment, living standards, social protection, access to information, and experience of domestic violence.

The report additionally provides a comparative analysis over time (from 2014 to 2022) between persons with and without disabilities of the change in a set of key well-being indicators since 2014 when the previous CDHS was fielded. The analysis of relative change in indicators enables assessment to be made on whether the well-being of persons with disabilities has improved, remained the same, or deteriorated over time relative to the population without disabilities.

Disability is measured in this report using the Washington-Group Short-Set (WG-SS) questionnaire. This provides self-reported assessment of the degree of difficulty in three tiers (some, a lot, cannot do). experienced by an individual in performing six basic domains (seeing, hearing, walking, self-care, remembering/concentrating, communication).

Following Hanass-Hancock et al. (2023), the different description of levels of disability applied in this analysis is based upon thresholds of difficulty experienced by an individual in performing the six basic domains. The descriptions are provided in the table immediately below:

Description	Level of difficulty reported
Persons with disabilities	At least some level of difficulty (some, a lot or cannot do) in any of the six domains.
Persons with severe disabilities	At least a lot of difficulty (a lot or cannot do) in any of the six domains
Persons with non- severe disabilities	Only some level of difficulty in any of the six domains.
Persons without disabilities	No functional difficulties in all six domains

The key findings of the comprehensive analysis are:

# Prevalence of disability reported within the population aged five years and older:

- 24% some degree of disability
- 4% severe degree of disability
- 20% non- severe disability

<sup>1</sup> Deprivation in multidimensional well-being is measured by the share of persons with more than one deprivation among four dimensions of well-being: education, work, health, and standard of living



- Proxy-respondent disability varies considerably across the population with higher disability prevalence recorded among females, older persons, persons with low education, poor persons, and those living in rural areas.
- ❖ Significant inequalities between persons with and without disabilities exist cross the various well-being dimensions, and the magnitude of difference increases with increasing severity of disability, and remains statistically significant after controlling for differences in other key observable characteristics that are summarized in the section immediately following:

# Education

- Persons with disabilities are significantly more likely to have never attended school compared with persons without disabilities. 31% of persons with disabilities reported have never attended school compared to 16% of persons without disabilities.
- School age persons with disabilities are significantly less likely to be currently attending school compared to school age persons without disabilities. 33% of children with severe disabilities of primary schooling age (6-12 years) were currently in school compared to 76% of equivalent-aged children without disabilities.

# Employment

• Persons with disabilities are significantly less likely to participate in any work, particularly in paid work (in cash or in-kind), and were more likely to participate in unpaid work. 59% of persons with severe disabilities reported to be working in the past 7 days compared to 73% of persons without disabilities.

# Health

• Persons with disabilities are significantly more likely to be in poor health. 8% of persons with disabilities and 23% of persons with severe disabilities reported being in poor health (bad or very bad) compared to 1% of persons without disabilities.

# Living Standards

- Persons with disabilities are significantly less likely to live in a household with access to safe drinking water and sanitation. 85% and 78% of persons with severe disabilities reported access to safe drinking water and sanitation, respectively, compared to 88% and 81% of persons without disabilities.
- Persons with disabilities are significantly less likely to live in a household with assets, quality housing conditions, and with access to clean cooking fuels. 37% and 41% of persons with disabilities live in quality housing and use clean cooking fuels compared to 43% and 52% of persons without disabilities.

# Multi-Dimensional Well-Being

 Persons with disabilities are significantly more likely to experience deprivation in multidimensional well-being<sup>2</sup>. 72% of persons with disabilities and 82% of persons with severe disabilities were deprived in multi-dimensional well-being compared to 58% of persons

<sup>2</sup> In this report, deprivation in multidimensional well-being is measured by the share of persons with more than one deprivation among four dimensions of well-being: education, employment, health, and standard of living.

without disabilities.

# Access to Information

 Persons with disabilities are significantly less likely to access information through the internet and other channels of communication. 55% of persons with disabilities use the internet compared to 70% of persons without disabilities.

# Domestic Violence

- Women with disabilities (15-49 years) are significantly more likely to experience domestic violence (physical, sexual, and emotional violence) by their intimate partner in the past 12 months. 20% of women with disabilities experienced domestic violence compared to 12% of women without disabilities.
- Trend analysis over time period (2014- 2022) established that most of the outcomes on the well-being indicators (described immediately prior) have improved at a similar rate for both persons with and without disabilities.
  - Overall, persons with disabilities have not for the majority 'been left behind' in the development process, however given 'the gap' or level of inequality has overall remained the same, for example in the use of clean cooking fuels, receipt of free health insurance, use of the internet.
  - In some areas the situation for persons with disabilities has deteriorated-living standards, social health protection, and access to information.
  - The rate of deprivation in multi-dimensional well-being has decreased at a slower rate for persons with disabilities compared to persons without disabilities, that, would indicate that overall persons with disabilities have not benefited equally from the country's economic and social development.

The evidence from the analysis provides the basis for options on action to take to address the continued inequality and in some areas deterioration of the experiences of persons with disabilities comparted to persons without disabilities. The areas for action proposed include:

- i. Increase the school enrollment ratio and primary school completion rate of children and young persons with disabilities.
- ii. Develop vocational training opportunities and paid employment opportunities for adults with disabilities.
- iii. Improve access to health care and rehabilitation programs, assistive devices, and social health protection (free health insurance) for persons with disabilities.
- iv. Expand coverage of social protection for persons with disabilities.
- v. Increase access to, and training in the use of information and communications technology (internet and mobile phone technology) for persons with disabilities.
- vi. Strengthen mechanisms that are equitable and inclusive to prevent violence and support all women survivors of violence, including women with disabilities.
- vii. Strengthen interventions in areas of education and work targeted towards empowering women with disabilities.



# TABLE OF CONTENTS

FOREWORD	III
ACKNOWLEDGEMENTS	IV
EXECUTIVE SUMMARY	V
ACRONYMS	XII
INTRODUCTION	1
BACKGROUND ON DISABILITY IN CAMBODIA	3
History Disability in Cambodia Legal and policy context	3 3 4
DESCRIPTION OF THE DATA AND DEFINITION OF DISABILITY	6
Survey description Defining disability	6
DISABILITY PREVALENCE	9
DEMOGRAPHIC PROFILE	14
EDUCATION	17
Disability gaps in education Adjusted disability gaps in education Disability gaps in education over time	17 21 22
EMPLOYMENT	25
Disability gaps in employment Adjusted disability gaps in employment Disability gaps in employment over time	25 27 28
HEALTH	30
Disability gaps in health Adjusted disability gaps in health Disability gaps in health over time Maternal Health	30 31 32 33

	26
LIVING STANDARDS AND SOCIAL PROTECTION	36
Disability gaps in living standards and social protection	36
Adjusted disability gaps in living standards and social protection	38
Disability gaps in living standards and social protection over time	39
MULTI-DIMENSIONAL WELL-BEING	41
Disability gaps in deprivation of multi-dimensional well-being	41
Adjusted disability gaps in deprivation of multi-dimensional well-being	43
Disability gaps in deprivation in multi-dimensional well-being over time	44
ACCESS TO INFORMATION	45
Disability gaps in access to information	45
Adjusted disability gaps in access to information	47
Disability gaps in access to information over time	48
DOMESTIC VIOLENCE	50
Disability gaps in domestic violence	50
Adjusted disability gaps in domestic violence	51
Disability gaps in domestic violence over time	52
CONCLUSIONS	54
The extent of disability in the population	54
Disability gaps	54
Policy implications	55
REFERENCES	57
APPENDICES	59
Appendix Table 1. Disability Prevalence, 2014 (%)	59
Appendix Table 2. Demographic Profile, 2014 (%)	60



Figure 1	Disability Prevalence9
Figure 2	Disability Type Prevalence
Figure 3	Disability Prevalence by Province
Figure 4	Disability Prevalence Over Time, 2014 and 2021-2211
Figure 5	Composition of Disability Status by Age Category14
Figure 6	Composition of Disability Types among Persons with Disabilities by Age Category15
Figure 7	Highest Educational Attainment by Disability Status
Figure 8	Ever Attended School by Disability Status and Gender
Figure 9	Currently Attending School by Disability Status and Gender (ages 6-24)19
Figure 10	Currently Attending School by Disability Status and Gender (ages 6-12)19
Figure 11	Employment Type by Disability Status25
Figure 12	Employment by Disability Status and Gender26
Figure 13	Health Indicators by Disability Status31
Figure 14	Standard of Living and Social Protection Indicators by Disability Status37
Figure 15	Deprivation in Multidimensional Well-being and Indicators by Disability Status (%)
Figure 16	Access to Information Indicators by Disability Status46
Figure 17	Frequency of Internet Usage by Disability Status
Figure 18	Domestic Violence Indicators by Female Disability Status51



Table 1	Disability Prevalence (%)
Table 2	Demographic Profile (%)
Table 3	Summary Education Statistics by Disability Status and by Gender (%)20
Table 4	Regression Results on the Effect of Disability on Education22
Table 5	Changes in Education Outcomes Over Time by Disability Status24
Table 6	Summary Employment Statistics by Disability Status and Gender (%)26
Table 7	Regression Results on the Effect of Disability on Employment27
Table 8	Changes in Employment Outcomes Over Time by Disability Status29
Table 9	Summary Health Statistics by Disability Status (%)31
Table 10	Regression Results on the Effect of Disability on Health Indicators32
Table 11	Changes in Water and Sanitation Outcomes Over Time by Disability Status33
Table 12	Maternal Health for women by Disability Status and Location (%)34
Table 13	Standard of Living and Social Protection Indicators by Disability Status (%)37
Table 14	Regression Results on the Effect of Disability on Living Standards and Social Protection Indicators
Table 15	Changes Over Time in Living Standards and Social Protection Indicators by Disability Status40
Table 16	Summary Statistics on Deprivation in Multidimensional Well-being and Associated Indicators by Disability Status (%)43
Table 17	Regression Results on the Effect of Disability on Deprivation in Multidimensional Well-being44
Table 18	Changes Over Time in Deprivation in Multidimensional Well-being by Disability Status44
Table 19	Summary Statistics on Access to Information Indicators by Disability Status (%)
Table 20	Regression Results on the Effect of Disability on Access to Information Indicators
Table 21	Changes Over Time in Access to Information Indicators by Disability Status49
Table 22	Summary Domestic Violence Statistics by Female Disability Status (%)51
Table 23	Regression Results for Effect of Disability on Domestic Violence Indicators52
Table 24	Changes Over Time in Domestic Violence Indicators
	by Female Disability Status53



ACCESS Australia Cambodia Cooperation for Equitable Sustainable Services

ATI Access to Information

ANC Ante Natal Care

**CDHS** Cambodia Demographic and Health Survey

**CRPD** Convention on the Rights of Persons with Disabilities

DAC Disability Action Council

**DFAT** Australian Department for Foreign Affairs and Trade

**DRA** Disability Rights Administration

GDP Gross Domestic Product

ICT Information and Communication Technology

LMICs Low- and Middle-Income Countries

MOH Ministry of Health, Cambodia

MOP Ministry of Planning

NIS National Institute of Statistics, Cambodia

**PWDF** Persons With Disabilities Foundation

RGC Royal Government of Cambodia

SDGs Sustainable Development Goals

UN United Nations

WG Washington Group on Disability Statistics

WG-SS Washington Group Short-Set

WHO World Health Organisation

INTRODUCTION

One in six persons worldwide or 1.3 billion people are estimated to live with some form of disability (WHO 2023). Producing statistics about the relative well-being of persons with disabilities is important to inform the development of policies and programs to progress the equalisation of opportunities for persons with disabilities. In addition, it is important to monitor the implementation of national, regional and international laws and commitments with respect to promoting and protecting the rights of persons with disabilities.

The international Convention on the Rights of Persons with Disabilities (CRPD) requires state parties to promote and protect the rights of persons with disabilities. The CRPD requires state parties to "collect appropriate information, including statistical and research data, to enable them to formulate and implement policies to give effect to the present Convention" (Article 31). Furthermore, the United Nations (UN) Sustainable Development Goals (SDGs) require disability data to monitor the achievement of the different SDGs and respective indicators for target population groups, among which persons with disabilities are identified as a vulnerable population group. It is necessary to monitor whether persons with disabilities are 'being left behind<sup>3</sup>′.

Although reporting on disability rights and human development indicators is essential to inform and support disability policy and advocacy, there is a general lack of detailed information on the inequalities that persons with disabilities face within and across countries (UNPRPD 2022). This is particularly the case in low- and middle-income countries (LMICs) where most of the world's population with disabilities resides (Mitra and Palmer, 2023). This makes it challenging to develop, and advocate for, inclusive policies and practices to equalise opportunities and promote the economic and social inclusion of persons with disabilities in these countries.

In response to growing awareness around the barriers that persons with disabilities face, a growing number of household surveys and censuses have begun to incorporate functional difficulty questions (e.g. difficulty seeing) so as to identify persons with disabilities (Mitra and Yapp 2021, 2022). Notably, the Washington Group Short Set (WG-SS) questionnaire, which includes six questions on functional difficulties developed by the Washington Group (WG) on Disability Statistics, has increasingly been integrated into national survey data (Hanass-Hancock et al. 2023). Due to the growing adoption of the WG-SS and other disability questions in recent years, it has become possible to document inequalities by disability status and monitor disability rights.

<sup>3</sup> Leave no one behind is the central, transformative promise of the 2030 Agenda for Sustainable Development and its Sustainable **Development Goals** 

In the country context of Cambodia, this report aims to achieve the following:

- 1) Document the extent of inequalities across a broad range of well-being indicators for persons with disabilities compared to persons without disabilities ("disability gaps") using the latest round of the CDHS (2021-22).
- 2) Document how inequalities between persons with and without disabilities have evolved over time since the previous round of the CDHS was collected in 2014.
- 3) Build the evidence base to support the Royal Government of Cambodia (RGC) to monitor and meet its national, regional and international commitments with respect to disability.

Disability is measured in this report using the WG-SS, according to the degree of functional difficulty across six domains (seeing, hearing, walking, self-care, remembering/concentrating, communication). Well-being is measured across a broad range of life areas including education, employment, health, living standards and social protection, multi-dimensional well-being, access to information and domestic violence. Inequalities by disability status are measured by the simple difference in the means of indicators (unadjusted disability gaps) as well as regression-adjusted gaps which account for differences in the observable characteristics of persons with and without disabilities (adjusted disability gaps). The regression-based estimates provide a more accurate estimate of the extent to which the gaps can be attributed to disability rather than other factors, such as age, which are jointly related to disability and outcomes. For example, disability is strongly associated with age and elderly persons have lower average level of education thus to measure inequalities more accurately in educational attainments between persons with and without disabilities it is necessary to adjust for differences in age.

This report documents further how inequalities by disability status, or disability gaps, in well-being indicators have changed over time since 2014 when the previous CDHS was fielded. The report documents how the outcomes of persons with disabilities have changed over time relative to persons without disabilities. The difference in the change in outcomes for persons with and without disabilities over time provides insight into the impact of policies implemented in the interim period or more generally the extent to which persons with disabilities have been included or left behind in the development process. The change in disability gaps over time is measured by a simple difference in the mean disability gaps over time, as well as in a regression framework that controls for observable differences in the composition of the two samples. Since the characteristics of persons that do and do not report disability may change over the two samples, it is necessary to adjust for these differences in the estimation.

# BACKGROUND ON DISABILITY IN CAMBODIA



# **History**

Cambodia's modern history is marked by civil conflict followed by rapid economic and social development. Beginning in 1970 after a military coup, the country experienced a period of prolonged internal conflict. During Khmer Rouge regime, an estimated 1.5–3 million people died due to execution, disease, and famine (Dy 2007). The destruction of human and physical capital that occurred during the reign of the Khmer Rouge continued to have an impact on Cambodia and its people long after the fall of the regime (Islam et al. 2016, 2017).

Since then, Cambodia has become one of the world's fastest-growing economies and has successfully transitioned into a lower-middle-income country (World Bank 2016). Over the past 2 decades, Cambodia has recorded an annual growth rate of approximately 8%, largely due to the expansion of the industrial sector and the textiles and apparel industry. Since the mid-1990s, the contribution of agriculture to gross domestic product (GDP) has declined from 44% to 21%, while that of industry has expanded to one-third. Official poverty rates have fallen dramatically from almost one-half of the population in 2007 to 14% in 2014. However, the share of non-poor but economically insecure households has been growing, in part because of limited human capital and assets.

The economy was impacted heavily by COVID-19 with GDP growth falling by 10 percentage points to-3% in 2020 (World Bank 2022). Thereafter the economy experienced a broad-based recovery. However, inflation has surged, which is particularly harmful to the poor and near-poor. Cambodia's small, open economy remains vulnerable to global economic risks and shocks.

# **Disability in Cambodia**

Almost half of Cambodia's population is below the age of 25 and around 10% are 60 years of age or older (NIS, MOH and ICF, 2023). Because disability is strongly associated with age, the youthfulness of Cambodia's population puts downward pressure on the disability rate.

However, the demographic profile of the Cambodian population is changing. Like many countries around the world, Cambodia is experiencing an aging of its population alongside the rise of non-communicable diseases both of which contribute to the self-report of disability in the population.

Previous estimates of the prevalence of disability in Cambodia range from 1% to 10%, depending upon the measure and selected cut-off of disability. The 2008 population census estimates the prevalence of disability to be 1.4%, using a medical impairment definition of disability (NIS & MOP 2009). This definition views disability in terms of disease or impairment, and measures based on it tend to understate the prevalence of disability (Palmer and Harley 2012; Pettinicchio and Maroto 2021).

Subsequent national surveys measure disability according to the degree of difficulty in functioning, consistent with the contemporary international classification of disability (WHO 2001). Using the WG-SS, the 2014 CDHS recorded an overall disability rate of 9.5% and a severe disability rate of 2.1% whereas the 2019 population census recorded an overall disability rate of 4.9% and a severe disability rate of 1.2% (NIS & MOP 2020; NIS, DGH & ICF 2015). The estimates are low when compared to global prevalence of 16% (WHO 2023), but are similar to those from other low- and middle-income countries (Pettinicchio and Maroto 2021; Mitra and Yapp 2021, 2022).

Persons with disabilities and their families are among the poorest and most marginalised in Cambodia. The poverty rate of households with at least one member with disability is estimated to be approximately one-third higher than households without members with disabilities (18.1% vs. 13.7%; Palmer, Williams, and McPake 2019). When considering the additional costs associated with disability (e.g., health care, medication, transportation), the poverty rate of households with a member with disability increases to almost three times that of households without member with disability (37% vs. 14%; Palmer, Williams, and McPake 2019). Ethnographic research documents the marginalisation of persons with disabilities from work and all facets of Cambodian society (Gartrell 2010; Gartrell and Hoban 2013). Contributing to this is a common misconception that associates disability with an inability to work.

# Legal and policy context

Cambodia has an extensive legal and policy framework to guide efforts to guarantee the rights and address the needs of adults and children with disabilities.

Cambodia ratified the CRPD in December 2012 and is currently finalising its first report to the Convention. As a member of UNESCAP, Cambodia has also committed to the implementation of the Incheon Strategy and has more recently adopted the Jakarta Declaration on the Asian and Pacific Decade of Persons with Disabilities 2023–2032. Cambodia has adopted the Cambodian Sustainable Development Goals and the country's overall development strategy commits to the "Leave no one behind" principle.

At the national level, the Law on the Protection and the Promotion of the Rights of Persons with Disabilities (Disability Law) was adopted in 2009. It provides a legal framework to protect the rights and freedoms of persons with disabilities; to protect the interests of persons with disabilities; to prevent, reduce and eliminate discrimination against persons with disabilities; and to provide physical, mental and vocational rehabilitation to ensure their full and equal participation in activities within the society. This law also defines key disability coordination entities including the Disability Action Council (DAC), the Disability Rights Administration (DRA) and the Persons With Disabilities Foundation (PWDF). A new Law on the Protection of the Rights of Persons with Disabilities is currently being finalised with the aim to better align with the rights-based CRPD.

A number of Sub-decrees, Prakas, Circulars and Letters have been issued to support the current law relating to accessibility and transportation; driving license; parking spaces; inclusive education, discounts for school fees and stationery and quotas for access to vocational training and employment.

The first National Disability Strategic Plan (NDSP 2014-2018) was launched on 3 July 2014 to "promote participation of government institutions, private sector, civil society, and development partners for disability inclusive social affairs to support sustainable development." The second NDSP 2018-2023 is about to conclude and a third NDSP 2024-2028 is under development.

Major recent policy developments include the introduction by the Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) of a disability identification process, a Disability Information Management System (DIMS) and a soon to be launched social assistance Family Package including a disability cash transfer for persons with disabilities living in poor households.

# DESCRIPTION OF THE DATA AND DEFINITION OF DISABILITY

# **Survey description**

The 2021-22 CDHS is the fifth such survey conducted in Cambodia, implemented by the National Institute of Statistics (NIS) in collaboration with the Ministry of Health (MOH) with technical assistance provided from ICF (NIS, MOH, & ICF, 2023). The survey was fielded over a five and haftmonth period from September 2021 to February 2022 and designed to provide representative results for all survey indicators for the country as a whole, for urban and rural areas separately, and for each of the 25 provinces.

The primary objective of the survey is to provide up-to-date estimates of demographic, socio-economic and health indicators of the population. Notably, the survey collected information on disability using an international disability question set developed by the Washington Group of Disability Statistics, known as the WG-SS (described below). The information collected through the 2021–22 CDHS is intended to assist policymakers and program managers in designing and evaluating programs and strategies for improving the health of the country's population. The 2021–22 CDHS also provides indicators relevant to the SDGs for Cambodia.

The 2021-22 CDHS (like earlier rounds in 2000, 2005, 2010, and 2014) followed a two-stage stratified cluster design that was intended to allow estimates of key indicators at the national level as well as for urban and rural areas, and for each of Cambodia's 25 provinces. In the first stage, clusters were selected using a probability proportionate to the number of households for urban and rural strata. In the second stage, 30 households were randomly selected from each of the 709 clusters. The total sample size was 21,270 households, with a sample response rate of 99%. Each household completed a questionnaire, with the person with the most knowledge of the household responding on behalf of all members. Separate questionnaires were administered to female and male household members aged 15–49 years. One female and male per household was randomly selected for the interview. In addition, one-third of households were randomly selected to be included in a domestic violence module that was administered to one randomly selected female in the household. For this report, selected information is drawn from each of the household questionnaire, male and female questionnaires. All analyses are adjusted for the complex survey design.

# **Defining disability**

Measuring disability in population surveys and censuses in a way that is internationally comparable and meaningful is challenging. There has been considerable progress in the development of survey questions to collect internationally comparable data on disability in the past two decades. The Washington Group (WG) on Disability Statistics, in collaboration with international organisations such as United Nations Children Fund (UNICEF) and International Labour Organisation (ILO) has developed and field tested several sets of disability questions.

Most notably, the WG-SS has increasingly been integrated into national household surveys and population censuses worldwide, including in the CDHS 2014 and 2021-22 waves. The question

set was inspired by the International Classification of Functioning, Disability and Health which defines disability as a degree of functional impairments that may result in activity limitations, such as difficulties executing activities of daily living, or participation restrictions that hinder a person's ability to play a meaningful role in society (Madans et al. 2011).

The WG-SS question set includes six questions according to six functional domains- seeing, hearing, walking, remembering or concentrating, self-care and communicating – along an ascending scale of difficulty of 'none', 'some', 'a lot', 'cannot do at all' (Box 1). There are various possible ways to create statistical measures of disability using WG-SS based data (Hanass-Hancock et al. 2023). The chosen cut-off for the level of functional difficulty affects estimates of disability prevalence as well as the inequalities in well-being between persons with and without disabilities (also referred to in this report as the "disability gap").

# Box 1.

# Disability questions contained in the Cambodia Demographic Health Survey 2021-22 for persons aged 5 years or older

- 1. Do you have difficulty seeing, even if wearing glasses?
  - a. No no difficulty
  - b. Yes some difficulty
  - c. Yes a lot of difficulty
  - d. Cannot do at all
- 2. Do you have difficulty hearing, even if using a hearing aid?
  - a. No no difficulty
  - b. Yes some difficulty
  - c. Yes a lot of difficulty
  - d. Cannot do at all
- 3. Do you have difficulty walking or climbing steps?
  - a. No no difficulty
  - b. Yes some difficulty
  - c. Yes a lot of difficulty
  - d. Cannot do at all
- 4. Do you have difficulty remembering or concentrating?
  - a. No no difficulty
  - b. Yes some difficulty
  - c. Yes a lot of difficulty
  - d. Cannot do at all
- 5. Do you have difficulty with self-care such as washing all over or dressing?
  - a. No no difficulty
  - b. Yes some difficulty
  - c. Yes a lot of difficulty
  - d. Cannot do at all
- 6. Because of a physical, mental or emotional health condition, do you have difficulty communicating (for example, understanding others or others understanding you)?
  - a. No no difficulty
  - b. Yes some difficulty
  - c. Yes a lot of difficulty
  - d. Cannot do at all

In this report, we adopt a three-way disaggregation of disability (Box 2) following the recommendation of Hanass-Hancock and colleagues (2023). Firstly, disaggregation is done for persons with no difficulty versus any difficulty (disaggregation A). This is a general measure of disability. Disaggregation is done in two additional ways which capture the severity of functional difficulties. In disaggregation B, we use three categories: persons with no difficulty versus some difficulty versus at least a lot of difficulty (a lot or cannot do). This is a measure of persons with non-severe and severe disabilities. In disaggregation C, we compare persons with no difficulty and some difficulty to persons with at least a lot of difficulty. This is a measure of severe disability.

# Box 2.

# How were indicators disaggregated by disability status?

# A. General (any) disability measure:

- No disability includes people who report 'No difficulty' in all domains.
- Any disability includes people who report 'Some difficulty', 'A lot of difficulty' or 'Unable to do' for at least one domain.

# B. Severe and non-severe disability measure:

- No disability includes people who report 'No difficulty' in all domains.
- Non-severe disability includes persons who report 'Some difficulty' in at least one domain but no 'A lot of difficulty' or 'Unable to do' in other domains.
- Severe disability includes people who answer 'A lot of difficulty' or 'Unable to do' in at least one domain.

# C. Severe disability measure:

- No disability includes persons who report no or some difficulty for all domains.
- Severe disability includes people who answer 'A lot of difficulty' or 'Unable to do' in at least one domain.

In this report, we mostly use the disaggregation A and B. Disaggregation A is useful to capture inequalities between the overall populations with and without disabilities. This measure is also useful in variables where there is limited sample size (i.e. limited number of persons with disabilities reporting the variable). Disaggregation B is a subset of A. Disaggregation B can identify potential deprivations among persons with mild or moderate disabilities and compare them to persons with severe or very severe disabilities. Disaggregation C is used to compare outcomes for persons with severe and non-severe disabilities. It is a useful measure of disability across time (and place) because it is a more consistent and less variable measure of disability. Disaggregation C is used in this report to compare changes across time (2014-2021/22) for persons with disabilities.

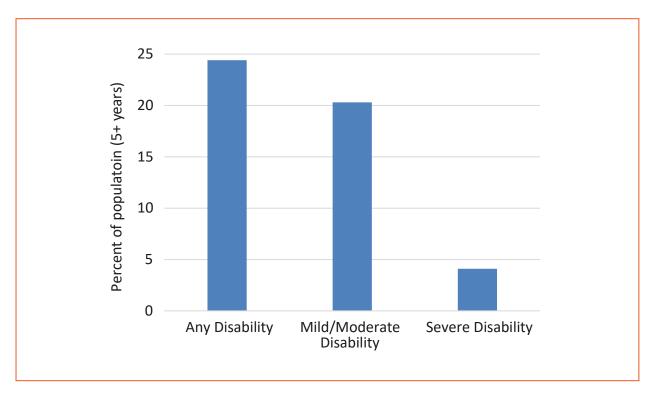
It is important to note that disability is measured in this report based on selected functional difficulties and does not capture all persons with disabilities. Disability is multi-dimensional and no single measure can capture all of its dimensions. For instance, the WG-SS does not capture persons with psychosocial and mental health disabilities particularly well. Despite the incomplete nature of the measure, the WG-SS does a good job of capturing a broad range of impairments and health conditions that lead to functional difficulties. Whilst we refer to "persons with disabilities" throughout the report, it is important to remember that this refers to the narrower group of persons with functional difficulties.

DISABILITY PREVALENCE

This section describes the extent of functional difficulties within the Cambodian population. Table 1., at the end of this section provides all of the detailed disaggregated data referred to in the text of this section.

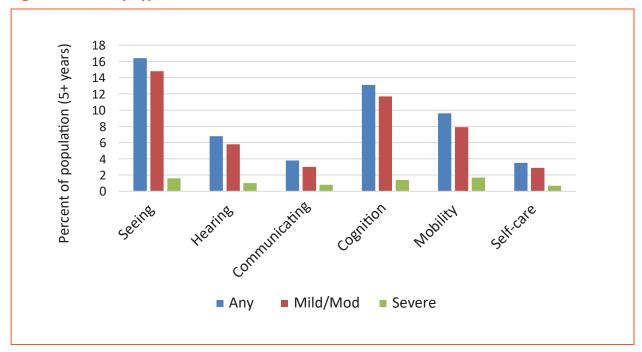
Close to one-quarter (24.4%) of the Cambodian population aged 5 years and above, or 3.44 million people based on current census population estimates, reported to be living with some degree of disability (Figure 1). This fraction was made up of 20.3% of the population reporting a mild or moderate level of disability and 4.1% reporting a severe disability.

**Figure 1 Disability Prevalence** 



With respect to the type of disability, seeing (16.4%), cognition (remembering and concentrating) (13.1%) and mobility (9.6%) difficulties were most reported, followed by hearing (2.8%), communicating (1.5%) and self-care (1.1%) difficulties to a lesser extent (Figure 2). Similar patterns in the reporting of disability types were observed across different degrees of disability severity. Respondents could report more than one disability type, so the percentages shown in Table 1. do not sum to the respective disability prevalence rates.

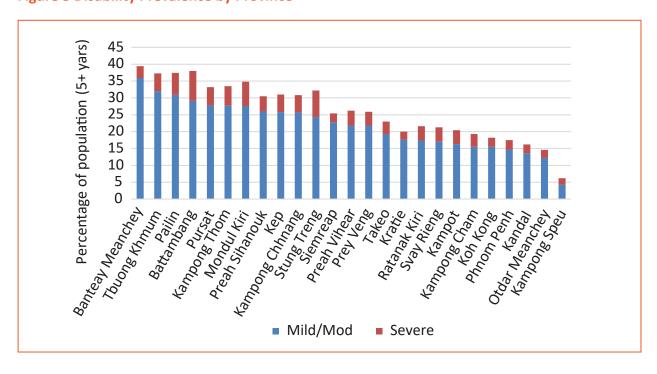
**Figure 2 Disability Type Prevalence** 



Disability prevalence also varies according to key demographic and socioeconomic characteristics. Higher rates of disability are reported among females, older persons, persons that are currently or were formerly married (widowed, divorced, or separated), persons with no formal education or low levels of education, persons that are multi-dimensionally poor, and persons that live in rural areas (data in Table 1.).

The rate of reported disability also varies considerably across provinces. As illustrated in Figure 3 for the case of severe disability, the rate of reported disability is highest in Battambang and Stung Treng provinces.

**Figure 3 Disability Prevalence by Province** 



The rates of disability reported in the Cambodian population in 2021-22 differ significantly from those reported in 2014. In 2014, 9.5% of the population reported any degree of disability, 7.3% reported mild or moderate disability, and 2.1% reported a severe disability (Figure 4.). Increased reporting of disability over time could be due to a multitude of reasons, including changing demographics and aging, changing awareness and social perceptions of disability, changing macroeconomic conditions, and changing policies and entitlements for persons with disabilities. Another potential factor explaining the jump in disability prevalence rates relates to the training of enumerators and increased attention given to disability questions in the 2021-22 wave.

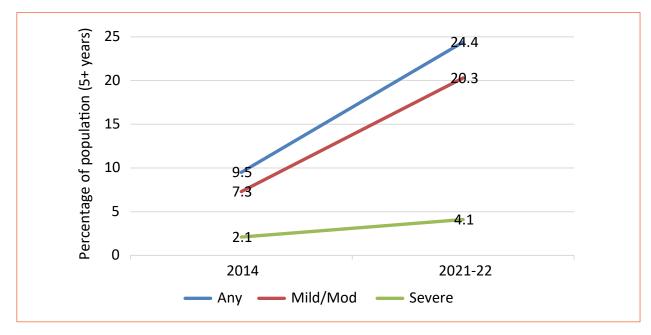


Figure 4 Disability Prevalence Over Time, 2014 and 2021-22

Finally, as shown in Appendix Table 1, patterns of disability prevalence are similar across the two survey waves. However, as discussed in the next section, there do exist some differences in the composition of the population with disabilities in the two samples.

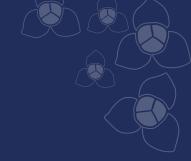
**Table 1 Disability Prevalence (%)** 

	Any	Mild/Mod	Severe	None
Disability	24.4	20.3	4.1	75.6
Disability type				
Seeing	16.4	14.8	1.6	83.6
Hearing	6.8	5.8	1.0	93.2
Communicating	3.8	3.0	0.8	96.2
Cognition	13.1	11.7	1.4	86.9
Mobility	9.6	7.9	1.7	90.4
Self-care	3.5	2.9	0.7	96.5
Sex				
Female	26.9	22.4	4.5	73.1

	Any	Mild/Mod	Severe	None
Male	21.8	18.2	3.6	78.2
Age group				
5-14	5.7	4.8	0.9	94.3
15-29	7.7	6.3	1.4	92.3
30-44	18.5	16.8	1.7	81.5
45-59	48.5	43.5	5.0	51.5
60+	773	57.5	19.9	22.7
Marital status				
Never married/living together	10.8	7.4	3.4	89.2
Married/living together	31.8	28.0	3.8	68.2
Widowed	68.1	48.7	19.3	31.9
Divorced/separated	33.3	26.5	6.8	66.7
Highest education achievement				
Never attended school	39.2	29.3	9.9	60.8
Less than primary	25.3	21.7	3.6	74.7
Primary school	17.3	15.4	1.9	82.7
At least secondary	14.7	13.6	1.1	85.3
Multi-dimensional well-being				
Deprived	28.8	23.3	5.5	71.2
Not deprived	17.5	15.7	1.9	82.5
Rural urban residence				
Urban	19.9	16.6	3.2	80.1
Rural	27.2	22.7	4.6	72.8
Province				
Banteay Meanchey	39.4	35.9	3.5	60.6
Battambang	38.0	29.1	8.9	62.0
Kampong Cham	19.3	15.5	3.8	80.7
Kampong Chhnang	30.8	25.7	5.1	69.2
Kampong Speu	6.2	4.3	1.9	93.8
Kampong Thom	33.5	27.7	5.8	66.5
Kampot	20.4	16.3	4.1	79.6
Kandal	16.2	13.6	2.6	83.8
Кер	31.0	25.8	5.2	69.0

	Any	Mild/Mod	Severe	None
Koh Kong	18.2	15.5	2.7	81.8
Kratie	20.0	17.6	2.4	80.0
Mondul Kiri	34.8	27.6	7.2	65.2
Otdar Meanchey	14.6	12.2	2.4	85.4
Pailin	37.4	30.9	6.5	62.6
Phnom Penh	17.5	14.7	2.8	82.5
Preah Sihanouk	30.5	26.0	4.5	69.5
Preah Vihear	26.2	21.8	4.4	73.8
Prey Veng	26.0	21.8	4.1	74.0
Pursat	33.2	27.8	5.4	66.8
Ratanak Kiri	21.6	17.4	4.2	78.4
Siemreap	25.4	22.8	2.6	74.6
Stung Treng	32.2	24.3	7.9	67.8
Svay Rieng	21.3	17.0	4.3	78.7
Takeo	22.9	19.3	3.7	77.1
Tbuong Khmum	37.3	32.0	5.3	62.7
Observations	20,082	16,669	3,413	56,776

# **DEMOGRAPHIC PROFILE**

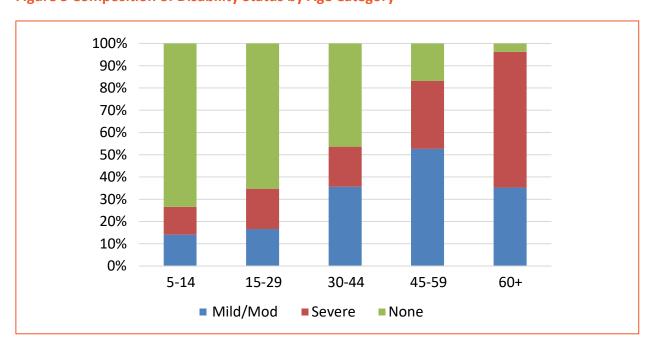


This section describes the demographic profile of persons with disabilities in Cambodia. Persons with disabilities differ to their counterparts without disabilities in key demographic characteristics described in this part of the analysis, and details are provided in Table 2. at the end of this section of the report.

On average, persons with disabilities are significantly older, more likely to be female, be currently or formerly married, and live in rural areas compared to persons without disabilities. Fifty-seven percent of the population with disabilities is female compared to 50% of the population without disabilities. This is likely because females live longer than males. The association between disability and age is reflected further in the marital status of persons with and without disabilities. Among persons 15 years age and above, persons with disabilities are more likely to be married and significantly more likely to be widowed compared to persons without disabilities. Eighteen percent of persons with disabilities report being widowed compared to just 3.7 percent of persons without disabilities. Close to one-third of persons with severe disabilities are widowed (Table 2).

There exists a strong relationship between age and disability (Figure 5). Persons with disabilities, on average, are approximately double the age of persons without disabilities (51.4 versus 26.7 years). Over two-thirds of persons with disabilities are 45 years of age or above compared to just 14 percent of persons without disabilities. The age gradient is even stronger for persons with severe disabilities. Most of these persons (57%) are 60 years of age or above compared to just 3.5 percent of persons without disabilities.

Figure 5 Composition of Disability Status by Age Category



The composition of disability types also varies according to age. Among children and youth aged 5-14 years that report any degree of disability, self-care and communication disabilities are most common. As persons with disabilities enter middle age, seeing, cognition and mobility disabilities become relatively more prevalent. When persons with disabilities reach the age of sixty and older, all types of disability are prevalent (Figure 6.).

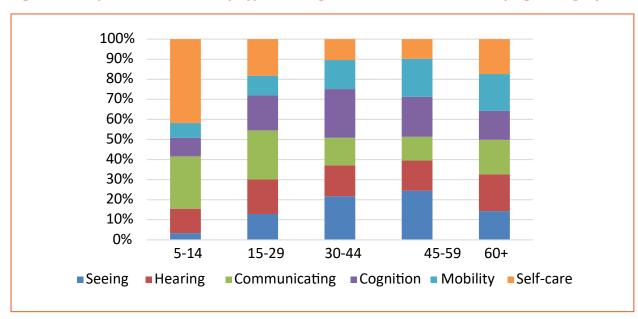


Figure 6 Composition of Disability Types among Persons with Disabilities by Age Category

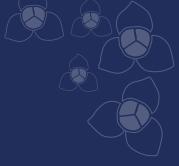
Overall, the demographic profile of the population with and without disabilities is similar across the two CDHS waves. However, as shown in Appendix Table 2, they are some differences. The more recent sample with disabilities is slightly younger (51.4 versus 53.7 years), more likely to be married (70.8% versus 62.8%), and twice as likely to live in urban areas (31.4% versus 14.6%). When comparing the outcomes of persons with and without disabilities over time, it is necessary to account for these demographic differences as they may have an independent effect on the outcomes.

**Table 2 Demographic Profile (%)** 

	Any	Mild/Mod	Severe	None
Age (years)	51.4	50.0	58.4	26.8
Age group				
5-14	5.5	5.6	5.0	29.3
15-29	7.7	7.6	8.3	29.8
30-44	18.8	20.5	10.4	26.7
45-59	31.1	33.4	19.3	10.7
60+	36.9	32.9	57.0	3.5

	Any	Mild/Mod	Severe	None
Sex				
Female	57.0	57.0	57.5	50.2
Male	43.0	43.0	42.5	49.8
Marital status (age 15 years and above)				
Never married	7.9	6.5	14.7	28.1
Married	70.8	74.9	50.5	65.6
Widowed	18.3	15.7	31.1	3.7
Divorced / separated	3.0	2.9	3.7	2.6
Rural urban residence				
Rural	68.6	68.5	69.2	59.2
Urban	31.4	31.5	30.8	40.8
Observations	20,077	16,667	3,410	56,774

# **EDUCATION**



This section describes and discusses the main results on education. This report uses several indicators on educational outcomes for the general population (5 years of age and older). The first, is the share of the adult population who has ever attended school. In addition, the highest level of educational attainment achieved is captured through four indicators: share of adults with no formal schooling, the share of adults with less than primary school completion, the share of adults with primary school completion and the share of adults with secondary school completion or higher. The report also records the share of children and youths aged 6-12 years and 6-24 years of age currently enrolled in school. The key data on education, disability status and gender are provided in Table 3. below in this section.

# Disability gaps in education

There exist substantial gaps in the educational attainment of persons with disabilities compared to those without disabilities in Cambodia. Close to one-third (31%) of persons with disabilities reported having never attended school compared to 16% of persons without disabilities. That means that persons with disabilities were approximately twice as likely to have never attended school relative to persons without disability. The rate increased to three times for persons with severe disabilities, among whom close to one-half (48%) reported to have never attended school.

Among those that attended school, there were also significant gaps in the completion of primary and secondary schooling by disability status. Around one-quarter of the population with disabilities reported to have completed primary school and just 6% had completed secondary schooling or higher. This compares to corresponding rates of 37% and 11% for the population without disabilities. Notably, persons with severe disabilities were more than twice as likely to not have completed primary school (16% versus 37%) and more than three times as likely not to complete secondary schooling (3% versus 11%) compared to persons without disabilities.

The above findings relate to the population aged 5 years and above. Among the current schoolaged population the proportion attending school is also significantly lower among those with disabilities and particularly those with severe disabilities. Among the primary school aged population (6-12 years), 76% of children without disabilities were attending school compared to 68% of children with disabilities. The current school attendance rate is only 34% for primary school-aged children with severe disabilities. Compared to children without disabilities of primary school age, those with severe disabilities were close to three times less likely to be attending school.

Similar patterns exist for the wider current school-aged population defined as those aged 6-24 years of age. The attendance rate among persons with non-severe disabilities is slightly lower than the population without disabilities (49% versus 55%). However, large gaps exist for the population with severe disabilities, among whom only 19% were currently attending school.

Therefore, persons with severe disabilities of schooling age were close to three times as likely to not be attending school as those without disabilities (19% versus 55%).

The above findings mask differences in the educational attainments between men and women with disabilities. Even though women have lower education attainments in general, the gaps between persons with and without disabilities are greater among females than males.

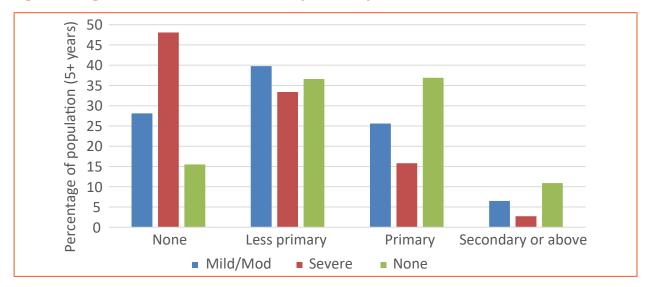


Figure 7 Highest Educational Attainment by Disability Status

Females with disabilities are significantly less likely to have attended school compared to females without disabilities. Specifically, 62% of the female population with disabilities reported attending school compared to 83% of females without disabilities, representing a gap of 21 percentage points or 25% relative to the mean of females without disabilities.

The gap is even greater for females with severe disabilities where only 43% had attended school, equating to a gap of 40 percentage points or 48%. The analogous gaps for men with disabilities, and those with severe disabilities, are 9% and 24% respectively (Figure 8.).

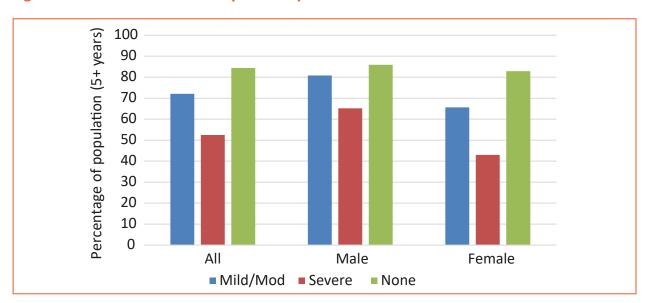


Figure 8 Ever Attended School by Disability Status and Gender

Among the current school-aged population (6-24 years), the same gender patterns emerge. Among males, the gaps in current school attendance for those with any degree of disability and severe disability relative to those without disabilities are 16% and 60%, respectively (Figure 9).

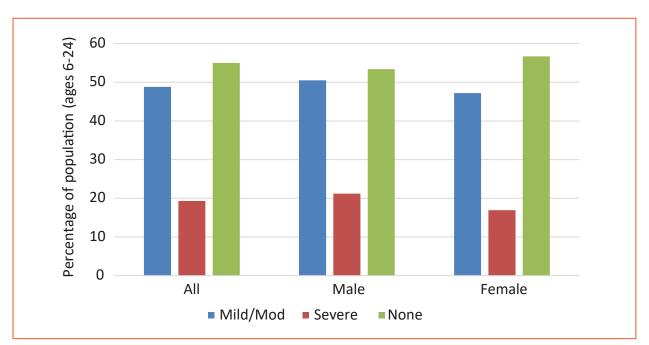


Figure 9 Currently Attending School by Disability Status and Gender (ages 6-24)

The comparable disability gaps for girls are 25% and 70%. However, for the primary school aged population (6-12 years) the disability gaps in current school attendance are higher among boys than girls (13% versus 6%) yet are similar in magnitude when it comes to severe disabilities (57% versus 52%) (Figure 10.).

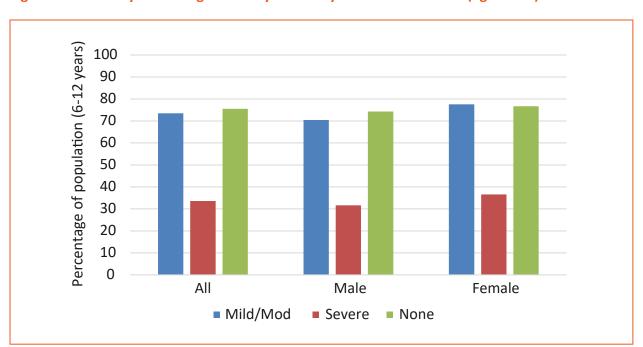


Figure 10 Currently Attending School by Disability Status and Gender (ages 6-12)

Table 3 Summary Education Statistics by Disability Status and by Gender (%)

Panel A: Full sample		Any	Mild/Mod	Severe	None
Highest year of education completed   5.1   5.2   4.5   5.7   Number of years of education   3.8   4.1   2.5   5.6   Highest education level completed	Panel A: Full sample				
Number of years of education 3.8 4.1 2.5 5.6 Highest education level completed   None 31.4 28.1 48.1 15.5 Less primary 38.8 39.8 33.4 36.6 Primary 24.0 25.6 15.8 36.9 Secondary or above 5.9 6.5 2.7 10.9 Ever attended school 68.8 72.1 52.5 84.4 Currently in school (6-12 years) 67.9 73.5 33.6 75.5 Currently in school (6-24 years) 43.6 48.8 19.3 55.0 Panel B: Male sample Highest year of education completed 5.6 5.7 5.0 5.9 Number of years of education evel completed   None 22.1 19.5 35.4 14.1 Less primary 38.6 39.1 36.1 35.5 Primary 31.0 32.2 24.8 37.8 Secondary or above 8.4 9.3 3.8 12.6 Ever attended school 78.2 80.8 65.2 85.9 Currently in school (6-12 years) 64.7 70.4 31.6 74.3 Currently in school (6-24 years) 44.7 50.5 21.2 53.4 Panel C: Female sample Highest year of education completed 4.7 4.8 4.0 5.6 Number of years of education and school 3.2 3.4 1.8 5.3 Highest education level completed 4.7 4.8 4.0 5.6 Number of years of education and school 3.2 3.4 1.8 5.3 Highest education level completed 4.7 4.8 4.0 5.6 Number of years of education and school 3.2 3.4 1.8 5.3 Highest education level completed 4.7 4.8 4.0 5.6 Number of years of education and school 3.2 3.4 1.8 5.3 Highest education level completed 4.7 4.8 4.0 5.6 Secondary or above 4.0 4.4 1.9 9.3 Secondary or above 4.0 4.7 7.6 36.6 76.7	·	5.1	5.2	4.5	5.7
Highest education level completed   None   31.4   28.1   48.1   15.5			4.1		
None         31.4         28.1         48.1         15.5           Less primary         38.8         39.8         33.4         36.6           Primary         24.0         25.6         15.8         36.9           Secondary or above         5.9         6.5         2.7         10.9           Ever attended school         68.8         72.1         52.5         84.4           Currently in school (6-12 years)         67.9         73.5         33.6         75.5           Currently in school (6-24 years)         43.6         48.8         19.3         55.0           Panel B: Male sample         Highest education completed         5.6         5.7         5.0         5.9           Number of years of education         4.8         5.0         3.4         5.9           Highest education level completed         3.4         5.9           None         22.1         19.5         35.4         14.1           Less primary         38.6         39.1         36.1         35.5           Primary         31.0         32.2         24.8         37.8           Secondary or above         8.4         9.3         3.8         12.6           Ever attended school (6-12 years)	<u> </u>				
Less primary         38.8         39.8         33.4         36.6           Primary         24.0         25.6         15.8         36.9           Secondary or above         5.9         6.5         2.7         10.9           Ever attended school         68.8         72.1         52.5         84.4           Currently in school (6-12 years)         67.9         73.5         33.6         75.5           Currently in school (6-24 years)         43.6         48.8         19.3         55.0           Panel B: Male sample         Highest year of education completed         Uses of education completed         Uses of education level completed           None         22.1         19.5         35.4         14.1           Less primary         38.6         39.1         36.1         35.5           Primary         31.0         32.2         24.8         37.8           Secondary or above         8.4         9.3         3.8         12.6           Ever attended school         78.2         80.8         65.2         85.9           Currently in school (6-12 years)         64.7         70.4         31.6         74.3           Currently in school (6-24 years)         44.7         5		31.4	28.1	48.1	15.5
Primary         24.0         25.6         15.8         36.9           Secondary or above         5.9         6.5         2.7         10.9           Ever attended school         68.8         72.1         52.5         84.4           Currently in school (6-12 years)         67.9         73.5         33.6         75.5           Currently in school (6-24 years)         43.6         48.8         19.3         55.0           Panel B: Male sample	Less primary	38.8	39.8	33.4	
Secondary or above       5.9       6.5       2.7       10.9         Ever attended school       68.8       72.1       52.5       84.4         Currently in school (6-12 years)       67.9       73.5       33.6       75.5         Currently in school (6-24 years)       43.6       48.8       19.3       55.0         Panel B: Male sample					
Ever attended school       68.8       72.1       52.5       84.4         Currently in school (6-12 years)       67.9       73.5       33.6       75.5         Currently in school (6-24 years)       43.6       48.8       19.3       55.0         Panel B: Male sample          5.0       5.9         Number of education completed       5.6       5.7       5.0       5.9         Number of years of education       4.8       5.0       3.4       5.9         Highest education level completed          None       22.1       19.5       35.4       14.1         Less primary       38.6       39.1       36.1       35.5         Primary       31.0       32.2       24.8       37.8         Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       4.7       4.8       4.0       5.6 <t< td=""><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td><td></td><td></td></t<>	· · · · · · · · · · · · · · · · · · ·				
Currently in school (6-12 years)       67.9       73.5       33.6       75.5         Currently in school (6-24 years)       43.6       48.8       19.3       55.0         Panel B: Male sample         5.0       5.9         Number of years of education       4.8       5.0       3.4       5.9         Number of years of education       4.8       5.0       3.4       5.9         Highest education level completed         5.6       5.7       5.0       5.9         None       22.1       19.5       35.4       14.1       1.2       5.9       14.1       1.1       1.2       1.2       1.2       1.4       1.1       1.2       1.2       1.2       1.2       1.2       1.4       1.1       1.2	·		72.1		
Currently in school (6-24 years)       43.6       48.8       19.3       55.0         Panel B: Male sample       5.6       5.7       5.0       5.9         Number of years of education       4.8       5.0       3.4       5.9         Highest education level completed       5.6       3.7       5.0       5.9         None       22.1       19.5       35.4       14.1         Less primary       38.6       39.1       36.1       35.5         Primary       31.0       32.2       24.8       37.8         Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       44.7       4.8       4.0       5.6         Number of years of education completed       4.7       4.8       4.0       5.6         Number of years of education       3.2       3.4       1.8       5.3         Highest education level completed       4.7       4.8       4.0 <td< td=""><td>Currently in school (6-12 years)</td><td></td><td></td><td></td><td></td></td<>	Currently in school (6-12 years)				
Panel B: Male sample       5.6       5.7       5.0       5.9         Number of years of education       4.8       5.0       3.4       5.9         Highest education level completed       Value of the property of the propert	· · · · · ·	43.6	48.8		
Highest year of education completed       5.6       5.7       5.0       5.9         Number of years of education       4.8       5.0       3.4       5.9         Highest education level completed       Use of the property o	, , , ,				
Number of years of education       4.8       5.0       3.4       5.9         Highest education level completed       22.1       19.5       35.4       14.1         Less primary       38.6       39.1       36.1       35.5         Primary       31.0       32.2       24.8       37.8         Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       4.7       4.8       4.0       5.6         Number of years of education completed       4.7       4.8       4.0       5.6         Number of years of education       3.2       3.4       1.8       5.3         Highest education level completed         None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4	·	5.6	5.7	5.0	5.9
Highest education level completed       22.1       19.5       35.4       14.1         Less primary       38.6       39.1       36.1       35.5         Primary       31.0       32.2       24.8       37.8         Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       44.7       4.8       4.0       5.6         Number of years of education completed       4.7       4.8       4.0       5.6         Number of years of education level completed         None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1 <t< td=""><td>Number of years of education</td><td>4.8</td><td>5.0</td><td>3.4</td><td>5.9</td></t<>	Number of years of education	4.8	5.0	3.4	5.9
None       22.1       19.5       35.4       14.1         Less primary       38.6       39.1       36.1       35.5         Primary       31.0       32.2       24.8       37.8         Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample	·				
Primary       31.0       32.2       24.8       37.8         Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       4.7       4.8       4.0       5.6         Number of years of education completed       3.2       3.4       1.8       5.3         Highest education level completed         None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	None	22.1	19.5	35.4	14.1
Secondary or above       8.4       9.3       3.8       12.6         Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       44.7       4.8       4.0       5.6         Number of years of education completed       3.2       3.4       1.8       5.3         Highest education level completed         None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Less primary	38.6	39.1	36.1	35.5
Ever attended school       78.2       80.8       65.2       85.9         Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       4.7       4.8       4.0       5.6         Number of years of education completed       3.2       3.4       1.8       5.3         Highest education level completed         None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Primary	31.0	32.2	24.8	37.8
Currently in school (6-12 years)       64.7       70.4       31.6       74.3         Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       4.7       4.8       4.0       5.6         Number of years of education completed       3.2       3.4       1.8       5.3         Highest education level completed       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Secondary or above	8.4	9.3	3.8	12.6
Currently in school (6-24 years)       44.7       50.5       21.2       53.4         Panel C: Female sample       4.7       4.8       4.0       5.6         Number of years of education completed       3.2       3.4       1.8       5.3         Highest education level completed       8.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Ever attended school	78.2	80.8	65.2	85.9
Panel C: Female sample       4.7       4.8       4.0       5.6         Number of years of education       3.2       3.4       1.8       5.3         Highest education level completed       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Currently in school (6-12 years)	64.7	70.4	31.6	74.3
Highest year of education completed       4.7       4.8       4.0       5.6         Number of years of education       3.2       3.4       1.8       5.3         Highest education level completed       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Currently in school (6-24 years)	44.7	50.5	21.2	53.4
Number of years of education       3.2       3.4       1.8       5.3         Highest education level completed       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Panel C: Female sample				
Highest education level completed         None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Highest year of education completed	4.7	4.8	4.0	5.6
None       38.4       34.6       57.5       17.0         Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Number of years of education	3.2	3.4	1.8	5.3
Less primary       38.9       40.4       31.4       37.8         Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Highest education level completed				
Primary       18.7       20.6       9.2       36.0         Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	None	38.4	34.6	57.5	17.0
Secondary or above       4.0       4.4       1.9       9.3         Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Less primary	38.9	40.4	31.4	37.8
Ever attended school       61.8       65.6       43.0       82.9         Currently in school (6-12 years)       72.1       77.6       36.6       76.7	Primary	18.7	20.6	9.2	36.0
Currently in school (6-12 years) 72.1 77.6 36.6 76.7	Secondary or above	4.0	4.4	1.9	9.3
	Ever attended school	61.8	65.6	43.0	82.9
Currently in school (6-24 years) 42.5 47.2 16.9 56.7	Currently in school (6-12 years)	72.1	77.6	36.6	76.7
	Currently in school (6-24 years)	42.5	47.2	16.9	56.7

# Adjusted disability gaps in education

One important consideration when examining the relationship between disability and educational attainment is that persons with and without disabilities differ in many dimensions. For example, as shown in the previous section, persons with disabilities tend to be older and live in rural areas. Older people and those that live in rural areas may have lower levels of education independent of disability status. By this, the differences in educational achievements between persons with and without disabilities may, in part, be because they are older and live disproportionately in rural areas. Therefore, to better examine the link between disability and education it is necessary to account for differences in the underlying characteristics between persons with and without disabilities.

Table 4 below presents regression results on the effect of disability on education outcomes, when controlling for important differences in observable characteristics (age, gender, marital status, rural/urban residence and province of residence). Specifically, the table reports ordinary least squares estimates on the effect of disability on the probability of having ever attending school (column 1), completing at least primary school education (column 2), completing at least secondary school (column 3), being currently enrolled in school for children aged 6-12 years (column 4) and being currently enrolled in school for children and youths aged 6-24 years (column 5).

Whilst the disability gaps are reduced when accounting for differences in observable characteristics, they remain large and are highly significant. Relative to persons without disabilities, persons with non-severe and severe disabilities respectively are 5.6 percentage points and 14.6 percentage points less likely to have ever attended school. Because significant numbers of the adult Cambodian population have not completed primary and particularly secondary schooling, the adjusted disability gaps are smaller for these outcomes. Persons with disabilities are 7-8 percentage points and 2-3 percentage points less likely to complete primary and secondary schooling, respectively, depending upon the level of severity. However, as shown in column 4 and 5, there are large disability gaps among children and youths of schooling age. This is particularly the case for those with severe disabilities who are 43 and 35 percentage points less likely to be currently attending school among the populations aged 6-12 years and 6-24 years, respectively.

Panels B and C of Table 4 present regression results for the male and female sub-samples. The differences in disability education gaps between males and females (previously described) are dampened when accounting for differences in observable characteristics. When controlling for other variables, the disability gaps are similar for the male and female samples. One possible explanation is that the female population with disabilities were older on average than the male sample with disabilities and controlling for age in the model closed off the negative confounding effects of age on education. In fact, the gender story is reversed to some extent in the regression analysis whereby males with severe disabilities are relatively less likely to have attended school and have completed primary and secondary schooling. However, among the school aged population, the disability gaps remain slightly higher for females.

**Table 4 Regression Results on the Effect of Disability on Education** 

	Attended school	Primary school	Secondary school	Current school (ages 6-12)	Current school (ages 6-24)			
	(1)	(2)	(3)	(4)	(5)			
Panel A: Full sample								
Disability status (reference no disability)								
Mild/mod disability	-0.056***	-0.085***	-0.030***	-0.041	-0.069***			
	(0.006)	(0.007)	(0.005)	(0.028)	(0.018)			
Severe disability	-0.144***	-0.073***	-0.017***	-0.432***	-0.352***			
	(0.014)	(0.013)	(0.007)	(0.055)	(0.029)			
Observations	76,851	76,851	76,851	13,086	31,377			
R-squared	0.128	0.128	0.078	0.156	0.270			
Panel B: Male sample								
Disability status (reference no disability)								
Mild/mod disability	-0.050***	-0.082***	-0.032***	-0.057	-0.062**			
	(800.0)	(0.009)	(0.006)	(0.039)	(0.026)			
Severe disability	-0.158***	-0.114***	-0.040***	-0.411***	-0.348***			
	(0.017)	(0.019)	(0.011)	(0.067)	(0.039)			
Observations	37,234	37,234	37,234	6,688	15,995			
R-squared	0.108	0.167	0.097	0.163	0.257			
Panel C: Female sample								
Disability status (reference no disability)								
Mild/mod disability	-0.060***	-0.079***	-0.025***	-0.026	-0.079***			
	(0.008)	(0.010)	(0.006)	(0.031)	(0.021)			
Severe disability	-0.131***	-0.039**	0.002	-0.460***	-0.361***			
	(0.020)	(0.017)	(0.009)	(0.086)	(0.039)			
Observations	39,617	39,617	39,617	6,398	15,382			
R-squared	0.159	0.150	0.058	0.151	0.286			

Notes: Standard errors in parentheses. All models are estimated using ordinary least squares. Dependent variables are binary indicator variables for (1) ever attending school (2) completing at least primary school (3) completing at least secondary school (4) currently attending school for persons aged 6-12 years (5) currently attending school for persons aged 6-24 years. Control variables include age, age squared, sex, marital status, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Disability gaps in education over time

How have the education outcomes changed for persons with disabilities over time? How do these changes compare to persons without disabilities? Table 5 shows the difference in the mean outcomes for persons with severe disabilities versus persons without severe disabilities

in both the 2021-22 and 2014 waves of the CDHS. The difference in the differences over the two survey waves is shown in bold and measures the extent to which outcomes have changed for the population with disabilities relative to the population without disabilities (column 3). The population with disabilities is measured using the severe disability measure (classification C) because this measure was more consistent over the two survey waves. One concern in undertaking this analysis is that the composition of the two samples with disabilities may differ over the two sample waves. For instance, as documented in the previous section, the population with disabilities in the 2021-22 sample was more urban compared to the 2014 sample. Column 4 presents the regression adjusted difference in the disability gaps over time adjusted for differences in the levels of key characteristics.<sup>4</sup>

The fraction of the population with severe disabilities having attended school increased by 4 percentage points over the 2014-2021/22 period. This compares to an increase 1.1 percentage points for the population without severe disabilities, representing a difference of 2.9 percentage points. This means, the rate of school attendance for persons with severe disabilities improved by close to 3 percentage points relative to persons without severe disabilities over the two survey waves. However, the effect is not statistically significant at conventional levels. The regression-adjusted change in the disability gaps over the two survey waves increases in magnitude to 3.8 percentage points but remains statistically insignificant.

Similarly, the rate of completing primary school education or higher increased for persons with severe disabilities over the two survey waves at a magnitude of 2 percentage points. However, the equivalent change was greater for persons without disabilities at 6 percentage points, representing a deficit of around 4 percentage points. The effect is statistically significant at the 1 percent level, however, is reduced in magnitude and becomes statistically insignificant when adjusting for observable differences in the composition of the two populations of persons with and of persons without disabilities in the two samples.

A similar pattern exists for the outcome of completing secondary schooling or higher. There are small improvements over time for the population with severe disabilities (2 percentage points) which is slightly lower than the improvement for the population without severe disabilities (3 percentage points). The difference in the differences of 1 percentage point is statistically insignificant and becomes zero in the regression-based framework.

For the school-aged cohorts, the school enrollment rate decreased over time for both the population with and without severe disabilities. Among those aged 6-12 years, the decline was greater for children without severe disabilities compared to children with severe disabilities (16 versus 4 percentage points), representing a relative gain of around 11 percentage points for children with severe disabilities. However, the gain was not statistically significant either without or with the addition of control variables. For the wider school aged population aged 6-24 years there were similar declines in the proportion attending school between those with and without severe disabilities. The net negative change of 2 percentage points for children with severe disabilities is not significantly significant.

<sup>4</sup> Control variables include age, gender, marital status, rural/urban residence and province of residence.

Overall, for the adult population with disabilities, there have been improvements in educational attainments over time yet are in line with the population without disabilities. For the younger school aged cohorts, school enrollment rates have declined for both persons with and without disabilities over time. However, once again, the differences in the changes over time are not statistically significant between the two groups. Overall, disability gaps in educational attainment have remained unchanged over time.

**Table 5 Changes in Education Outcomes Over Time by Disability Status** 

	2021-22	2014	Difference	Adjusted Difference			
	(1)	(2)	(3)	(4)			
Outcome: Ever attended school							
Persons with severe disability	0.525	0.485	0.040				
Persons without severe disability	0.818	0.807	0.011				
Difference	-0.293	-0.322	0.029	0.038			
Outcome: Completed at least primary school							
Persons with severe disability	0.197	0.178	0.019				
Persons without severe disability	0.448	0.385	0.063				
Difference	-0.251	-0.207	-0.044***	-0.026			
Outcome: Completed at least high school							
Persons with severe disability	0.041	0.018	0.023				
Persons without severe disability	0.104	0.070	0.034				
Difference	-0.063	-0.052	-0.011	-0.000			
Outcome: Currently in school (6-12 years)							
Persons with severe disability	0.336	0.375	-0.039				
Persons without severe disability	0.754	0.909	-0.155				
Difference	-0.418	-0.534	0.116	0.091			
Outcome: Currently in school (6-24 years)							
Persons with severe disability	0.193	0.243	-0.05				
Persons without severe disability	0.547	0.579	-0.032				
Difference	-0.354	-0.336	-0.018	-0.067			

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Regression controls include age, gender, marital status, rural/urban residence and province of residence. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# **EMPLOYMENT**

This section describes and discusses the main results on work indicators. Table 6. in the section

immediately following provides detail on employment, disability and gender.

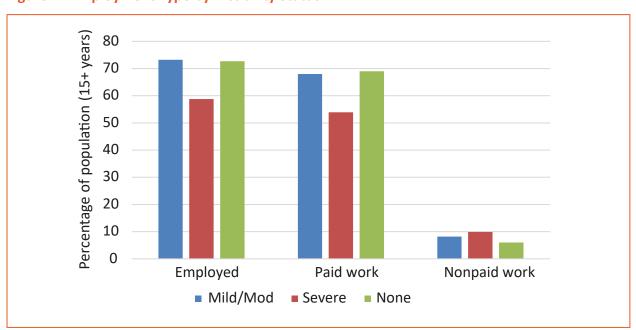
This report uses three work indicators for adults. The first one is the employment population ratio, also called the employment rate. It captures the share of the adult population who is employed, i.e. working for pay or those who are self-employed. The second is the paid employment rate which captures the share of the population who work for pay. The third is the unpaid employment rate which captures the share of the population who participated in unpaid work.

#### Disability gaps in employment

Around seven in ten persons with disabilities aged 15 years and above reported to be working in the past 7 days, which is at a rate similar to persons without disabilities. Most persons with disabilities engaged in paid work with a small fraction also reporting unpaid work activities at a rate slightly higher than persons without disabilities (Figure 11).

Work participation was markedly lower for persons with severe disabilities. Less than six in ten persons with severe disabilities reported being working and just over one-half engaged in paid work compared to around seven in ten persons without disabilities. Persons with severe disabilities were relatively more likely to engage in unpaid work with one in ten persons reporting unpaid work (Figure. 11).

Figure 11 Employment Type by Disability Status



Although the rate of work participation is higher among men, both males and females with severe disabilities are substantially less likely to be working and particularly in paid work. The gaps are higher among females. Seventy-two percent of males with severe disability reported being working compared to 86% of males without disabilities, representing a gap of 14 percentage points or 16%. Among females, 51% of those with severe disabilities reported being working compared to 66% of those without disability, representing a gap of 16 percentage points or 22%. For paid work, the disability gap is 22% for males and 25% for females. Both males and females with severe disabilities were significantly more likely to engage in unpaid work with larger gaps for females (58% versus 73%) (Figure 12.).

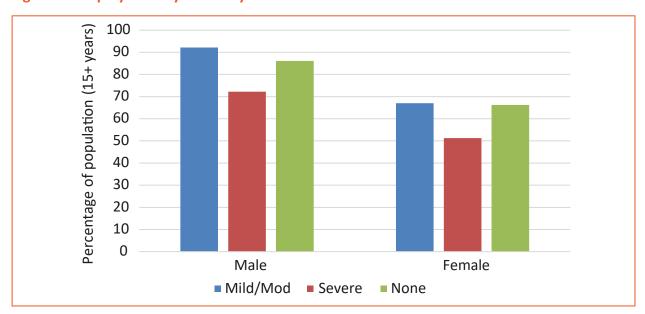


Figure 12 Employment by Disability Status and Gender

Table 6 Summary Employment Statistics by Disability Status and Gender (%)

	Any	Mild/Mod	Severe	None
Panel A: Full sample				
Any work	72.2	73.2	58.8	72.7
Any paid work	67.0	68.0	53.9	69.0
Any nonpaid work	8.3	8.2	9.9	6.0
Panel B: Male sample				
Any work	90.3	92.2	72.2	86.1
Any paid work	85.3	87.4	65.9	81.9
Any nonpaid work	6.0	5.7	8.7	5.5
Panel C: Female sample				
Any work	66.1	67.0	51.3	66.2
Any paid work	60.8	61.7	47.1	62.8
Any nonpaid work	9.3	9.2	10.9	6.3

#### Adjusted disability gaps in employment

To better isolate the relationship between disability and work it is necessary to adjust for other confounding variables. For instance, as shown in the previous section, the population of persons with disabilities is less educated than the population of persons without disabilities. It is possible that the reduced work participation among persons with disabilities documented previously is in part attributed to lower education.

Table 7 presents regression results on the association between disability and the probability of working conditional on age, sex, married status, education level, rural/urban and province of residence. Results are presented separately on the probability of working (column 1), working in paid work (column 2), and working in non-paid work (column 3).

Relative to persons without disabilities, persons with non-severe and severe disabilities are around one percentage point and 18 percentage points less likely to be working, respectively, when controlling for differences in other observable characteristics. The small effect for persons with non-severe disabilities is not statistically significant whereas the large effect for persons with severe disabilities is highly statistically significant. The negative effects associated with disability status are slightly higher in magnitude and level of significance for the paid work outcome suggesting that the employment gaps are even larger for paid work. Consequently, persons with disabilities are relatively more likely to engage in unpaid work. Specifically, persons with non-severe and severe disabilities are around 2 and 4 percentage points more likely to be engaged in unpaid work, respectively.

In panels B and C of Table 7, it is shown further that the negative effects of disability on employment are similar in magnitude for males and females. One notable difference is that females with disabilities are relatively more likely to be employed in non-paid work whereas the effects for males are smaller and statistically insignificant.

**Table 7 Regression Results on the Effect of Disability on Employment** 

	Employed	Paid	Non-paid
	(1)	(2)	(3)
Panel A: Full sample			
Disability status (reference no disability)			
Mild/mod disability	-0.014	-0.027***	0.017***
	(0.010)	(0.011)	(0.006)
Severe disability	-0.178***	-0.187***	0.044*
	(0.036)	(0.038)	(0.025)
Observations	28,257	28,257	20,630
R-squared	0.166	0.185	0.119

	Employed	Paid	Non-paid
	(1)	(2)	(3)
Panel B: Male sample			
Disability status (reference no disability)			
Mild/mod disability	-0.023**	-0.034***	0.014
	(0.011)	(0.013)	(0.010)
Severe disability	-0.177***	-0.195***	0.034
	(0.052)	(0.059)	(0.046)
Observations	8,806	8,806	7,747
R-squared	0.260	0.298	0.127
Panel C: Female sample			
Disability status (reference no disability)			
Mild/mod disability	-0.010	-0.024*	0.016**
	(0.013)	(0.013)	(0.008)
Severe disability	-0.188***	-0.191***	0.050*
	(0.045)	(0.044)	(0.028)
Observations	19,451	19,451	12,883
R-squared	0.120	0.135	0.147

Notes: Standard errors in parentheses. All models are estimated using ordinary least squares. Dependent variables are binary indicator variables for (i) working in the past 7 days (ii) working in paid work in the past 7 days (iii) working in unpaid work in past 7 days. Control variables include age, age squared, sex, marital status, education, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Disability gaps in employment over time

As shown in Table 8, the employment situation of persons with severe disabilities has improved over the two survey waves, 2014 and 2021-22. Across both paid and unpaid employment types, the rate has improved for persons with severe disabilities whereas for persons without severe disabilities the respective rates decreased and stayed the same. Specifically, the rate of employment and paid employment for persons with severe disabilities increased by around 4 percentage points whereas for those without (severe) disabilities the rate decreased by around 2 percentage points, representing a net gain of around 6 percentage points. For unpaid work, the rate increased by 2 percentage points for persons with severe disabilities and was unchanged for

those without severe disabilities, representing a relative change of 2 percentage points. However, despite net gains in employment the changes were not statistically significant at conventional levels of significance.

The regression-based estimate of the double differences shown in column 4 is slightly larger in magnitude for the employment and paid employment outcomes and slightly smaller for the unpaid work outcome. However, in all three cases, the coefficients remain statistically insignificant. Overall, the results show that employment outcomes have improved for persons with severe disabilities, and have improved relative to persons without severe disabilities, but the relative improvements are measured imprecisely. It cannot be said with confidence that the relative gains are statistically different from zero.

**Table 8 Changes in Employment Outcomes Over Time by Disability Status** 

	2021-22	2014	Difference	Adjusted Difference
	(1)	(2)	(3)	(4)
Outcome: Worked in past 7 days				
Persons with severe disability	0.588	0.543	0.045	
Persons without severe disability	0.727	0.748	-0.021	
Difference	-0.139	-0.205	0.066	0.082
Outcome: Worked in paid work in past 7 days				
Persons with severe disability	0.539	0.503	0.036	
Persons without severe disability	0.689	0.710	-0.021	
Difference	-0.15	-0.207	0.057	0.082
Outcome: Worked in unpaid work in past 7 days				
Persons with severe disability	0.099	0.075	0.024	
Persons without severe disability	0.063	0.062	0.001	
Difference	0.036	0.013	0.023	0.015

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Regression controls include age, gender, marital status, education, rural/urban residence and province of residence. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### **HEALTH**



This section presents results for three indicators for health including access to clean water and adequate sanitation and an indicator of poor self-reported health. Access to clean water and adequate sanitation is critical to maintaining public health, and are captured under SDG Goal 6 "to ensure the availability and sustainable management of water and sanitation for all". The two indicators are proxies for health and capture some of the living conditions of the household: the share of adults living in households with safely managed drinking water<sup>5</sup> (CRPD Article 25, SDG indicator 6.1.1) and the share of adults living in households with safely managed sanitation<sup>6</sup> (CRPD Article 25, SDG indicator 6.2.1).

The third indicator is a more direct measure of health and is based on the simple question, "In general, how would you rate your health?" It is one of the most frequently employed and comprehensive health measures which captures a broad range of health conditions such as bodily pain, presence of illnesses and psychosocial factors (Au and Johnston 2014). In the CHDS 2021-22, self-reported health was collected from men and women aged 15-49 years of age. In this report, poor health is defined as a respondent reporting their general health to be "bad" or "very bad" and non-poor health is defined as a respondent reporting their general health to be "moderate", "good" or "very good".

#### Disability gaps in health

Figure 13 and Table 9 show the share of persons above 5 years of age with safely managed drinking water and the share with safely managed sanitation is lower for persons with disabilities than it is for persons without disabilities. For persons with non-severe disabilities the gap is small, however it an increase in magnitude is measured for persons with severe disabilities. The disability gaps are substantially greater for the poor health indicator which is collected at the individual rather than household level. Comparable data for three key indicators:

- Access to safe water services around 87% of persons with non-severe disabilities and 85% of persons with severe disabilities had access to safe water services compared to 88% of persons without disabilities, representing a gap of 1 and 3 percentage points, respectively.
- **Safely managed sanitation** around 79% of persons with non-severe disabilities and 78% of persons with severe disabilities had access to safely managed sanitation compared to 81% of persons without disabilities, representing a gap of 2 and 3 percentage points, respectively.
- **Reporting to be in poor health -** among persons aged 15-49 years, 8% of persons with non-severe disabilities and 23% of persons with severe disabilities reported to be in poor

<sup>5</sup> Water sources considered as safely managed include: piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs; packaged water; delivered water and rainwater. Water sources that are not considered as safely managed include: unprotected well, unprotected spring, tanker truck, surface water (river/lake, etc), cart with small tank.

<sup>6</sup> Members of the household are considered to have safely managed sanitation service if the household's sanitation facility is improved and is not shared with other households. 'Improved' sanitation facilities include: flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets.

health compared to just 1% of persons without disabilities, representing a gap of 7 and 21 percentage points, respectively.

100 Percentage of population (5+ years) 90 80 70 60 50 40 30 20 10 0 Poor health Safe water Safe sanitation Mild/Mod Severe None

Figure 13 Health Indicators by Disability Status

Table 9 Summary Health Statistics by Disability Status (%)

	Any	Mild/Mod	Severe	None
Safe water	86.8	87.3	84.5	87.5
Safe sanitation	79	79.3	77.6	80.7
Poor health	8.6	7.6	22.5	1.4

#### Adjusted disability gaps in health

Table 10 presents regression estimates on the relationship between the level of functional difficulty and the three health indicators. When adjusting for differences in key observable characteristics such as age, gender, marital status, education level, rural/urban residence, and province of residence, disability gaps remain in all three indicator outcomes. Particularly large disability gaps are present for the poor health outcome.

- Persons with severe disabilities are approximately 2 percentage points less likely to have access to safe drinking water relative to persons without disabilities. The effect is statistically significant at the 5 percent level. There exists no discernable difference in access to safe drinking water for persons with non-severe disabilities compared to persons without disabilities when controlling for other observable factors.
- Relative to persons without disabilities, persons with non-severe disabilities and those with severe disabilities, are less likely to have to access safe sanitation, at around 2 and 4 percentage points, respectively. Both effects are highly statistically significant at the one percent level.
- Relative to persons without disabilities aged 15-49 years, equivalent aged persons with nonsevere disabilities are approximately 5 percentage points more likely to be in poor health and persons with severe disabilities are 19 percentage points more likely to be in poor health. Both effects are highly statistically significant at the one percent level.

**Table 10 Regression Results on the Effect of Disability on Health Indicators** 

	Safe water (1)	Safe sanitation (2)	Poor health (3)
Disability status (reference no disability)			
Mild/mod disability	0.001	-0.017***	0.046***
	(0.005)	(0.006)	(0.005)
Severe disability	-0.017**	-0.042***	0.191***
	(0.008)	(0.010)	(0.027)
Observations	76,510	76,510	28,257
R-squared	0.125	0.094	0.066

Notes: Standard errors in parentheses. All models are estimated using ordinary least squares. Dependent variables are binary indicator variables for (1) safely managed drinking water and (2) safely managed sanitation and (3) bad/very bad self-reported health status. Control variables include age, age squared, sex, marital status, education, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Disability gaps in health over time

Table 11 documents the change over time in access to safe drinking water and safe sanitation for persons with severe disabilities compared to the changes over time for persons without severe disabilities. In 2014, the rate of access to safe water and safe sanitation was essentially the same irrespective of disability status. By 2021-22, rates improved dramatically for both groups, but the rate of change was slightly higher for persons without disability resulting in a small statistically insignificant net deficit for persons with disabilities.

Specifically, the share of the population with severe disabilities with access to safe drinking water improved from 65% in 2014 to 85% in 2021-22, a magnitude of 20 percentage points. The comparable change for the population without severe disabilities was even higher at 23 percentage points. The relative change for persons with severe disabilities was a deficit of 3 percentage points yet was not statistically significant at conventional levels of significance. The regression-based estimate as shown in column 4 shows that, when controlling for observable differences in the composition of the samples with and without disabilities over time, the relative change is very close to zero.

A similar pattern exists with respect to access to safe sanitation. The rate of access to safe sanitation improved even more considerably for persons with severe disabilities from 48% in 2014 to 77% in 2021-22, an improvement of 29 percentage points. For persons without severe disabilities, the rate improved by close to 32 percentage points. The relative negative difference of 2 percentage points was not statistically significant at conventional levels. The regression-based estimate in column 4 was very close to zero and remained statistically insignificant.

<sup>7</sup> Self-assessed health information was not collected in the 2014 wave so we are unable to compare changes over time in the poor health indicator.

Table 11 Changes in Water and Sanitation Outcomes Over Time by Disability Status

	2021-22	2014	Difference	Adjusted Difference
	(1)	(2)	(3)	(4)
Outcome: Safe water				
Persons with severe disability	0.845	0.645	0.200	
Persons without severe disability	0.875	0.648	0.227	
Difference	-0.030	-0.003	-0.027	-0.009
Outcome: Safe sanitation				
Persons with severe disability	0.776	0.482	0.294	
Persons without severe disability	0.804	0.489	0.315	
Difference	-0.028	-0.007	-0.021	0.005

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Controls include age, gender, marital status, education, rural/urban residence and province of residence. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Maternal Health

Almost all women (99%) aged 15-49 with and without disabilities, who had a live birth in the past 2 years preceding the survey have received ante natal care (ANC). There is no significant difference overall between women with and without disabilities in terms of the number and time of the antenatal care received. According to the results, all women have the similar pattern of receiving ANC from a skilled provider for their most recent birth. Most women (84%) received ANC from a nurse or midwife, while 12% received care from a doctor and 2% from an auxiliary midwife. The women with severe disabilities received ANC from doctor at a higher rate compared to others.

Institutional deliveries increase the chances of skilled birth attendance, as well as increasing mothers' access to essential equipment and supplies. Overall, 98% of live births and stillbirths in the 2 years preceding the survey were delivered in a health facility. However, for women with severe disabilities differences were found. They were more likely to deliver at home and to deliver with assistance from an unskilled provider compared to women with mild/moderate and without disabilities, 3% and 14% respectively.

In Cambodia, 92 % of mothers received a postnatal check within the first 2 days after birth. However, mothers with severe disabilities were seen less frequently than the mothers with mild/ moderate disabilities and mothers without disabilities.

Sixty-two percent of currently married women use a method of contraception. The women with severe disabilities reported the lowest use of contraception compared to currently married women with mild/moderate disabilities. Currently married women without disabilities reported the highest use of contraception.

Use of modern contraceptive methods is higher among currently married women in rural areas (47%) than among those in urban areas (41%). However, there is no significant difference in use in rural areas between currently married women with and without disabilities.

Unmet need for family planning is higher among currently married women with severe disabilities, 19% compared to 11% for women without disabilities. Overall, 76% of the demand for family planning is from women without disabilities in urban areas. This compared to 73% of currently married women with severe disabilities in the same residence.

Table 12. following provides details of the analysis.

Table 12 Maternal Health for women by Disability Status and Location (%)

Indicators	Any	Mild/Mod	Severe	Non
Number and time of the Antenatal care				
0	1.8	1.9	1.1	1.2
<4	12.1	12.2	11.0	12.5
4+	86.0	86.0	87.9	86.2
Don't Know	0.0	0.0	0.0	0.1
Antenatal care provider				
No ANC	1.7	1.8	0.0	1.2
Doctor	12.0	11.6	23.8	12.8
Nurse/midwife	84.5	84.8	76.2	83.6
Other health worker	1.7	1.8	0.0	2.4
TBA/other/relative	0.0	0.0	0.0	0.1
Institutional Deliveries				
Health Facility	97.0	97.0	96.7	96.7
Home	2.1	2.1	3.3	1.8
Others	0.9	0.9	0.0	1.4
Skilled Assistance during Delivery				
Skilled provide	96.7	97.0	86.5	96.7
Unskilled provider	3.3	3.0	13.5	3.3
No one	0.0	0.0	0.0	0.1
Postnatal Care for mother				
No Visit w/in 2 days	8.0	7.5	20.9	7.5
visit w/in 2 days	92.0	92.5	79.1	92.5
Family planning				
Total				
Currently used any method	59.1	59.4	53.0	63.0
Currently used modern method	44.1	44.1	44.4	45.2
Urban				
Currently used any method	63.8	64.1	58.4	66.9
Currently used modern method	41.5	40.9	50.0	41.8
Rural				
Currently used any method	57.1	57.5	50.0	60.2

Indicators	Any	Mild/Mod	Severe	Non
Currently used modern method	45.2	45.4	40.6	47.6
Total demand for Family Planning				
Total				
Unmet need	12.4	12.0	18.7	11.2
Met Need	59.1	59.4	53.0	63.0
Urban				
Unmet need	9.2	8.7	16.7	9.4
Met Need	63.8	64.1	58.4	66.9
Rural				
Unmet need	13.7	13.4	19.8	12.5
Met Need	57.1	57.5	50.0	60.2

# LIVING STANDARDS AND SOCIAL PROTECTION

This section describes and discusses the main results on standard of living and social protection. Specifically, this section presents results for nine indicators related to the standard of living for adults and their households (refer Table 13). They inform CRPD Article 28 on "Adequate standard of living and social protection" and include the share of adults in households with electricity (SDG 7.1.1); using clean fuel for cooking<sup>8</sup> (SDG 7.1.2); with adequate housing<sup>9</sup>; who own assets; who own a cell phone (SDG 5.b.1); who receive social protection (SDG 1.3.1).

The specific indicator of the receipt of social protection is the share of persons aged 15-49 who have free health insurance, either through the Health Equity Fund or community-based health insurance.

#### Disability gaps in living standards and social protection

As shown in Figure 14 and in Table 13, persons with disabilities are less likely to use clean cooking fuels, reside in quality housing, own durable assets and receive free health insurance compared to persons without disabilities. There was little difference in the rate of access to electricity according to disability status. The disability gaps for standard of living indicators increase with the degree of disability whereas for social protection they decrease with the degree of disability.

- Households that used clean cooking fuels was reported in over half (52%) of persons without disabilities compared to 42% of persons with mild/moderate disabilities and 38% of persons with severe disabilities, representing a gap of 10-14 percentage points or 19-27% depending upon the degree of disability.
- Quality housing was lived in by 43% of persons without disabilities compared to 37% of persons with mild/moderate disabilities and 34% of persons with severe disabilities, representing a gap of 6-9 percentage points or 14-26% depending upon the degree of disability.
- **Households with access to electricity** was reported by 93% of persons without disabilities compared to 92% of persons with mild/moderate disabilities and 91% of persons with severe disabilities, representing a gap of 1-2 percentage points depending upon the degree of disability.
- 8 Clean refers to the share of the population with primary reliance on clean fuels and technology for cooking. Clean fuel includes electricity, gaseous fuels (e.g. natural gas, biogas). Unclean fuels include kerosene and solid fuels (biomass (wood, crop waste, dung), charcoal, coal).
- 9 Adequate housing refers to a household living in a place with quality floor, roof and wall materials. Quality floor conditions include laminates, cement, tiles, bricks, parquet. Poor floor conditions include earth, dung, stone, wood planks. Quality roof conditions include burnt bricks concrete, cement. Poor roof conditions refer to no roof or roofs made of natural or rudimentary materials (e.g. asbestos, thatch, palm leaf, mud, earth, sod, grass, plastic, polythene sheeting, rustic mat, cardboard, canvas, tent, wood planks, reused wood, unburnt bricks). Quality wall conditions include burnt bricks, concrete, cement. Poor wall conditions refer to no walls or walls made of natural or rudimentary materials (e.g. cane, palms, trunk, mud, dirt, grass, reeds, thatch, stone with mud, plywood, cardboard, carton/plastic, canvas, tent, unburnt bricks, reused wood.

- Among 8 household assets (radio, television, refrigerator, mobile phone, bicycle, motorbike, car and computer), persons without disabilities on average owned 47% compared to 45% for persons with mild/moderate disabilities and 42% for persons with severe disabilities, representing a gap of 2-5 percentage points or 4-11% depending upon the degree of disability. The individual assets where inequalities in ownership were greatest tended to be the higher priced items such as motorbike, car, refrigerator, mobile phone, and computer.
- Free health insurance was reported by around 17% of persons without disabilities (aged 15-49 years) compared to 13% of persons with mild/moderate disabilities representing a gap of 5 percentage points or 33%. The insurance rate was higher among persons with severe disabilities at 16% slightly below the rate among persons without disabilities.



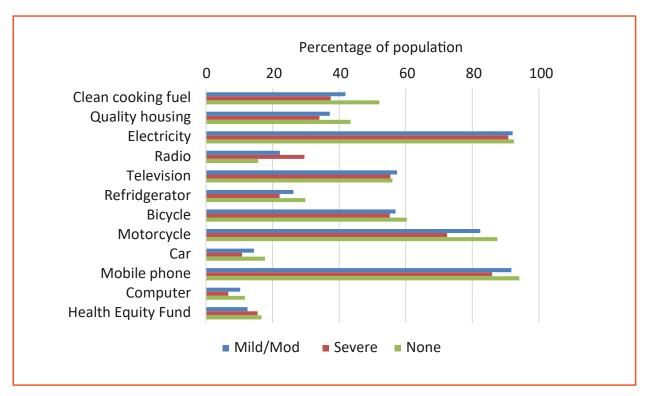


Table 13 Standard of Living and Social Protection Indicators by Disability Status (%)

	Any	Mild/Mod	Severe	None
Clean cooking fuel	41.2	41.9	37.5	52.1
Quality housing	36.7	37.2	34.1	43.4
Electricity	91.9	92.1	90.8	92.5
Radio	23.5	22.2	29.6	15.7
Television	57.1	57.4	55.4	56

	Any	Mild/Mod	Severe	None
Refridgerator	25.6	26.3	22.1	29.8
Bicycle	56.6	56.9	55.2	60.3
Motorcycle	80.7	82.4	72.4	87.5
Car	13.8	14.4	10.8	17.7
Mobile phone	90.7	91.7	85.9	94.1
Computer	9.7	10.3	6.7	11.7
Asset ownership ratio	44.7	45.2	42.3	46.6
Free health insurance	12.7	12.5	15.5	16.7

# Adjusted disability gaps in living standards and social protection

Table 14 shows that disability gaps remain across the standard of living measures even after accounting for differences in key observable characteristics between the population with and without disabilities. This provides greater confidence that the gaps can be attributed to the presence of disability itself rather than other confounding factors. For the social protection measure, being insured under the Health Equity Fund, the disability gap is removed after controlling for observable characteristics.

- The probability of using clean cooking fuels is associated with disability by a 1-3 points reduction depending upon the degree of disability. However, only the larger effect for persons with severe disabilities is statistically significant.
- The likelihood of living in adequate housing is reduced for persons with disabilities by 2-3 percentage points depending upon the degree of disability.
- Asset ratio is associated with disability, with a 1-4 percentage point reduction in the asset ratio or share of a selection of durable assets owned, depending upon the degree of disability.
- There exist no statistically significant differences in the rate of access to electricity according to disability status, holding other observable factors constant.
- There exist no statistically significant differences in the probability of being insured under the Health Equity Fund according to disability status, holding other observable factors constant.

Table 14 Regression Results on the Effect of Disability on Living Standards and Social **Protection Indicators** 

	Clean cooking fuel	Quality housing	Electricity Non-paid	Asset ratio	Free health Insurance
	(1)	(2)	(3)	(4)	(5)
Disability status (reference r	no disability)				
Mild/mod disability	-0.010	-0.015**	-0.000	-0.012***	-0.003
	(0.007)	(0.006)	(0.004)	(0.003)	(0.008)
Severe disability	-0.027**	-0.028**	-0.010	-0.042***	0.036
	(0.012)	(0.013)	(0.007)	(0.006)	(0.026)
Observations	76,484	76,510	76,510	76,510	28,257
R-squared	0.299	0.271	0.181	0.168	0.091

Notes: Standard errors in parentheses. All models are estimated using ordinary least squares. Dependent variables are binary indicator variables for residing in a household that (i) uses clean cooking fuels (ii) has quality housing (iii) has access to electricity, and (iv) a ratio of the number of assets owned among 8 assets including radio, television, fridge, mobile phone, bicycle, motorbike, car, and computer; and (v) an indicator variable for being insured through the Health Equity Fund. Control variables include age, age squared, sex, marital status, education, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Disability gaps in living standards and social protection over time

Table 15 documents the changes over the two CDHS waves, 2014 and 2021-22, in living standard and social protection measures between persons with and without disabilities. As shown in the table, there has been marked improvement across all measures of living standards – use of clean cooking fuels, living in quality housing, access to electricity, and asset ratio – for persons with disabilities over time. However, these improvements have either been in line with, or less than, those experienced by persons without disabilities. Therefore, the disability gaps in living standard indicators over time have either remained unchanged or have deepened.

Specifically, the relative position of persons with disabilities has not changed with respect to asset ownership and electricity access and with respect to the use of clean cooking fuels and living in quality housing has worsened. However, the negative relative change in adequate housing for persons with disabilities approaches zero and is no longer statistically significant when adjusting for the different sample compositions over time (column 4). After adjusting for differences in the samples over time through the regression framework, the disability gap in the use of clean cooking fuels has increased by around 3 percentage points over the two survey waves.

For the social protection outcome relating to free health insurance, there exists a different pattern between persons with and without disabilities over time. The insurance rate dropped for persons with disabilities from 23% in 2014 to 16% in 2021-22, some 7 percentage points, whereas there was an increase in the insurance rate among persons without disabilities of 4 percentage points over the same period. Consequently, the disability gap in free health insurance coverage increased by 12 percentage points over the period. The effect is significant at conventional levels of significance and is robust to the inclusion of control variables.

Table 15 Changes Over Time in Living Standards and Social Protection Indicators by Disability Status

	2021-22	2014	Difference	Adjusted Difference
	(1)	(2)	(3)	(4)
Outcome: Clean cooking fuel				
Persons with severe disability	0.375	0.127	0.248	
Persons without severe disability	0.500	0.163	0.337	
Difference	-0.125	-0.036	-0.089***	-0.031**
Outcome: Quality housing				
Persons with severe disability	0.340	0.177	0.163	
Persons without severe disability	0.421	0.216	0.205	
Difference	-0.081	-0.039	-0.042**	0.004
Outcome: Electricity				
Persons with severe disability	0.908	0.564	0.344	
Persons without severe disability	0.924	0.579	0.345	
Difference	0.016	0.015	-0.001	0.026
Outcome: Asset ratio				
Persons with severe disability	0.423	0.385	0.038	
Persons without severe disability	0.463	0.416	0.047	
Difference	0.040	0.031	-0.009	0.008
Outcome: Free health insurance				
Persons with severe disability	0.155	0.231	-0.076	
Persons without severe disability	0.161	0.119	0.042	
Difference	0.006	-0.112	-0.117*	-0.110*

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Controls include age, gender, marital status, education level, rural/urban residence and province of residence. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# MULTI-DIMENSIONAL WELL-BEING

Increasingly, deprivation has been understood in terms of disadvantage in various dimensions of well-being (Sen 2009; UNDP 2020), as reflected in SDG 1 with poverty "in all its forms". Deprivation in well-being is multifaceted as it can take various forms (e.g. poor living conditions, poor health, low educational attainment) and can be measured by counting the number of deprivations across different dimensions (Alkire and Foster 2011). In this report, deprivation in multidimensional well-being is measured by the share of persons with more than one deprivation

Eight indicators across the four dimensions were selected for the calculation of deprivation in multidimensional well-being. Each of the four dimensions (education, employment, health, and standard of living) has a weight of 1 and when more than one indicator was used within a dimension, indicators were equally weighted within the dimension. Education and employment are measured through an indicator of educational attainment and employment. Health is measured with two indicators and each has a weight of ½: access to safely managed drinking and sanitation services. Standard of living is measured through four indicators with each a weight of ½: clean fuel, electricity, adequate housing and asset ownership.

among four dimensions of well-being: education, employment, health, and standard of living.

The deprivation indicators are: if a person (1) has less than primary education; (2) is not working in paid or unpaid work (3) lives in a household without safely managed drinking water; (4) lives in a household without safely managed sanitation services; (5) lives in a household without electricity (6) lives in a household without clean cooking fuel; (7) lives in a household without adequate housing, i.e. without adequate walls, floor and roof; (8) lives in a household that does not own more than one asset (among radio, TV, telephone, bike, motorbike, fridge) and does not own a car.<sup>10</sup>

#### Disability gaps in deprivation of multi-dimensional well-being

As shown in Figure 15 and Table 16, persons with disabilities are significantly more like to be deprived in multi-dimensional well-being compared to those without disabilities. Specifically, 70% of persons with mild/moderate disabilities and 82% of persons with severe disabilities were deprived across more than one dimension of well-being compared to 58% of persons without disabilities, representing a gap of 12-24 percentage points or 21-41% depending upon the degree of disability.

<sup>10</sup> For more detailed information on the calculation of the multi-dimensional well-being measure, refer <a href="https://disabilitydata.ace.fordham.edu/twentymethod\_brief/3-multidimensional-poverty/">https://disabilitydata.ace.fordham.edu/twentymethod\_brief/3-multidimensional-poverty/</a>.



Disability gaps exist across all of the eight deprivation indicators used in the calculation of deprivation of multi-dimensional well-being:

- i. **Not completing primary school:** 21% of persons with mild/moderate disabilities and 26% of persons with severe disabilities compared to 16% of persons without disabilities, representing a gap of 5-10 percentage points or 33-65% depending upon the degree of disability.
- ii. **Not participating in work:** 10% of persons with severe disabilities were compared to 7% of persons without disabilities, representing a gap of 3 percentage points or 42%. The rate of non-participation in work was similar for persons with mild/moderate disabilities and persons without disabilities.
- iii. **Household without access to safe drinking water:** 16% of persons with severe disabilities lived in households that lack access compared to 13% of persons without disabilities, representing a gap of 3 percentage points or 24%. The share of persons without access to safe drinking water was similar between persons with mild/moderate disabilities and persons without disability.
- iv. **Lack of access to safe sanitation:** around 21-22% of persons with disabilities compared to 19% of persons without disabilities lived in a house without access to safe sanitation, representing a gap of 2-3 percentage points or 10-17% depending upon the degree of disability.
- v. **Household without access to electricity:** 9% of persons with severe disability lived in households without electricity compared to 8% of persons without disability, representing a gap of 1 percentage point or 13%. The share of persons residing in a household without electricity was similar for persons with mild/moderate disabilities and persons without disability.
- vi. **Household without clean cooking fuels:** 63% of persons with severe disabilities and 58% of persons with mild/moderate disabilities lived in a household without clean cooking fuel compared to 48% of persons without disabilities, representing a gap of 10-15 percentage points or 21-30% depending upon the degree of disability.
- vii. **Lived in poor quality housing:** 63% of persons with mild/moderate disabilities and 66% of persons with severe disabilities lived in poor-quality housing compared to 57% of persons without disabilities, representing a gap of 6-9 percentage points or 11-16% depending upon the degree of disability.
- viii. **Lived in a household deprived of assets:** 2% of persons with mild/moderate disabilities and 4% of persons with severe disabilities lived in households deprived of assets compared to 1% of persons without disabilities, representing a gap of 1-3 percentage points depending upon the degree of disability.

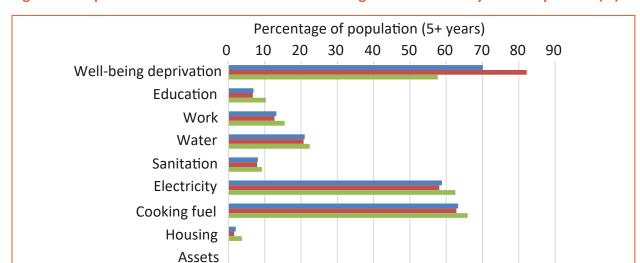


Figure 15 Deprivation in Multidimensional Well-being and Indicators by Disability Status (%)

Table 16 Summary Statistics on Deprivation in Multidimensional Well-being and Associated **Indicators by Disability Status (%)** 

Severe None

Mild/Mod

	Any	Mild/Mod	Severe	None
Deprivation indicators				
Education	22.1	21.3	26.4	16.0
Work	6.9	6.7	10.3	6.8
Water	13.2	12.7	15.5	12.5
Sanitation	21.0	20.7	22.4	19.3
Electricity	8.1	7.9	9.2	7.5
Cooking fuel	58.8	58.1	62.5	47.9
Housing	63.3	62.8	65.9	56.6
Assets	2.0	1.6	3.7	0.8
Deprivation in multi-dimensional well-being	0.721	0.701	0.822	0.577

#### Adjusted disability gaps in deprivation of multi-dimensional well-being

As shown in Table 17, the disability gaps associated with multi-dimensional well-being are reduced yet remain significant once adjusted for differences in observable characteristics between the populations of persons with and without disabilities. The gaps by the degree of disability are removed and are similar for persons with severe and mild/moderate disabilities. Specifically, compare to persons without disabilities, persons with disabilities are 7-8 percentage points more likely to be deprived across more than one dimension of well-being as measured by education, employment, health and standard of living. The effects are highly statistically significant.

Table 17 Regression Results on the Effect of Disability on Deprivation in Multidimensional Well-being

	Deprivation in multi- dimensional well-being (1)
Disability status (reference no disability)	
Mild/mod disability	0.080***
	(0.007)
Severe disability	0.069***
	(0.012)
Observations	76,851
R-squared	0.199

Notes: Standard errors in parentheses. Model is estimated using ordinary least squares. Dependent variable is a binary indicator variable for deprivation in multi-dimensional well-being. Control variables include age, sex, marital status, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# Disability gaps in deprivation in multi-dimensional well-being over time

The rate of deprivation in multi-dimensional well-being has declined for the population with severe disabilities from 90% in 2014 to 82% in 2021-22, representing a drop of 8 percentage points. However, over the same period, the rate of deprivation in multi-dimensional well-being fell by 17 percentage points (from 77% to 60%) for the population without disabilities. Therefore, the disability gap in the extent of deprivation in multi-dimensional well-being increased by 9 percentage points over the period 2014 to 2021-22 (Table 18). The increase in the disability gap over time is reduced slightly to 7 percentage points and remains highly statistically significant when adjusted for differences in the composition of the two samples (column 4). Overall, the results show that the relative position of persons with disabilities with respect to deprivation in multi-dimensional well-being has worsened over time. Despite improvement in the rate of deprivation in multi-dimensional well-being, it has not been sufficient to keep pace with, let alone exceed, the population without disabilities. This evidence indicates that persons with disabilities are being left behind in the development process.

Table 18 Changes Over Time in Deprivation in Multidimensional Well-being by Disability Status

	2021-22	2014	Difference	Adjusted Difference
	(1)	(2)	(3)	(4)
Persons with severe disability	0.822	0.903	-0.081	
Persons without disability	0.603	0.774	-0.171	
Difference	0.219	0.129	0.091***	0.072***

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Regression controls include age, gender, marital status, rural/urban residence and province of residence. . \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



This section describes and presents results on access to information (ATI). Information is a valuable resource and source of empowerment for citizens to actively advocate for their rights (Banerjee et al. 2018). This particularly concerns persons with disabilities who may have functional limitations which limit their ability to seek out information through traditional

channels. When accessible information and communications are not available, a range of persons

with different disabilities cannot effectively benefit from public policies and programs.

The importance of ATI as an internationally recognised human right for all, including for persons with disabilities, has long been acknowledged and is explicitly stated in the CRPD. Specifically, Article 21 of the CRPD outlines the right of freedom to seek, receive and impart information and ideas for persons with disabilities on an equal basis with others and through all forms of communication of their choice. The following section presents inequalities by disability status across multiple proxy ATI indicators including whether persons read the newspaper, listen to the radio, watch television, use the internet and own a mobile phone.

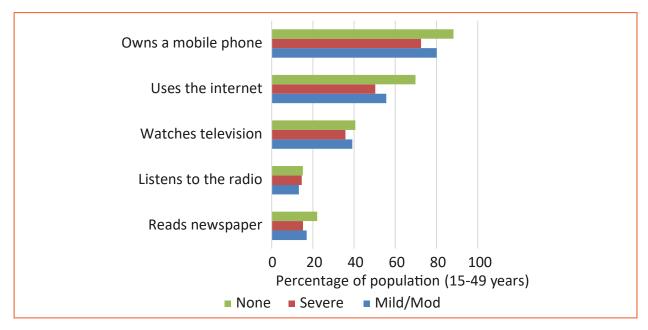
#### Disability gaps in access to information

As shown in Figure 16 and Table 19, persons with disabilities have lower levels of ATI compared to persons without disability. Specifically, persons with disabilities are less likely to read the newspaper, listen to the radio, watch television, use the internet, and own a mobile phone. The disability gaps for ATI proxy indicators increase with the degree of disability except for listening to the radio where the gaps are small. The greatest disability gaps are for indicators relating to using the internet and owning a mobile phone.

- **Read the newspaper -** 17% of persons with mild/moderate disabilities and 15% of persons with severe disabilities reported reading the newspaper compared to 22% of persons without disabilities, representing a gap of 5-7 percentage points or 23-31% depending upon the degree of disability.
- **Listen to the radio** 13% of persons with disabilities listened to the radio compared to 15% of persons without disabilities, representing a gap of 2 percentage points or 12%.
- Watch the television 39% of persons with mild/moderate disabilities and 36% of persons with severe disabilities watched television compared to 41% of persons without disabilities, representing a gap of 2-5 percentage points or 4-12% depending upon the degree of disability.
- **Used the internet** 56% of persons with mild/moderate disabilities and 50% of persons with severe disabilities used the internet compared to 70% of persons without disabilities, representing a gap of 14-20 percentage points or 20-28% depending upon the degree of disability.

• Owned a mobile phone - 80% of persons with mild/moderate disabilities and 73% of persons with severe disabilities owned a mobile phone compared to 88% of persons without disabilities, representing a gap of 8-16 percentage points or 9-18% depending upon the degree of disability.





In addition to having a higher proportion reporting not to use the internet, among those that used the internet the frequency of usage for persons with disabilities was lower than persons without disabilities. Among users of the internet, 80% of internet users with disabilities reported using the internet daily compared to 90% of internet users without disabilities (Figure 17 and Table 19).

Figure 17 Frequency of Internet Usage by Disability Status

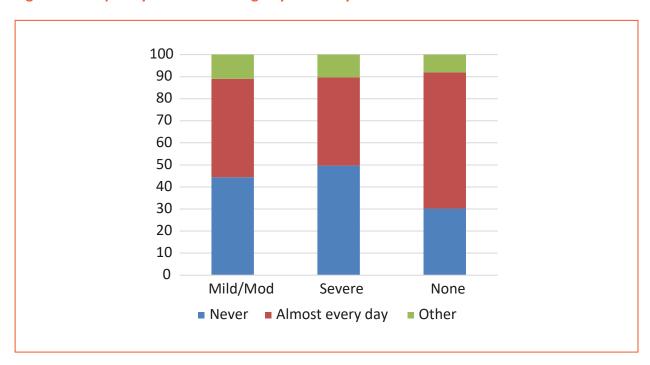


Table 19 Summary Statistics on Access to Information Indicators by Disability Status (%)

	Any	Mild/Mod	Severe	None
Information indicators				
Reads newspaper	16.8	17.0	15.2	22.1
Listens to the radio	13.3	13.2	14.6	15.1
Watches television	38.9	39.1	35.8	40.6
Uses the internet	55.3	55.6	50.3	69.8
Owns a mobile phone	79.6	80.1	72.5	88.2
Frequency of internet usage				
Never	44.7	44.4	49.7	30.2
Almost every day	44.2	44.6	40.0	61.7
Other	11.0	11.1	10.3	8.2

#### Adjusted disability gaps in access to information

Disability gaps in ATI proxy indicators are reduced yet remain significant after accounting for differences in key observable characteristics between the population with and without disabilities (Table 20). This provides greater confidence that the gaps in ATI can be attributed to disability rather than other confounding factors, such as age. The exception is listening to the radio where the gaps are very small and only marginally statistically significant. The gaps once again increase with the degree of disability.

- **Reading the newspaper** disability is associated with a 1-4 percentage point reduction in the probability of reading the newspaper depending upon the degree of disability, holding other observable characteristics constant. However, only the larger effect for persons with severe disabilities is statistically significant at conventional levels of significance.
- **Listening to the radio** disability is associated with a 1 percentage point reduction in the probability of listening to the radio, holding other observable characteristics constant. The effect is the same magnitude for persons with mild/moderate and severe disabilities yet only the former is statistically significant.
- **Watching the television** disability is associated with a 3-6 percentage point reduction in the probability of watching television depending upon the degree of disability, holding other observable characteristics constant. Both effects are statistically significant.
- **Use of the internet** disability is associated with a 4-8 percentage point reduction in the probability of using the internet depending upon the degree of disability, holding other observable characteristics constant. Both effects are highly statistically significant.
- **Owning a mobile phone** disability is associated with a 2-8 percentage point reduction in the probability of owning a mobile phone depending upon the degree of disability, holding other observable characteristics constant. Both effects are highly statistically significant.

Table 20 Regression Results on the Effect of Disability on Access to Information Indicators

	Reads newspaper (1)	Listens to radio (2)	Watches television (3)	Uses the internet (4)	Owns a mobile phone (5)
Disability status (referenc	e no disability	)			
Mild/mod disability	-0.010	-0.011*	-0.026**	-0.035***	-0.020***
	(0.009)	(0.007)	(0.012)	(0.010)	(0.007)
Severe disability	-0.043*	-0.010	-0.055*	-0.083***	-0.078***
	(0.026)	(0.023)	(0.031)	(0.031)	(0.028)
Observations	28,257	28,257	28,257	28,257	28,257
R-squared	0.233	0.101	0.094	0.167	0.118

Notes: Standard errors in parentheses. All models are estimated using ordinary least squares. Dependent variables are binary indicator variables for males and females aged 15-49 years that (i) reads the newspaper (ii) listens to the radio (iii) watches television (iv) uses the internet and (iv) owns a mobile phone. Control variables include age, age squared, sex, marital status, education, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Disability gaps in access to information over time

The proportion of persons with severe disabilities that read the newspaper, listen to the radio and watch television has declined over time from 2014 to 2021-22 (Table 21). The rate of decline over time for the population with severe disabilities is lower than that of the population without severe disabilities, resulting in a net positive change or reduction in the disability gap for these three ATI indicators. Specifically, the disability gap over time is reduced by 1 percentage point for the reading newspaper indicator and by 7 percentage points for the listen to the radio and watching television indicators. However, in all cases the relative change is not statistically significant which means that there is insufficient confidence that the result is not due to chance. As shown in column 4, the results remain statistically insignificant when adjusting for differences in the composition of the two samples through regression analysis.

The picture is very different for the internet indicator which suggests that there is some substitution between more traditional channels of accessing information (newspapers, radio and television) and the internet. For both the population with and without severe disabilities, use of the internet has increased substantially over the 7-8 year period. However, the rate of increase has been greater for the population without than with severe disabilities resulting in a net negative change or increase in the disability gap. Specifically, the proportion of persons with severe disabilities using the internet increased from 9% to 50% representing a change of 41 percentage points whereas the analogous increase for persons without severe disabilities was from 14% to 68% representing a change of 54 percentage points. The disability gap increased by 13 percentage points over the period and is highly statistically significant. When controlling for differences in the composition of the two CDHS samples, 2014 and 2021-22, the change in the disability gap is reduced to 8 percentage points and remains statistically significant.

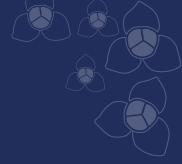
Overall, the results suggests that the disability gaps have not changed significantly over time for ATI indictors of reading the newspaper, listening to the radio or watching television but have worsened for the ATI indicator relating to the use of the internet.

**Table 21 Changes Over Time in Access to Information Indicators by Disability Status** 

	2021-22	2014	Difference	Adjusted Difference
	(1)	(2)	(3)	(4)
Outcome: Reads newspaper				
Persons with severe disability	0.152	0.212	-0.060	
Persons without severe disability	0.214	0.287	-0.073	
Difference	-0.062	-0.075	0.013	0.070
Outcome: Listens to the radio				
Persons with severe disability	0.146	0.527	-0.381	
Persons without severe disability	0.148	0.599	-0.451	
Difference	-0.002	-0.072	0.070	0.094
Outcome: Watches television				
Persons with severe disability	0.358	0.655	-0.297	
Persons without severe disability	0.404	0.770	-0.366	
Difference	-0.046	-0.115	0.069	0.100
Outcome: Uses the internet				
Persons with severe disability	0.503	0.088	0.415	
Persons without severe disability	0.678	0.136	0.542	
Difference	-0.175	-0.048	-0.127***	-0.078*

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Controls include age, gender, marital status, rural/urban residence and province of residence. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

# DOMESTIC VIOLENCE



Intimate partner violence is a violation of human rights and a social and public health issue. Article 16 of the CRPD stipulates that States should put in place legislation and policies to protect women with disabilities from exploitation, violence and abuse. SDG Goal 5 calls for "the elimination of all forms of violence against all women and girls in the public and private sphere". In the CDHS, a subsample of women aged 15-49 years of age answered questions on domestic violence. In this report, domestic violence is measured by the share of women reporting being subject to domestic violence by their intimate partner in the past 12 months (CRPD Article 16, SDG indicator 16.1.3). Domestic violence may be physical, psychological or sexual violence.

#### Disability gaps in domestic violence

As shown in Figure 18 and Table 22, women with disabilities are significantly more likely to experience domestic violence by their intimate partner in the past 12 months compared to women without disabilities. The most common form of violence was emotional violence, followed by physical and sexual violence respectively. Across all categories of violence, the reporting was higher for women with disabilities.

- Experience of domestic violence was reported by around 20% or one in five women with disabilities compared to 12% of women without disabilities, representing a gap of 8 percentage points or 66%. In other words, women with disabilities were two-thirds more likely to experience domestic violence in the past 12 months.
- **Emotional violence** was reported by 18% of women with disabilities compared to 11% of women without disabilities, representing a gap of 7 percentage points or 64%. Therefore, women with disabilities were 64% more likely to experience emotional violence in the past 12 months.
- **Physical violence** was reported by 8% of women with disabilities compared to around 4% of women without disabilities, representing a gap of 4 percentage points or 100%. Therefore, women with disabilities were twice as likely to experience physical violence in the past 12 months.
- **Sexual violence** was reported by 4% of women with disabilities compared to around 2% of women without disabilities, representing a gap of 2 percentage points or 100%. Women with disabilities were therefore twice as likely to experience sexual violence in the past 12 months.

Percentage of female population (15-49 years)

0 5 10 15 20 25

Any violence
Physical violence
Sexual violence
Emotional violence

Figure 18 Domestic Violence Indicators by Female Disability Status

Table 22 Summary Domestic Violence Statistics by Female Disability Status (%)

Any

	Any	None
Any violence	19.7	11.9
Physical violence	8.1	3.7
Sexual violence	3.5	1.5
Emotional violence	17.9	11.1
Observations	1,154	5,050

None

#### Adjusted disability gaps in domestic violence

The disability gaps for the domestic violence indicators remain significant after adjusting for differences in the observable characteristics of women with and without disabilities (Table 23). Specifically, women with disabilities aged 15-49 years are five percentage points more likely to experience domestic violence compared to equivalent-aged women without disabilities, holding other observable factors constant. The effect is highly statistically significant which suggests that the result is not due to chance. With respect to violence types (holding other observable differences constant), women with disabilities are four percentage points more likely to experience emotional violence; three percentage points more likely to experience physical violence; and one percentage point more likely to experience sexual violence relative to women without disabilities. All the effects are statistically significant at conventional levels of significance except for the effect on sexual violence which is statistically insignificant.

**Table 23 Regression Results for Effect of Disability on Domestic Violence Indicators** 

	Any violence	Physical	Sexual	Emotional
	(1)	(2)	(3)	(4)
Women with disabilities	0.051***	0.032**	0.012	0.043**
	(0.019)	(0.013)	(0.008)	(0.018)
Observations	6,198	6,198	6,198	6,198
R-squared	0.053	0.027	0.016	0.052

Notes: Standard errors in parentheses. All models are estimated using ordinary least squares. Dependent variables are binary indicator variables for (1) any form of violence (2) physical violence (3) sexual violence (4) emotional for women aged 15-49 years. Control variables include age, age squared, marital status, education level, rural/urban residence and province. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

#### Disability gaps in domestic violence over time

The reporting of domestic violence decreased over time among women with disabilities (Table 24). For the indicator of experiencing any form of domestic violence, the rate decreased from 25% in 2014 to 20% in 2021/22; a drop of around 5 percentage points. By comparison, the drop in the reporting of domestic violence was slightly larger for women without disabilities from 19% in 2014 to 12% in 2021/22; a drop of around 7 percentage points. Therefore, the difference in the change over time in the reporting of domestic violence for women with versus without disabilities was two percentage points. Although the disability gap in domestic violence increased over time, it was small in magnitude and not statistically significant. When adjusting for differences in the composition of the population with and without disabilities across the two samples, the change in the disability gap over time became close to zero indicating that the disability gap did not change over time.

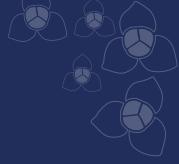
A similar pattern exists according to the type of domestic violence. For all three types – physical, sexual, and emotional – the rate decreased over time for women with disabilities but at a slower rate of change than women without disabilities. The disability gap increased over time, but the magnitude was small and was not statistically different from zero. The exception is the case of sexual violence in which the disability gap increased by close to 5 percentage points over time. The effect was highly statistically significant even after controlling for differences in the composition of samples. However, this result should be viewed with some degree of caution because the number of reported cases is low and subject to more variation over time.

**Table 24 Changes Over Time in Domestic Violence Indicators by Female Disability Status** 

	2021-22	2014	Difference	Adjusted Difference
	(1)	(2)	(3)	(4)
Outcome: Any violence				
Women with disabilities	0.197	0.253	-0.056	
Women without disabilities	0.119	0.193	-0.074	
Difference	0.078	0.060	0.018	-0.005
Outcome: Physical violence				
Women with disabilities	0.081	0.111	-0.03	
Women without disabilities	0.037	0.092	-0.055	
Difference	0.044	0.019	0.025	0.013
Outcome: Sexual violence				
Women with disabilities	0.035	0.016	0.019	
Women without disabilities	0.015	0.041	-0.026	
Difference	0.02	-0.025	0.045***	0.045***
Outcome: Emotional violence				
Women with disabilities	0.179	0.232	-0.053	
Women without disabilities	0.111	0.170	-0.059	
Difference	0.068	0.062	0.006	-0.018

Notes: Adjusted difference presents the regression adjusted difference in disability gaps. Controls include age, age squared, marital status, education, rural/urban residence and province of residence. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

### **CONCLUSIONS**



This report provides an analysis of inequalities in well-being between persons with and without disabilities in Cambodia. It presents nationally representative estimates of disability prevalence and well-being indicators disaggregated across disability status. Disability status is measured through questions on functional difficulties that are considered internationally comparable. For individual-level indicators, such as education and employment, separate analyses are presented for males and females.

In addition, the report provides an analysis of disability gaps in well-being indicators over two time periods, 2014 and 2021-22.

#### The extent of disability in the population

Cambodia has a large population with disabilities. Close to one-quarter of the Cambodian population aged 5 years of age and older is living with some degree of functional difficulty. However, the proportion of the population living with severe functional difficulties is much lower at around 4%. The prevalence rates of functional difficulty and severe functional difficulty are consistent with those recorded from other low- and middle-income countries (Pettinicchio and Maroto 2021; Mitra and Yapp 2021, 2022).

Like in many countries, disability is highly correlated with age in Cambodia with highest prevalence recorded among the elderly. Over three-quarters of persons aged 60 years and above reported some degree of functional difficulty and one in five reported severe functional difficulties.

Higher disability rates were recorded among females compared to males. This is likely because women tend to live longer than men. Higher disability rates are also recorded among persons with low education and high levels of deprivation, and among residents in rural areas, reflecting the close relationship between disability and disadvantage.

There also exists a high degree of variation in the reporting of disability across provinces. For instance, in Battambang province, the reporting of functional difficulty and severe functional difficulty is around 1.5 and 2 times higher than the national average, respectively. Together with the finding that persons with disabilities disproportionately reside in rural areas, this shows that the distribution of functional difficulties in Cambodia has a strong spatial component: where someone resides appears to have significant implications for their level of functioning and wellbeing.

#### **Disability gaps**

Inequalities associated with functional difficulties were examined across a broad range of well-being domains including education, employment, health, standard of living and social protection, multi-dimensional well-being, access to information and domestic violence.

A disability gap represents a significant disadvantage for persons with functional difficulties compared to persons with no functional difficulty. This report documented a disability gap in almost all well-being indicators: educational attainment, current school enrollment, work participation, access to safe water and sanitation, poor (self-reported) health, use of clean cooking fuels, quality housing, household assets, deprivation in multi-dimensional well-being, use of information and communication technology (ICT) and experience of domestic violence. In most instances, the disability gaps are greatest for persons with severe disabilities and are robust to adjustments for differences in observable characteristics between persons with and without disabilities.

There have been improvements across almost all indicators for persons with disabilities since 2014.

However, the improvements have generally not been sufficient to surpass the improvements experienced by the Cambodian population without disabilities. Therefore, in most cases, the disability gaps did not change significantly over time. This suggests that, whilst persons with disabilities are not being left behind across most indicators of well-being, their relative position compared to persons without disabilities has not improved.

The disability gaps have widened over time (i.e. where the rate of improvement was lower for persons with disabilities compared to persons without disabilities) in some of the dimensions analysed. This is generally the case for indicators that represent minimum standard of living and are correlated with poverty. Improvements in the use of clean cooking fuels, receipt of free health insurance, use of the internet and deprivation in multi-dimensional well-being for persons with disabilities have not kept pace with that of persons without disabilities.

One important finding is that the disability gap in deprivation in multi-dimensional well-being has increased over time. Deprivation in multi-dimensional well-being in this report is measured by deprivation across more than one of four dimensions of well-being including education, employment, health and living standards. The result suggests that in terms of meeting basic minimum levels of well-being, progress has lagged for persons with disabilities in Cambodia compared to the population without disabilities.

#### **Policy implications**

Over the last two decades, Cambodia has made important strides in developing and reforming legal instruments to promote and protect the rights of persons with disabilities, and in developing policies and programs in accordance with these rights. The country has also made considerable efforts in disability data collection by including disability questions in national survey data (that includes the WG-SS in two rounds of the CDHS), that enabled this research to be undertaken.

The findings from this study show across a broad range of well-being indicators, the situation has improved for persons with disabilities over the period 2014 to 2021-22. However, significant inequalities remain by disability status. This indicates that further efforts and investment of resources is required to make progress towards equalising opportunities and living standards for persons with disabilities in Cambodia. The areas where the disability gaps are most apparent and effort needs to be focused are education, labour market, health care, social protection, ICT and domestic violence:

- i. The disability gaps in education indicators found in this report stem from lower school attendance rates and lower primary school completion rates among persons with disabilities. Further efforts are required to improve the school enrollment and completion rates of children and youths with disabilities. This can be achieved through teacher training on children with special needs, and breaking down barriers in the broader environment, whether physical, structural or attitudinal.
- ii. The disability gaps in employment found in this report result from lower opportunities for employment and for paid employment. Further efforts are required to provide access to vocational training opportunities for persons with disabilities and create opportunities for paid employment. Disability employment quotas and the reasonable accommodation of workers with disabilities in the workplace as specified under law need to be monitored and enforced (Palmer and Williams 2023). Public messaging needs to challenge negative stereotypes around disability and reinforce the capabilities of persons with disabilities.
- iii. The largest disability gaps are observed in health status. Further efforts are required to improve access to quality general health care for persons with disabilities and to improve access to disability-specific health care services and products, including rehabilitation programs and assistive devices. In addition, despite persons with disabilities being in significantly poorer health, the coverage rate of free health insurance is similar for persons with and without disabilities. Greater efforts are required to expand social health protection for persons with disabilities.
- iv. In addition to health, persons with disabilities were more likely to be deprived in terms of education, work, household assets, quality housing, and the use of clean cooking fuels. Further efforts are required to improve access to social protection for persons with disabilities. This includes improving access to income support, support in managing the extra costs of disability such as travel and health care costs (not covered under social health protection), and support in managing education and housing costs.
- v. The disability gaps in ATI are greatest for indicators of ICT including use of the internet and mobile phones. This is a concern since the internet (which can also be accessed through mobile phone technology) is increasingly a channel for conveying information about employment opportunities and government programs and services. Accessing information online is relevant for persons with disabilities who may face a range of physical, communication and transport barriers to accessing information. Efforts are required to improve access to ICT for persons with diverse disabilities.
- vi. Women with disabilities are relatively more likely to experience domestic violence, particularly emotional and physical violence. There is an urgent need to ensure that existing mechanisms to prevent and respond to violence against women take into account specific needs of women with disabilities.
- vii. There exists some evidence that the disability gaps are higher for females and males in areas of education and work which suggests the need to increase interventions specifically targeted to empowering women with disabilities.

## **REFERENCES**

Banerjee, A., Hanna, R., Kyle, J., Olken, B. A., & Sumarto, S. (2018). Tangible information and citizen empowerment: Identification cards and food subsidy programs in Indonesia. Journal of Political Economy, 126(2), 451-491.

De-Walque, D. 2005. "Selective Mortality during the Khmer Rouge Period in Cambodia." Population and Development Review 31:351–68.

De-Walque, D. 2006. "The Socio-Demographic Legacy of the Khmer Rouge Period in Cambodia." Population Studies 60:223–31.

Dy, K. 2007. A History of Democratic Kampuchia (1975–1979). Phnom Penh: Documentation Centre of Cambodia.

Gartrell, A. 2010. "'A Frog in a Well': The Exclusion of Disabled People from Work in Cambodia." Disability and Society 25:289–301.

Gartrell, A., and E. Hoban. 2013. "Structural Vulnerability, Disability and Access to Nongovernmental Organisation Services in Rural Cambodia." Journal of Social Work in Disability and Rehabilitation 12:194–212.

Hanass-Hancock, Jill, Sureshkumar Kamalakannan, G. V. S. Murthy, Michael Palmer, Monica Pinilla-Roncancio, Minerva Rivas, Shailaja Tetali, and Sophie Mitra. "What cut-off (s) to use with the Washington Group Short Set of Questions?" Disability and Health Journal (2023): 101499.

Islam, A., C. Ouch, R. Smyth, and L. C. Wang. 2016. "The Long-Term Effects of Civil Conflicts on Education, Earnings and Fertility: Evidence from Cambodia." Journal of Comparative Economics 44, no. 3:800–820.

Islam, A., C. Ouch, R. Smyth, and L. C. Wang. 2017. "The Intergenerational Effect of Cambodia's Genocide on Children's Education and Health." Population and Development Review 43, no. 2:331–53.

Madans, J.H., Loeb, M.E. and Altman, B.M., 2011, December. Measuring disability and monitoring the UN Convention on the Rights of Persons with Disabilities: the work of the Washington Group on Disability Statistics. In BMC public health (Vol. 11, No. 4, pp. 1-8). BioMed Central.

Mitra, S. and Palmer, M. (2023). Economics of Disability. In K. F. Zimmermann (Ed.), Handbook of Labour, Human Resources and Population Economics. New York: Springer. (Forthcoming)

Mitra, S. and Yapp, J. 2021. The Disability Data Report 2021. New York: Disability Data Initiative.

Mitra, S. and Yapp, J. 2022. The Disability Data Report 2022. New York: Disability Data Initiative.

NIS & MOP. 2009. General Population Census of Cambodia. Phnom Penh: National Institute of Statistics.

NIS, DGH and ICF. 2015. 2014 Cambodia Demographic and Health Survey Key Findings. Rockville, Maryland, USA: National Institute of Statistics, Directorate General for Health and ICF International.

NIS, MOH, and ICF. 2023. Cambodia Demographic and Health Survey 2021–22 Final Report. Phnom Penh, Cambodia, and Rockville, Maryland, USA: National Institute of Statistics, Ministry of Health, and ICF International.

Palmer, M., and D. Harley. 2012. "Models and Measurement in Disability: An International Review." Health Policy and Planning 27:357–64.

Palmer, M., J. Williams, and B. McPake. 2019. "Standard of Living and Disability in Cambodia." Journal of Development Studies 55:2382–402.

Palmer, M., and J. Williams. 2023. "Are Employment Protection Laws for Persons with Disabilities Effective in a Developing Country?" Economic Development and Cultural Change, 71 no. 3.

Pettinicchio, D., and M. Maroto. 2021. "Who Counts? Measuring Disability Cross Nationally in Census Data." Journal of Survey Statistics and Methodology 9:257–84.

Royal Government of Cambodia. 2009. Law on the Protection and Promotion of the Rights of Persons with Disabilities, Royal Kram NS/RKM/0709/010. Phnom Penh: Royal Government of Cambodia

UNPRD. 2022. Annual Narrative and Financial Report – 2022. New York: United Nations Partnership on the Rights of Persons with Disabilities.

WHO. 2001. International Classification of Functioning, Disability and Health (ICF). Geneva: World Health Organisation.

WHO. 2022. Global report on health equity for persons with disabilities. Geneva: World Health Organisation.

WHO.2023. Disability Key Facts. Geneva: World Health Organisation.

WHO & World Bank. 2011. World Report on Disability. Geneva: World Health Organization.

World Bank. 2016. Cambodia Economic Update: The Garment Sector in Perspective. Phnom Penh: World Bank.

World Bank. 2022. Cambodia Economic Update: Navigating Global Economic Headwinds. Phnom Penh: World Bank.

# **APPENDICES**

### **Appendix Table 1. Disability Prevalence, 2014 (%)**

	Any	Mild/Mod	Severe	None
Disability	9.5	7.3	2.1	90.5
Disability type				
Seeing	5.1	4.4	0.7	94.9
Hearing	2.8	2.2	0.6	97.2
Communicating	1.5	0.9	0.6	98.5
Cognition	4.2	3.5	0.7	95.8
Mobility	3.7	2.8	0.9	96.3
Self-care	1.1	0.6	0.5	98.9
Sex				
Female	10.4	8.1	2.3	89.6
Male	8.4	6.5	1.9	91.6
Age group				
5-14	1.8	1.2	0.5	98.2
15-29	3.0	2.1	0.9	97.0
30-44	6.9	5.8	1.1	93.1
45-59	16.9	14.2	2.7	83.1
60+	44.2	32.5	11.7	55.8
Marital status				
Never married/living together	5.0	2.9	2.2	95.0
Married/living together	11.6	9.7	1.8	88.4

	Any	Mild/Mod	Severe	None
Widowed	36.7	26.3	10.4	63.3
Divorced/separated	13.1	10.1	2.9	86.9
Highest education achievement				
Never attended school	17.4	12.0	5.5	82.6
Less than primary	8.9	7.3	1.5	91.1
Primary school	6.3	5.2	1.1	93.7
At least secondary	4.2	3.7	0.5	95.8
Multi-dimensional well-being				
Deprived	10.4	8.0	2.5	89.6
Not deprived	6.0	5.1	0.9	94.0
Rural urban residence				
Urban	8.6	6.4	2.2	91.4
Rural	9.6	7.5	2.1	90.4
Obs ervations	5,550	4,304	1,246	60,558

# Appendix Table 2. Demographic Profile, 2014 (%)

	Any	Mild/Mod	Severe	None
Age (years)	53.7	53.0	56.5	28.2
Age group				
5-14	4.7	4.3	6.1	27.3
15-29	9.3	8.4	12.1	31.3
30-44	15.4	16.7	10.8	21.7
45-59	27.2	29.4	19.2	14.0
60+	43.5	41.1	51.7	5.7
Sex				

	Any	Mild/Mod	Severe	None	
Female	57.1	57.3	56.4	51.3	
Male	42.9	42.7	43.6	48.7	
Marital status (age 15 years and above)					
Never married	10.2	7.4	20.2	26.3	
Married	62.8	67.6	45.6	65.7	
Widowed	24.5	22.5	31.6	5.8	
Divorced / separated	2.5	2.4	2.5	2.2	
Rural urban residence					
Rural	85.4	86.0	83.4	83.8	
Urban	14.6	14.0	16.6	16.2	
Observations	5,550	4,304	1,246	60,558	



**Declaimer:** The survey of this publication is funded by the Australian Department Foreign Affairs and Trade (DFAT). The views expressed in this publication are the author's alone and are not necessary the views of the Australian Government.





#### Ministry of Social Affairs, Veterans, and Youth Rehabilitation (MoSVY); **Disability Action Council (DAC)**

- A Building 788, Monivong Blvd, Sangkat Boeung Trabek, Khan Chamkamorn, Phnom Penh
- (+855) 23 726 086
  - mosvy.dpss@gmail.com
- www.mosvy.gov.kh

#### **National Institute of Statistics Ministry of Planning**

- A Buildings C and E, #386 Preah Monivong Blvd. Beoung Keng Kong 1, Chamkarmorn District Phnom Penh, Kingdom of Cambodia
- (+855)23 219 922; (+855) 23 219921

#### info@nis.gov.kh http://www.nis.gov.kh

#### **ACCESS 2 Program**

- ANINA Building, 3rd Floor, No. 240, Street 271, Sangkat Boeung Tumpun, Khan Meanchey, Phnom Penh, Cambodia
- (+855) 12 876 549
  - info@access2cambodia.org