A DECADE OF DOCUMENTING MIGRANT DEATHS

Data analysis and reflection on deaths during migration documented by IOM’s Missing Migrants Project, 2014–2023
The opinions expressed in the report are those of the authors and do not necessarily reflect the views of the International Organization for Migration (IOM). The designations employed and the presentation of material throughout the report do not imply the expression of any opinion whatsoever on the part of IOM concerning the legal status of any country, territory, city or area, or of its authorities, or concerning its frontiers or boundaries. IOM is committed to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to: assist in meeting the operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.

This publication has been issued without formal editing by the Publications unit of IOM.

CONTENT
Julia Black, IOM GMDAC

LAYOUT DESIGN, DATA VISUALIZATION AND ILLUSTRATIONS
Roberta Aita

PHOTOS
© International Organization for Migration (IOM)

ACKNOWLEDGMENTS
Thanks to Koko Warner and Marina Manke, Andrea Garcia Borja, Merna Abdelazim, and Zoe Sigman for their contributions to this report. Thanks also to Wilfried Coly, Edwin Viales, John Muindi, Emmanuel Quarshie, Riham Abouelhassan, and Boon Benjapornkulpong for their work on the Missing Migrants Project.

Global Migration Data Analysis Centre (GMDAC) International Organization for Migration (IOM)
Taubenstr. 20–22 D 10117 Berlin, Germany
tel: +49 30 278 778 22 fax: +49 30 278 778 99

Please visit the GMDAC website for publications, resources, and events: http://gmdac.iom.int.

EXECUTIVE SUMMARY

Analysis of IOM’s Missing Migrants Project data from the last decade, show several concerning trends:

Nearly 60 per cent of deaths documented during migration are linked to drowning. Search and rescue capacities to assist migrants in distress at sea must be strengthened to help save lives, while working with IOM, partners, and governments to facilitate regular migration pathways.

More than two-thirds of those whose deaths were documented through IOM’s Missing Migrants Project are unidentified. Without knowing the fate of migrants from their households and communities, families and those communities of origin must face the lasting impacts of the ambiguous loss of a loved one.

More than one in three migrants whose country of origin could be identified come from countries in conflict. This implies attempts to leave areas of conflict without safe pathways to do so. One of IOM’s strategic priorities is to work with countries to facilitate safe, regular, and orderly pathways to ameliorate unnecessary loss of life through dangerous, irregular means.

Through IOM’s Missing Migrants Project, better data and analysis can be used to deliver insights that help save lives and facilitate regular migration pathways. Missing Migrants Project data also helps offer closure to the countless families and communities impacted by these tragic losses.
At least 63,285 PEOPLE DIED OR DISAPPEARED DURING MIGRATION, 2014–2023
As of 13 March 2024
In October 2013, more than 600 people drowned in the Mediterranean Sea after two shipwrecks took place off the coast of Lampedusa, Italy. These tragedies inspired responses from policymakers and partners across Europe and the world, and the beginning of IOM’s Missing Migrants Project, which since 2014 has documented deaths and disappearances during migration worldwide.

The more than 63,000 deaths captured by the Missing Migrants Project (MMP) over the past decade bear witness to the ongoing loss of life on migratory routes, but also are emblematic of the importance of further intensifying the meaningful action to prevent deaths and address the enduring impacts these losses have had on families and communities left behind. With 2023—the tenth year in MMP’s dataset—the deadliest year on record, effective multistakeholder action on this issue is long overdue. MMP data show that migration on many routes remains unsafe, irregular and deadly.

At a global level, commitments have been made by States to “save lives and keep migrants out of harm’s way” and to “facilitate orderly, safe, and responsible migration”. Similar pledges have been made at the regional level across Europe, Africa and the Americas. IOM is committed to saving lives and protecting people on the move—and, closely linked to this, its efforts to work with governments and partners worldwide—within the UN family, civil society and member states to facilitate pathways for regular migration. Working together, IOM and partners contribute to preventing tragic loss of migrant lives, and mitigating the suffering of affected families and communities.

This report sheds insights on MMP data to inform action to make migration safe for all. It starts with a brief overview of migrant deaths and disappearances documented in 2023, highlighting the increases in recorded fatalities across nearly all regions of the world. A holistic analysis of the last decade of MMP data is then presented, including the main countries of origin, causes of death, and demographic information of those who are known to have died. The report concludes with a discussion of the many data gaps and challenges of documenting deaths and disappearances during migration and calls for long-overdue action to ensure evidence-based policies and programmes are put in place to end migrant deaths.

---

1 Missing Migrants Project data includes deaths during migration, meaning both those who have died (i.e. bodies recovered) and those who are missing and presumed dead, most often in mass shipwrecks.

2 Global Compact for Safe, Orderly and Regular Migration (GCM), para. 13. The GCM also includes an entire objective in which States “commit to cooperate internationally to save lives and prevent migrant deaths”. Since the GCM was signed in late 2018, MMP has recorded more than 30,000 deaths during migration.

3 2030 Agenda for Sustainable Development, Target 10.7. The only concrete measure of “safe” migration in the SDGs is the MMP dataset, which is used as SDG indicator 10.7.3.

4 See e.g. Council of Europe Human Rights Comment "For the Rights of the Living, for the Dignity of the Dead – Time to End the Plight of Missing Migrants in Europe" and European Parliament motion 2023/2787(RSP).

5 African Commission on Human and Peoples Rights, Resolution 486 on missing migrants and refugees in Africa and the impact on their families.


7 All data on migrant deaths used in this report are from IOM’s Missing Migrants Project (MMP) database, accessed 13 March 2024. A data annex with summary tables by region and migration route for all years 2014-2023 is available from here. All MMP data are updated on a continuous basis, including in some cases retroactively for prior years as new data is reported.
In 2023, 8,542 people are known to have died or disappeared during migration, the highest figure recorded in any year in the past decade. This marks a 20 per cent global increase in migrant deaths over the 7,141 deaths recorded in 2022. Year-to-year, 2023 saw an increase in deaths across the Mediterranean, Africa, and Asia, with an unprecedented number of lives lost across the latter two regions.¹

¹ 2023 data for the Americas is still pending reports from much of the United States-Mexico border, which has historically been the deadliest route on record in the region.
Figure 1: Deaths and disappearances documented during migration worldwide, 2014–2023

1.1 MEDITERRANEAN

In the Mediterranean Sea, at least 3,105 lives were lost in 2023, compared to 2,411 recorded in 2022. The most lives were lost in the Central Mediterranean crossing between North Africa and Italy, with 2,476 deaths and disappearances recorded compared to 1,417 in 2022. The increase in deaths is likely linked to the increase in departures and, correspondingly, shipwrecks, off the coast of Tunisia—in total, at least 729 people died near the Tunisian coast in 2023, compared to 462 in 2022. In all prior years, most deaths in the Central Mediterranean were documented off the coast of Libya.

1.2 AFRICA

Across the African continent, at least 1,866 deaths were recorded, compared to 1,031 recorded in 2022. This marks the deadliest year for Africa on record since 2014. Deaths increased across two major African migration routes: the Atlantic Route to Spain’s Canary Islands, and the Sahara Desert crossing to North Africa.

959 deaths were documented on the Atlantic route in 2023, compared to 559 in 2022. This increase is likely linked to a growing number of people who depart from Western African nations such as Senegal and Mauritania, whereas in prior years most people departed from the Moroccan coast. The length of the overseas journey taken by many on the Atlantic route means that many more disappearances at sea go undocumented due to “invisible shipwrecks” in which entire boats disappear without a trace: the Spanish NGO Caminando Fronteras reported more than 6,000 disappearances on the Atlantic route in 2023, with 84 total invisible shipwrecks, most of which are nearly impossible to verify.

Compared to the long overseas route, the Sahara Desert crossing involves a completely different geography, yet the data on migrant deaths is no less difficult to collect due to the remote nature of the journeys many take. 429 deaths were documented in the Sahara in 2023, compared to 220 in 2022, due in large part to improved data collection from eyewitnesses who reported a death in surveys deployed by IOM’s Displacement Tracking Matrix in Niger, Mali, and Libya. These numbers are nonetheless almost certainly a vast undercount of the true number of lives lost in the Sahara, as the small, non-representative sample of survey respondents cannot compare to the many thousands of people that cross the desert each year.

1.3 ASIA

In Asia, 2,138 deaths were recorded in 2023, compared to 2,070 documented in 2022, and surpassing that year as the deadliest year in MMP records.

MMP recorded the deaths of 1,181 on migration routes from Afghanistan in 2023, compared to 733 recorded in 2022. This is the largest number of deaths of Afghan nationals recorded in the past decade. Most of these deaths (1,068) occurred during movements from Afghanistan to the Islamic Republic of Iran, but this is likely due to the availability of data on Afghan remains repatriated from that country, rather than an indication that Iran is more deadly for Afghans than other neighboring countries with significant migration flows.

At least 443 Rohingya are known to have died fleeing Myanmar in 2023, compared to 381 recorded in 2022. This is the highest total number of deaths of this persecuted group since 2015, when UNHCR estimated that more than 50,000 Rohingya left Myanmar on often-deadly sea journeys, which claimed at least 764 lives. Compared to 2015, however, the proportion of Rohingya deaths in 2023 is much higher when compared to embarkations: UNHCR figures indicate that 4,338 Rohingya refugees undertook sea journeys in 2023. In Western Asia, at least 473 Ethiopian and other migrants from Eastern Africa were killed due to violence at international borders in 2023, a death toll that is second only to the 794 violent deaths recorded in 2022 in this region. Given that humanitarian actors widely report involvement of State actors in these deaths, and that these actors may seek to obscure the facts surrounding these deaths, it is likely that many more die than are currently recorded.

1.4 AMERICAS

At least 1,275 deaths during migration were recorded across the Americas, compared to 1,465 in 2022 though it should be noted that at the time of this publication 2023 data from border counties across the southern United States were still pending submission. 636 deaths at the United States-Mexico border crossing were recorded in 2023 as of 13 March, continuing the trend of more than 600 deaths recorded each year since 2021, likely linked to an increase in attempted crossings of this border in the last three years. Recorded deaths across Caribbean migration routes also remained high, with 247 fatalities recorded in 2023 second only to the 350 documented in 2022.

8 Caminando Fronteras, Monitoring the Right to Life 2023.


10 See e.g. OHCHR, Special procedures request, Ref: AL SAU 9/2022; Human Rights Watch, “They Fired on Us Like Rain” Saudi Arabian Mass Killings of Ethiopian Migrants at the Yemen-Saudi Border.
1.5 DEMOGRAPHIC INFORMATION ON MIGRANT DEATHS DOCUMENTED IN 2023

In general, data on the identities of those who die on migration journeys is incomplete, indicating the large number of people who are never identified after they die or disappear en route. In 2023, information on the age, sex or country of origin of the deceased person was available for just half of the 8,542 recorded.

**Figure 2:** Top 10 countries of origin of those who died during migration, 2023

In total, the deaths of 2,915 males and 870 females were recorded in the MMP database in 2023. Separately, the deaths of 449 children were recorded. The majority of these occurred in the Mediterranean (162) or Southern Asia (113). As with data on the countries of origin of people who die during migration, data on age and sex is incomplete.

1.6 CAUSES OF DEATHS RECORDED IN 2023

As in prior years, drowning was the top cause of deaths during migration in 2023 comprising 52 per cent of all cases. Drowning caused 4,470 total deaths, including 2,882 individuals who were reported missing and are presumed dead in sea crossings. Vehicle accidents and other deaths linked to hazardous transport, such as suffocation due to fuel inhalation, accounted for another 1,072 deaths in MMP’s records for 2023 (12% of all cases), with violence claiming another 864 lives (10%).
In the past decade, more than 63,000 deaths of migrants have been recorded by MMP. Notably, more than one in three of those identified come from countries in conflict, including Afghanistan, Myanmar, the Syrian Arab Republic, and Ethiopia. With that said, more than two-thirds of those whose deaths are documented in the MMP dataset in the last decade have little to no information on their identities, meaning that each one of these tens of thousands of individuals are unidentified.

Data on migration, irregular migration movements, and missing migrants are difficult to collect for many reasons, including the fact that information sources documenting deaths are not consistently available over time. Despite the acknowledged data gaps—discussed further in the methodology section below—longitudinal data such as that provided by the decade of records documented by IOM’s Missing Migrants Project can shed insights into which populations are most at risk, and where vulnerabilities most urgently need to be addressed.

COUNTRIES AND REGIONS OF ORIGIN OF PEOPLE WHO HAVE DIED DURING MIGRATION WORLDWIDE

Many of those who die during migration are unidentified, regardless of where the death occurs and the capacities of the local authorities to carry out proper identification processes.\(^\text{11}\) More than two-thirds of the people whose deaths are documented in the MMP dataset in the last decade have incomplete information on their country of origin, with more than 33,000 people recorded with an unknown country of origin and another 8,000 recorded in mass casualty incidents in which no breakdown by country of origin is available. More than 20,000 of the individuals for whom this identification is not available are those who are lost at sea and presumed dead. It is likely that for each one of these tens of thousands of unidentified people, there is a family that faces the ambiguous loss of their loved one and the profound psychological, social, economic, and legal impacts that come with an unresolved disappearance.

Of those whose country of origin is recorded in the MMP database, more than one-third were from countries in conflict. Notably, at least 3,471 Afghan nationals have died on migration routes, the vast majority of whom (2,448) died fleeing to neighboring countries since the onset of the most recent conflict in August 2021. The second-most prevalent country of origin of those identified as having died during migration since 2014 is Myanmar, almost all of whom are Rohingya refugees who died fleeing outbreaks of violence in their home country between 2014 and 2015 (715 deaths recorded) and in 2023 (443).

\(^{11}\) See e.g. ICRC, Counting the Dead: An ICRC report on the migrants dying on Europe’s borders, which highlights for example that 73 per cent of migrant bodies buried in Italy between 2014 and 2019 were unidentified.
Figure 3: 10 countries of origin of those who died during migration, 2014-2023

In many MMP records, the region of origin is specified by those reporting a death even when the country of origin is unknown. It should be noted that these may be based off of racial categorizations – for example the designation of ‘sub-Saharan African’ for many cases reported in European countries may be decided based on the color of the deceased person’s skin—but nonetheless the reported regions of origin in the MMP database can provide important insights into which population groups on the move face specific risks. As illustrated in the table below, it is notable that the deaths of more than 25,000 Africans on the move have been recorded in the last decade, and that more than half of these individuals are missing and presumed dead, often in large shipwrecks in the Mediterranean, Atlantic or Gulf of Aden crossings.

**Figure 4:** Regions of origin of those who died during migration, 2014-2023

<table>
<thead>
<tr>
<th>Region</th>
<th>Dead Persons</th>
<th>Missing Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>14,249</td>
<td>11,100</td>
</tr>
<tr>
<td>Americas</td>
<td>7,164</td>
<td>1,386</td>
</tr>
<tr>
<td>Asia</td>
<td>6,203</td>
<td>3,272</td>
</tr>
<tr>
<td>Oceania</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Mixed/Unknown</td>
<td>7,425</td>
<td>10,421</td>
</tr>
</tbody>
</table>

**Source:** IOM Missing Migrants Project, accessed 13 March 2024.
2.1 CAUSES OF DEATHS AND DISAPPEARANCES DURING MIGRATION WORLDWIDE

Deaths during migration can be largely categorized into six groups, as illustrated in the graphic below, additionally many deaths occur for unknown reasons. These causes of death are those most immediate, and do not reflect the structural causes of deaths during migration linked to the lack of safe, legal pathways, increased securitization of borders, and shrinking humanitarian space for those on the move.

Drowning is the most prevalent cause of death for people on the move since 2014, with more than 36,000 deaths recorded on migration routes in the last decade. The vast majority of drowning deaths occurred in the Mediterranean, with more than 28,000 total recorded, but thousands have also died attempting the Atlantic route (4,126), the United States-Mexico border crossing (5,213), the Gulf of Aden crossing between the Horn of Africa and Yemen (1,031) and on routes from the Caribbean to the United States (539). Of all drowning deaths, more than 23,000 people are missing and presumed dead at sea, many of whom disappeared in mass casualty shipwrecks, meaning their bodies were never recovered. This total of “missing” drowned persons is best understood as a low estimate of the true number of lives lost, as MMP’s methodology always uses the minimum number of persons onboard in large shipwrecks, which comprised more than two-thirds of all drowning deaths documented in the past decade.

Deaths due to violence are on the rise, with 2,322 killings documented between 2021 and 2023 totaling more than the 2,040 recorded in the seven years prior between 2014 and 2020. The rise in violent deaths is due in large part to the increasing reports of deaths at the Yemen-Saudi Arabia border since 2022 (1,267), but also include many killings in the Sahara Desert (712) and at the borders between Afghanistan and Iran (287), Syria and Türkiye (208), and the United States and Mexico (170).

It is notable that more than one in seven deaths in the MMP database are recorded with an unknown cause of death. This is often due to remains being found well after a death has occurred, rendering forensic investigation of the cause of death, let alone identifying the deceased person, extremely difficult. An unknown cause of death is particularly common in remote desert regions, with 26 per cent of cases recorded on the United States-Mexico border and at least 23 per cent in the Sahara Desert.

12 “Large shipwrecks” are here defined as those involving 50 or more lives lost in a single shipwreck.
Figure 5: Causes of deaths and disappearances during migration worldwide, 2014–2023

2.2 SEX AND AGE OF MIGRANTS WHO HAVE DIED DURING MIGRATION WORLDWIDE

Of the 63,000 people whose deaths or disappearances were recorded during migration 2014-2023, information on age or sex is unavailable for more than 37,000 (59%) individuals. Of the 25,925 people in the MMP database for whom some demographic information is available, more than 17,100 were male, nearly 5,500 were female and over 3,400 were children.

Figure 6: Age and sex of people whose death was recorded during migration, 2014-2023

Women and children are likely overrepresented in the large number of unidentified persons in the MMP database. For example, evidence from the ICRC’s Restoring Family Links programme, which helps families search for and reunite with lost loved ones, indicates that children on the move are more at risk of going missing. Women, too, are likely over-represented in this “unknown” category in the MMP database, particularly given the huge numbers of drowning-related deaths for which women are at higher risk. Case studies of migration-related mass casualties from the United States, Europe and Australia consistently show that the proportion of women who drown during shipwrecks is higher by 10-25 per cent when compared to their male shipmates. At the same time, women and children may be overrepresented in data on deaths during migration from media sources, as societal assumptions that most migrants are adult men mean that the death of a woman or child is more likely to be explicitly mentioned in news articles.

IOM’s Missing Migrants Project counts migrant fatalities only at the external borders of a state or during the process of migrating towards an international destination. Collecting data on migrant deaths and disappearances remains challenging due to the lack of systematic reporting on the deaths of non-nationals in transit, and even when available, official data are often incomplete. MMP collects data through official sources such as the coast guard and local authorities (25% of cases recorded 2014-2023); nongovernmental civil society organizations and focal points in IOM country offices (28%); surveys with migrants and key informants (22%); and media monitoring (25%, with 13% of recorded cases being reported by multiple media sources). However, this latter source of information is considered least reliable as media articles may have incomplete or incorrect coverage, which poses an additional challenge on routes with limited official reporting. This data collection methodology presents some limitations in terms of consistency and comparability of data as the MMP team constantly works to improve the data from key informants and public information, including by creating regional networks of practitioners and exploring open-source intelligence (OSINT) documentation and other innovative technologies to leverage the growing amount of OSINT available.

As illustrated by the table below, the quality of information available on deaths during migration varies from region to region. Notably, almost no official information is available across Africa and Asia, indicating that MMP data in these regions are particularly likely to undercount the true number of lives lost. At the same time, both these regions have many cases reported by eyewitnesses and non-governmental key informants but see the lowest amount of media attention on this issue, indicating that public narratives around migration in Asia and Africa are also likely underreporting on deaths during migration.

---


---


Figure 7: Sources of information for incidents recorded in the MMP database, 2014-2023

The more than 63,000 deaths during migration recorded by IOM’s Missing Migrants Project during the last decade are likely only a fraction of the actual number of lives lost worldwide. The fate of a much larger number of people who are reported missing and may not be dead, or who have faced other harms during migration including violence, sexual abuse, and trafficking, is even less clear, as there is little to no data available documenting the broader issue of (un)safe migration.16 Despite political commitments and large amounts of media attention to the issue in many regions of the world, deaths are on the rise: 2023 is the highest annual death toll on record with nearly 8,600 lives lost.

Analysis of MMP’s data from the last decade, show several concerning trends: first, that more than two-thirds of those whose deaths were documented are unidentified. Without knowing the fate of migrants from their households and communities, families and those communities of origin must face the lasting impacts of the ambiguous loss of a loved one. Second, more than one in three migrants whose country of origin could be identified come from countries in conflict. This implies attempts to leave areas of conflict without safe pathways to do so. One of IOM’s strategic priorities is to work with countries to facilitate safe, regular, and orderly pathways to ameliorate unnecessary loss of life through dangerous, irregular means. Third, nearly 60 per cent of deaths documented during migration are linked to drowning. Search and rescue capacities to assist migrants in distress at sea must be strengthened, in line with international law and the principle of humanity.

IOM’s Missing Migrants Project has provided data to save lives and prevent loss of migrant lives for a decade. Governments have expressed support to ensuring safe migration for all through the Global Compact for Safe, Orderly and Regular Migration (GCM) and in the 2030 Agenda for Sustainable Development, as well as through many regional commitments across Europe, Africa, and the Americas.

The UN Secretary General highlighted the crucial role governments play in preventing migrant deaths in his 2022 Progress Declaration on the GCM,17 and called for actionable recommendations to improve international coordination and humanitarian assistance for all States.18 These recommendations are due to be released in 2024.

Evidence-based action is urgently needed to respond to the rise in migrant deaths across irregular routes. Through IOM’s Missing Migrants Project, better data and analysis can be used to deliver data for insight that save lives and facilitate regular migration pathways. Missing Migrants Project data also help to offer closure to the countless families and communities impacted by these tragic losses.

---

17 UN General Assembly Resolution A/AC.293/2022/L.1, para. 76.
18 UN Migration Network workstream on actionable recommendations on missing migrants and providing humanitarian assistance to migrants in distress
Further reading on the issue of missing migrants can be found at missingmigrants.iom.int/publications