3.1 Introduction

The recent surge of popular interest in and increasing public awareness of migrant deaths in the Mediterranean has turned the question of how many have died into an urgent matter. Attempts to respond to this question have produced varying estimates. This variation is partly attributable to the politically controversial nature of the subject of border-related deaths: different political and institutional actors have different stakes in the answer to this question. In addition, there is a general paucity of information about those who have died attempting to cross the southern external borders of the European Union (EU) without authorization, especially when compared with the amount of data generated about the arrival, interception, rescue, detention and deportation of migrants – statistics which can serve to justify funding and intensification of border control.

This chapter investigates the various estimates of deaths that have been produced – where they come from, how they are used, what they add to debates, proposed solutions, policy and policy development, awareness of the issue and human rights advocacy, among others. It shows that existing estimates are insufficient for documenting how many people have died trying to cross the southern EU external borders. The chapter also reviews the possibilities for improved data on border-related deaths.

There are numerous reasons why it is important to document the number of people who have died attempting to cross into southern Europe without authorization. For one, this information would enable us to appreciate the extent of migrant mortality in the Mediterranean. Furthermore, knowledge of when, where and how migrants die is important to determine the factors contributing to these deaths, so that further incidents may be prevented through changes in policy or practices. The lack of reliable and accurate data prevents debates from

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* The views expressed in this chapter are those of the authors and do not necessarily represent those of the International Organization for Migration (IOM).

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moving forward towards evidence-based solutions. If there are elements to migrant mortality in the Mediterranean that are related to policies and practices of State authorities – in particular if a relationship can be established with border control policies and practices – this would raise human rights concerns. As there is an increasing volume of funds at the national and EU levels being channelled into border control efforts, the intended and unintended effects of such activities should be publicly known if these activities are to maintain democratic legitimacy. A lack of reliable information also hinders policymakers’ and civil society’s engagement with the issue more generally, contributing to the neutralization and legitimization of border-related deaths that, as Weber (2010) argues, explains why European societies have so long turned a blind eye to the problem.

Finally, we need to know who is dying so that we understand who faces the risk of death at the border, whether there are particularly vulnerable groups and, importantly, in order to notify the families of the deceased. Without confirmation of the death of their relatives, family members are not only denied closure but may also be unable to inherit or remarry (Grant, 2011; Moorehead, 2014; and Weber and Pickering, 2011).

### 3.2 Brief historical and geographical overview

The main routes for irregular migration across the Mediterranean area to the EU are the following: from Turkey to Greece – both by sea and by land in the Evros region (the Eastern Mediterranean route); from Tunisia and Libya to Italy and Malta (the Central Mediterranean route); from Morocco to mainland Spain by sea, as well as to the Spanish enclaves, Ceuta and Melilla, by land and sea (the Western Mediterranean route); and from the West African coast (Cabo Verde, Mauritania, Morocco and Senegal) to the Canary Islands. Less common are the sea routes from Egypt to Crete and Italy, from Algeria to Sardinia, and from Algeria to Spain. The sea route from Albania to Italy, which was an important route especially in the late 1990s, no longer plays a very significant role. Instead, irregular migrants crossing the Adriatic Sea and the Strait of Otranto depart from Greece in an attempt to reach Northern and Western Europe. There seems to be little boat migration to Portugal and Cyprus, which may be related to their geographical location and to the sea conditions and currents along their coastlines. See Figure 3.1 for detections of irregular migrants along selected routes to the EU in 2013.
**Figure 3.1:** Detections of illegal border crossing along selected routes of entry into southern EU and main nationalities detected on these routes, 2013

![Map showing illegal border crossings](image)


The International Centre for Migration Policy Development (ICMPD), Europol and Frontex have created an online interactive animation (iMap⁴) showing the shifts of mixed migration flows towards and across the southern EU external borders over the period 2000–2013. It illustrates how routes fade in and out of use over time, as strategies are developed by border agencies in response to irregular entry, by migrants and facilitation networks to circumvent obstructions, leading to new responses, and so on.⁴ Figure 3.2 shows shifts in routes based on Frontex data on detections of illegal border crossings.

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⁴ For an analysis focusing on the Canary Islands, see Godenau (2014).
In addition to travelling clandestinely by boat, migrants also use regular means of transport. Many will enter the EU with, for example, tourist visas, and then overstay, but they may also travel without any authorization, for example, by using forged documents or hiding from border checks. In both cases, migrants use regular means of transport in order to effectuate irregular migration. Migrating clandestinely by boat is not the most common mode of migration; migrants travel by air, cargo and passenger ships; and by car, bus, lorry or train. The general estimate is that only about 10 per cent of irregular migrants enter Europe by sea (Triandafyllidou and Vogel, 2010; and De Bruycker, Di Bartolomeo and Fargues, 2013). Nonetheless, existing data suggests that migrant deaths occur overwhelmingly during clandestine sea voyages (Kiza, 2008:221–224).

The relatively low number of migrant deaths before 1990 may be related to the fact that it used to be much easier to reach Europe by regular means, even in the absence of official government authorization to immigrate. The introduction of visa obligations for many countries of origin, coupled with carrier sanctions, may have led to a shift from regular means of transport, such as airplanes and ferries, to irregular means of transport like fishing boats. The cessation of boat migration along the Albania–Italy route and the subsequent shift to, among others, passage from Libya to Italy has been related to border control practices (Cuttitta, 2005; Spijkerboer, 2007; Kiza, 2008; and Godenau, 2014).
As to the countries of origin, existing data suggests that in the 1990s migrants on the Western and Eastern Mediterranean routes predominantly originated from Morocco and Algeria, and Turkey and the Middle East respectively (Carling, 2007; and FRA, 2013). However, the origin of migrants using these routes has diversified and includes people from sub-Saharan Africa, the Middle East and South Asia. Migrants who travel clandestinely by sea, in particular the Central Mediterranean route, are often fleeing conflict zones such as Afghanistan, Eritrea, Somalia and the Syrian Arab Republic (Figure 3.3).

**Figure 3.3:** Detections of illegal border crossing along EU external land and sea borders by nationality, 2013

![Pie chart showing detections of illegal border crossing by nationality, 2013](image)

*Source: Frontex Annual Risk Analysis, 2014.*

In response to irregular migration by sea, European countries have stepped up border control over the past two decades. This has taken various forms, such as Italy’s naval blockade in the Adriatic in the late 1990s; Spain’s high-tech surveillance system called Sistema de Vigilancia Exterior (SIVE) and its cooperation with West African countries in the late 2000s; Italy’s controversial pushbacks of migrants to Libya in 2009; the razor-wire fences in Ceuta and Melilla; and the demining of the Evros region, followed by the construction of a high-tech fence in 2013. At the EU level, a specialized EU border agency, Frontex, was created. Frontex has coordinated multiple operations to combat smuggling and trafficking and prevent irregular migration at sea; these operations include: the Gate of Africa, which targets stowaways travelling between Morocco and Spain; Hera, focused on the region between West Africa Senegal and Mauritania in particular, and the Canary Islands; Poseidon, in main land and sea crossing points between Greece and Turkey, Greece and Albania, and Bulgaria and Turkey; Hermes, between Tunisia, Libya and Algeria, and the southern Italian islands of Lampedusa, Sicily and Sardinia; Aeneas, in the Ionian Sea between Turkey and Egypt, and the Italian regions of Puglia and Calabria; Indalo, between North and...
sub-Saharan Africa and Spain, where migration happens partly in response to the protracted crisis in Mali; and Nautilus, in the region between Libya, Malta and Italy. Another significant development at the EU level is the introduction of Eurosur, an integrated surveillance and intelligence system for the entire Mediterranean. It seems plausible that these innovations in border policies and practices have influenced the itineraries of migrants, which in turn may have led to a relatively higher migrant death toll, as argued by several authors (Fekete, 2003; Carling, 2007; Spijkerboer, 2007; Grant, 2011; and FRA, 2013).

3.3 Risks associated with unauthorized travel

People who attempt to cross the southern EU external borders without authorization face a number of risks. One risk they all share is that of interception by authorities. As unauthorized, “illegalized” border-crossers, being caught by border guards or other State officials may result in migrants being detained and/or deported, subjected to violence perpetrated by these officials, forced overboard by smugglers in fear of being caught, or “pushed back” (being removed out of the jurisdiction of the intercepting State without any possibility to claim asylum or humanitarian protection). However, being caught on the “right” side of the border can result in rescue and/or an opportunity to lodge an asylum claim.

The different modes of unauthorized border-crossing also carry specific risks. For stowaways in regular means of transport, the risks are mostly related to where migrants hide to avoid being detected and caught. These places may include: underneath lorries, where migrants face a danger of falling among moving vehicles; wheel bays of planes, where migrants are at risk of freezing to death, suffocating or falling; sealed containers on cargo ships or on the back of lorries, where there is a danger of suffocation; and engine rooms or propeller bays of ships, where migrants are at risk due to machinery and/or suffocation. For those who cross the land borders between Morocco and the Spanish enclaves of Ceuta and Melilla, the dangers faced are from the razor-wire fences that fortify these borders as well as violence from the Moroccan police and pushbacks by the Spanish Guardia Civil. The land border between Greece and Turkey is mostly marked by a deep and fast-flowing river, so the risks are similar to those faced at sea (which is explained in detail in the succeeding paragraph). This border region was also the site of thousands of unexploded landmines until 2009, according to the Greek Government, and has vast areas of dense forest in which it is easy to become lost, and thus face the dangers of starvation, dehydration and hypothermia, among others.

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5 Frontex provides an overview of its operations at http://frontex.europa.eu/operations/archive-of-operations/.

6 Established by Regulation 2051/2013, OJ 2013 L295/11.
Being at sea (or crossing the Evros river) carries a wide range of risks, some applicable to persons at sea generally, and others specific to unauthorized migrants. The general risks of being at sea include bad weather, rough seas and poor visibility. The dangers associated with such conditions are heightened for irregular migrants for various reasons. While faced by all sea vessels, migrant boats are at greater risk of losing direction or running out of supplies of food or, more devastatingly, drinking water. Often every space on a boat used to carry unauthorized migrants is reserved for additional paying passengers rather than food, water or fuel; furthermore, these boats are more likely to get lost as they may be operated by inexperienced captains with little to no navigation equipment on board. Migrant boats tend to be of very low quality, increasingly so since the likelihood of confiscation has increased with stricter surveillance. Since the boat will presumably be lost, smugglers have an incentive to invest as little as possible in the boat itself. Those who cross from West Africa to the Canary Islands may quite easily miss the mark and drift out to the Atlantic. Boats that run out of fuel can drift for weeks, passengers dying slowly of dehydration, starvation, hypothermia or sun stroke. Migrant boats are also at greater risk of shipwreck and capsizing due to overcrowding, inexperienced crew and captain, and substandard quality of the boats, which means that leaks and motor failure occur frequently.

Rescue operations themselves are inherently quite dangerous, especially in bad conditions, because they involve careful manoeuvring and transfer of passengers from one vessel to another. Rescue of migrant boats, especially unseaworthy boats, is risky because of overcrowding and poor stewardship. Unauthorized migrants are also, of course, the target of interception operations, which carry the same risks as rescue operations if not more, because border guards are not usually trained as coast guards and border patrol boats do not always carry rescue equipment. The fact that the passengers on board migrant boats are not generally accustomed to being at sea, sometimes cannot swim and may be fearful of State authorities contributes to the risk of rescue and interception operations ending in fatalities.

As a result of disputes between State authorities over the location of rescue and disembarkation responsibilities, migrants also run the risk of not being rescued. Distress calls have been known to go unanswered or ignored (Strik, 2012; Heller and Pezzani, 2014). Private vessels may not assist a migrant boat in distress due to the related risks and financial losses that stand no chance of compensation, and because they fear their assistance may lead to arrest and prosecution for supposedly assisting illegal immigration. Rather than being rescued, migrant boats may be “pushed back” to the high seas or to another coast. Human rights reports insist that this was common between Italy and Libya/Tunisia,7 between

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7 European Court of Human Rights, 23 February 2012, application 27765/09, Hirsi Jamaa and others v Italy.
Spain and Morocco (MSF, 2013), and between Turkey and Greece, both in the Aegean Sea and in the river Evros (PRO ASYL, 2013). Being pushed back increases the chances of running out of supplies, getting lost or drifting, thus subjecting migrants to prolonged exposure at sea.

3.4 How many die? Existing data and its quality

The most comprehensive, Europe-wide set of data is the list of fatalities of UNITED for Intercultural Action (UNITED), an international non-governmental organization (NGO) based in Amsterdam. This list is based on media reports, and each entry mentions the source on which it is based. UNITED’s List of Deaths was started as a monitoring mechanism in 1993 by a network of civil society actors to record the deaths of refugees and migrants they attribute to the immigration and border control policies of Fortress Europe. The latest published version of the list includes 17,306 cases from 1993 to November 2012. However, UNITED utilizes a broad definition of “border death,” including those who die in detention centres, those who die as homeless people, the victims of racist attacks in Europe, those who lose their lives crossing borders within the EU (for instance between France and the United Kingdom), and anywhere on the journey to Europe, meaning not only in the physical border region but also in the Sahara Desert, for instance. When filtered for a narrower definition of “border deaths,” as those which occur during the attempt to cross a southern EU external border, the total number comes to around 14,600.

The other frequently referenced list, which is comparable in methodology, is the one of Fortress Europe, run by Italian journalist Gabriele Del Grande since 2006. Fortress Europe uses news media as its primary source and civil society organizations as a secondary source, similar to UNITED. However, while UNITED lists numerous sources for cases which were widely reported, Fortress Europe only provides one. The Fortress Europe blog lists a total of 19,812 migrants who died or went missing on their way to Europe from 1988 until the end of June 2014. This total is higher than that of UNITED, which is in part due to the extended temporal coverage, and mostly due to the more extensive coverage of the Egyptian (Sinai)–Israeli border and the Sahara. UNITED, on the other hand, covers Greece and Spain more comprehensively (see Figure 3.5). The total number of border deaths reported by Fortress Europe for the Mediterranean region only (deaths which occur during attempts to cross the southern EU external borders without authorization) is 14,757 from 1988 until the end of June 2014. This figure is close to that of UNITED for the same region and definition of border deaths; however, even in their coverage of the Mediterranean, the two lists are far from identical, both revealing gaps in the accuracy of the other. Nonetheless,

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8 See www.unitedagainstracism.org.
9 At the bottom of the “List of Deaths,” all sources on which UNITED has relied are listed.
10 See www.fortresseurope.blogspot.com.
they both demonstrate a similar trend in the total number of border deaths over time (see Figure 3.4).

Figure 3.4: Comparison of UNITED and Fortress Europe lists of border deaths in the Mediterranean, 1993–2011

The fact that the two major sources of data on border deaths are themselves sourced from news media raises significant concerns vis-à-vis the reliability of press reporting. Big incidents are generally well recorded: the higher the number of deaths, the more attractive the news story is to journalists. Some places receive more media attention than others because they have developed into “border theatres” (Cuttitta, 2014); therefore, we can suspect that deaths in these places are reported more systematically in the media, as in the case of Lampedusa. Local media is generally more reliable at reporting individual bodies found on beaches, or by local fishermen or other private seafarers. Nevertheless, news media is a problematic source for three reasons:

- Media reports news. If deaths happen all the time, it stops being news. At other times, border deaths may not have been considered as relevant as they are now. Sometimes they are reported as faits divers, as page fillers, while, for example, shortly after big accidents media attention for individual deaths may be more intense. These factors lead to undercounting.

- The details that are important to journalists for the story are not necessarily the same details that are important to social science or forensic investigations. For academic research, detailed information about the circumstances of death, the cause of death and the precise location where death presumably occurred are more important than for journalism. This also explains the
gaps and diversity of information found in the UNITED, Fortress Europe, The Migrants Files and APDHA lists. Moreover, the journalist picks up on information available at the time of writing. As in the case of environmental or industrial disasters, the immediate body counts or reports of how many are missing are not often the most accurate. If there is no follow-up article, the facts may never be published.

- Although it is likely that the total counts are underestimates, there is a chance of overcounting when using the news media. For example, media may report 10 people missing, and three weeks later report two bodies found in an advanced state of decomposition somewhere along the coast. These could be two of the 10 missing, but one cannot be sure unless a survivor can identify them. Should one assume 10 migrants died, or 12?

In its annual report on human rights at the frontiers of Spain, Asociación Pro Derechos Humanos de Andalucía (APDHA, Andalusian Association for Human Rights) also publishes information about migrants who died or went missing on their way to Spain. Numbers from the APDHA tend to be higher than figures from other sources for the Western Mediterranean route. However, the APDHA does not specify the source/s of each case, and includes deaths of migrants presumed to be on their way to Spain, but which in fact occur, for example, in the desert in Niger (APDHA, 2014:53).

Over the years, various academics have used UNITED, Fortress Europe and/or the APDHA in combination with other sources to attempt more accurate estimates by checking and cleaning the data provided by these databases. Local, short-term studies (Godenau and Zapata Hernández, 2008; Carling, 2007; Cuttitta, 2006) lead to higher numbers than the ones from UNITED and Fortress Europe but for smaller areas (Spain and Sicily, respectively) and for short periods. Most likely, this is the case because big NGO networks such as UNITED rely on national and regional media, while a local study such as Cuttitta (2005) included all local Sicilian media, for instance. Kiza (2008) reviewed the data available as of 2008 and built a more scientific database, MigVicEU. Using the UNITED list as a starting point, Kiza checked and confirmed the details of each case by adding and triangulating different sources, and narrowed the focus of the database to those who died on their way to Europe, excluding those who, for example, died in detention centres. Similarly, in 2013, a consortium of journalists started The Migrants Files, aimed at improving the accuracy and comprehensiveness of the UNITED and Fortress Europe data, which was their starting point. However, the resulting databases of The Migrants Files (publicly available) and Kiza are still based primarily on news media and demonstrate similar trends of fatalities over time as the UNITED and Fortress Europe lists (see Figure 3.5).

11 See www.journalismfund.eu/migrants-files.
Figure 3.5: Border deaths between Africa and Spain – comparison of datasets, 1988–2014

The information provided in the UNITED list ranges according to the quality and detail of the sources. In some cases, name, gender, age, nationality, place, date, cause and circumstances of death, and how many bodies were found by whom are provided, whereas in others the description can be as simple as the month or year, and an estimated number of persons who “drowned in the Mediterranean”. Fortress Europe lists the date, the (supposed) country or region of origin, and a description which, again, ranges dramatically in the amount of detail. As Pickering and Cochrane (2012) found when attempting a gender analysis of a dataset derived from the UNITED List of Deaths, there are insufficient cases with comparable information to be able to draw conclusions about who dies where, of what and why.

Yet another issue is whether the existing sources contain information on the cause of death. For some, the cause of death is directly related to the border: mines in Evros (until 2009); razor-wire fence in Ceuta and Melilla; shootings and malpractices in Italy, Greece and Spain; shootings and beatings by North
African border guards. The data presently available suggests there are more deaths directly related to border control at land borders than at sea. For the vast majority, however, the cause of death is only indirectly related to border control. Most boat migrants seem to die of drowning, hypothermia and dehydration, while most stowaways seem to die of suffocation and dehydration. As far as we can tell from the data currently available, factors contributing to causes of death, both directly and less directly related to border control, are the risks associated with unauthorized travel, attitudes towards and dehumanization of “illegal” migrants, detection-avoidance tactics and profit-driven behaviour of smugglers, and lack of experience of migrants with the open sea.

In addition to the sources from civil society, some official figures are published. The Spanish Ministry of Interior has released numbers on an ad hoc basis,\(^\text{12}\) probably derived from operational reports by Guardia Civil and La Sociedad de Salvamento y Seguridad Marítima (SASEMAR), the integrated Spanish sea search and rescue system. When departures from Algeria became more common, the Algerian Government announced total figures per year of those known to the Algerian navy and coast guard to be dead or missing at sea on the way to Europe (Fargues, 2013:14). However, this data is not individualized but provided only in aggregated form, which makes it impossible to test its accuracy and to compare it with UNITED and similar sources. The Italian Special Commissioner for Missing Persons has compiled a list of unidentified corpses and human remains in Italy, the vast majority of which are thought to be migrants (Cattaneo et al., 2010). However, it is not yet complete, and it will not list any identified migrants. Thus, the published official statistics raise more questions than they answer. Agencies that deal directly with migrants attempting to cross the southern EU border without authorization, such as the national coast guards and Frontex, do not include data on deaths in their annual reports or statistics.

As a result of the paucity of official statistics, UNITED’s List of Deaths and the Fortress Europe blog have remained the primary sources of data on border-related deaths in the Mediterranean. Although there has been an increase in visualizations of data (see, for example, the maps produced by Migreurop\(^\text{13}\)), and papers and reports on the subject over the last 10 years, sources of data have not developed, therefore it is questionable to what extent knowledge of the subject has moved forward in any substantive way.

Civil society groups and journalists have so far taken on the role of keeping track of the number of deaths and missing migrants in the Mediterranean; without them there would be very little information available. However, it seems that UNITED has either stopped counting or is no longer making its List of Deaths public, as the last version available online is dated 1 November 2012. The efforts

\(^\text{12}\) Data from the Spanish Ministry of Interior is in PowerPoint presentations on file with the authors.

\(^\text{13}\) See http://www.migreurop.org/?lang=en.
of The Migrants Files journalists and academics such as Carling (2007) and Kiza (2008) seem to be focused on cleaning and checking past cases rather than monitoring the ongoing system. Local civil society groups still record information about shipwrecks and other incidents involving fatalities, but their primary aim is not to generate public knowledge but to assist in the identification, burial and repatriation of bodies, and in searches for missing persons.

Some individuals caught up in the process of dealing with border deaths or unauthorized border crossings have kept their own records. In the research they are presently undertaking, the authors have discovered coroners who keep databases of every autopsy they have done of irregular migrants, civil registrars who have taken it upon themselves to create special lists of cases that come to them for registration, and cemetery offices which keep separate records of all the irregular migrants they have buried. However, these actors do not aim to publicize their databases, but keep them out of a sense of professional responsibility and the feeling that someday someone might come asking about them. Thus, while total estimates have varied and diversified, publicly accessible data has in fact reduced over the last two years – UNITED has ceased to put new entries in the death list online for instance – and there has been little to no publication of official government statistics to supplement civil society monitoring efforts.

3.5 Methods and sources for a more accurate and comprehensive count

Established scientific methods of counting deaths in difficult contexts such as conflict zones, namely surveys of random, representative samples of households, are not appropriate in the case of border deaths due to the clandestine nature of the border crossing, the transnational element of the migrants’ deaths, and the difficulties associated with locating families in such a range of countries of origin. There are, however, numerous potential sources of data on border deaths through the generation of paperwork during the process of investigating, registering and burying a dead body that is brought, by boat or tide, to countries along the Mediterranean shore. The authors are carrying out a research using such sources in Greece, Italy, Malta and Spain. These official sources each come with specific limitations.

In Spain, border deaths are counted as “unnatural” or “suspicious,” which means that a court must declare the body judicially dead and open an investigation. In Italy, border deaths are considered unnatural and the public prosecutor of the province (the Procura) decides whether to open an investigation or not. In Malta, a magistrate presides over the investigation into the cause of death and – particular to Malta – the assessment whether or not the person died in
Maltese territory. In Greece, the public prosecutor appears to play a less active role in the investigation, but nonetheless presides over the case and authorizes autopsies and so on. Since the case files of Courts of Instruction (Spain), public prosecutors (Greece and Italy) and magistrates (Malta) contain copies of police reports, coroner reports, orders to register and bury, and other paperwork generated during the investigation, they ought to be the ideal sources of data on border deaths. However, there are two major problems: firstly, case files are not comprehensively archived and are usually destroyed after a period of 5 to 15 years, so they are difficult or even impossible to locate. As border death cases are not allocated a special category or separated from other case files, even where databases of cases exist, there is no way to search for them with the limited information we currently have. Counting on this source would involve having to search through rooms of chaotic files containing all case files and perhaps one or two border death case files. Secondly, even if all border deaths were registered (which might not always happen in Italy or Greece) and the case files could all be located, such documents are generally regarded as confidential and require special access permission which may not be granted on a large-scale basis necessary to identify border death cases. In all four countries, the authorities involved in the criminal investigation do keep digital records, but in their present form these cannot be used for compiling information about migrant deaths.

Coast guards in Greece collect statistics, but we do not know what their methods or inclusion/exclusion criteria are; therefore, we do not know if there are methodological differences between units, making this source unreliable for the time being. The police in all countries collect data because they are always involved in the process when a body is found, but they do not share their methods of collecting data and will not always be willing to provide this data, in some cases, because the data is simply not processed in any way. Furthermore, methods might differ between units and countries.

Coroners are usually involved when a dead body is recovered but do not necessarily archive autopsy reports and even when they do, they cannot easily disclose such reports given their confidentiality and sensitivity. Moreover, these only contain information about the cause of death and possibly a few forensic clues regarding the person’s identity. DNA samples are now required to be taken from all unidentified bodies in Greece, and submitted to the DNA Laboratory in Athens for profiling, creating a potential source of statistics. Unfortunately, however, the low number of samples submitted indicates that not all coroners who deal with border deaths do this.

By law, all dead bodies found in the national territories of southern EU Member States should be entered in the civil/public registry before they can be buried. In most countries, this also extends to any dead body brought to their shores from the high seas. Deaths are one of the three vital events that are systematically recorded by the hundreds of local civil/public registries whose jurisdictions
cover the European coastlines of the Mediterranean. Previously, these records had been on paper, but by May 2013, records were digitized in all southern EU countries, making them easier to collect. However, in their present form, these cannot be used for compiling information about migrant deaths.

There are no specific laws dealing with the burial of unauthorized border-crossers and therefore their bodies have been scattered among government, religious and specially designated cemeteries in all countries. Since cemetery offices usually keep some record of who is buried where, tracing all the burial sites would be a useful approach; this is a considerable task, though, as decisions over burials are a subject of negotiation between local authorities and communities, with only occasional interference from national or regional government authorities. Also, bones are regularly removed from these cemeteries — a common practice in many places for religious purposes and to create space in graveyards — and there is no obligation to keep special records of migrants. Depending on the practice at each individual cemetery, records may or may not specify location and cause of death, and may or may not archive information concerning bodies whose bones have been removed from the grave. Moreover, some bodies are identified and repatriated to the migrants’ families and would therefore be missing from any count based on this source.

Although some courts, coroners, police and coast guards, civil registrars and cemeteries are willing to share the information they have, and others may be persuaded by permission from a higher governmental authority, there is a further problem: these sources are scattered across the border regions of the Mediterranean, and there has been no national- or European-level initiative to collect and record these deaths systematically. Moreover, the bodies that wash up or are brought to the North/West African, Turkish and Balkan coasts may be harder to trace due to poorer infrastructure for processing the dead, such as the potential lack of coroners, courts, civil registrars or even police involved in their processing and registration.

All data sources on border deaths are limited in one way or another, so all statistics are inevitably incomplete. Each source will lead to a sample based on the necessarily limited information available from that particular source. Regardless of the source, yet another problem is that some deceased migrants have “disappeared” because neither their departure nor their arrival was recorded and their bodies sank; others may have been (officially or unofficially)

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14 Greece was last to digitize; the transition period was completed in May 2013. Spain has been using digitized death certificates since 2006 and Italy since 2001. Both have retrospectively digitized death certificates for the period of interest for this project (1990–2014). Valletta Public Registry’s digitized database of Acts of Death now includes all deaths going back to the early 1900s. Valletta is the registry for Malta, as it also registers all deaths recorded at the only other public registry in Malta in Gozo, so this database is complete. However, the common problem among all these digital death registration systems is the lack of ability to search for border death cases without prior knowledge of names, places and dates of birth, dates of death or dates of death registration.
reported missing but their bodies are never found. It will never be possible to find evidence of every body, every person who attempted the journey and did not survive, even if mechanisms are established in the future to record migrant deaths. The issue of “grey numbers” – which include people who died while crossing the Mediterranean but whose bodies were not recovered or whose deaths were not recorded – can never be entirely overcome.

In light of this, the aim of data collection on migrant deaths has to be limited to getting the most reliable number of and information about migrant deaths. If we want to know how, when, where, how many and why people have died attempting to cross the southern EU external borders over the last two decades or more, as well as who they are, we have to make the best of the various sources of data available.

This leads to three methodological challenges:

- Counting using official sources

In order to have comparable data on the entire region, it is necessary to identify available trustworthy sources existing in the region, which use identical or at least very similar methods. This makes sources such as local political actors or regionally focused NGOs problematic. In addition, as some NGOs collect information on deaths of both migrants crossing the EU’s external borders and of those who die once inside the EU (the internal border), it can be challenging to isolate only deaths that occur at the external border. However, the information that is needed is already collected during the government-led forensic investigation and death registration process. This information is just spread out over hundreds of local jurisdictions, making it time consuming and expensive to collect. In addition, the information is held by local government authorities and judicial bodies with varying levels of public accessibility due to legal barriers, such as privacy laws, and political concerns, namely for public criticism because of the manner in which bodies are dealt with. The presence of such obstacles and concerns means that the research will, at best, take longer and at worst have a large error margin in addition to the grey numbers problem described above.

- Restoring identity to “illegal migrants” and clandestinos

As Grant (2011) has argued, another aim of investigating migrant deaths is to restore the identity of the deceased and, where possible, to inform their surviving relatives. Many migrants do not carry identification documents or destroy them on the way, making it very difficult to identify them even in the cases where their bodies are found. Relatives and others searching for missing migrants are also unlikely to turn to the police or other forensic

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15 See Chapter 1 for an introduction to the concept of the external and internal borders.
institutions: if they are irregularly in Europe they fear they would face problems with their immigration status or that they could cause problems for their missing relative if he or she is in fact still alive, but they may also be generally hesitant to turn to the authorities because of a general mistrust of government agencies. Families searching for missing relatives usually turn to migrant community networks, smugglers (Kovras and Robins, 2013), and well-known humanitarian organizations such as the Red Cross, which has decades of experience in reconnecting dispersed families. However, coordination and inter-agency cooperation in forensic investigations into unidentified bodies and missing persons, both between State authorities and international organizations or civil society groups, is particularly problematic. Most of the forensic investigation is not accessible to the public but in closed court files, coroners’ reports, police reports, DNA laboratories and so on. Lack of obligation or motivation to cooperate makes it very difficult to: (a) match antemortem and post-mortem data for identification; and (b) identify persons who have been reported missing in one place but whose bodies are found elsewhere.

- Recording causes of death

Knowledge of the causes of death may be relevant for figuring out ways to reduce the number of migrant border-related deaths. When putting together such kind of information from different countries, two main problems arise. Firstly, the privacy and data protection laws of some of the countries involved treat the cause of death as a non-public issue, which makes collecting and processing data problematic as information on the cause of death is not readily available on death certificates. Secondly, the use of standardized coding for causes of death differs widely both across and within relevant countries (Mathers et al., 2005). This weakens the quality of the aggregated data from different countries.

3.6 Conclusions and recommendations

The numbers of migrant border-related deaths currently available vary considerably because they are not based on the same counting methods, sources or definitions of “border deaths”. Furthermore, political factors may influence the count of border-related deaths. The underlying motivations of data collection efforts by different institutions may influence whether figures are overstated or understated, and due to the amount of missing and hazy information on migrant deaths, counts are hardly verifiable. All of the presently available datasets are based on media reports, which – valuable as they are –

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16 This is the case in Spain as of 1994 and in Italy for the entire period of interest (1990–2014). In Greece and Malta, causes of death, where it was possible to determine, are clearly stated in death certificates.
are inherently problematic. Such obstacles can be overcome, to some extent, by collecting data already available in public records in Mediterranean countries, mostly at the local level. It is, however, impossible to produce wholly accurate figures due to the dark number of migrants who have gone missing at sea. In addition, all sources of information on migrant deaths at the border have specific limitations, as outlined previously.

It is, however, imperative to have migrant death data that is as reliable as possible, for at least two reasons. First, when death occurs on such a massive scale, all actors involved, including States, NGOs and international humanitarian organizations, have a responsibility to investigate the causes of such tragedies in order to identify possible interventions. Second, missing migrants’ relatives have the right to know whether their loved ones have died in the attempt to reach the destination country, and if so where their remains are.

In our own research, we are collecting data on migrant deaths from 1990 to 2013 in Gibraltar, Greece, Italy, Malta and Spain. We seek funding to add Cyprus and Portugal, and to do pilot studies in Algeria, Egypt, Libya, Mauritania Morocco, Senegal, Tunisia and Turkey, in order to find out how reliable data can be collected there. We take death certificates in civil registries as our main source, on the assumption that every dead migrant will leave a paper trail in those registries. In order to identify the cause and location of death, and to check whether data from the registries is complete, we triangulate by relying on data from the public prosecutor (in Spain and Italy), the cemeteries (in Italy), the coroner (in Malta) and the coast guard (in Greece). By so doing, we are confident that we will be collecting data – which is as reliable as possible – on the number of migrants who were found dead on the European side of the Mediterranean, and were consequently buried there. A meta-analysis of existing estimates of migrants who have tried to cross the Mediterranean from 1990 to 2013 will then enable us to estimate how migrant mortality has developed during this period. Finally, we will try to establish whether a relationship can be found between the development of border policies and practices of European States, and the evolution of migrant mortality.

While data collection and in-depth research is ongoing, actors directly involved in the procedures described in this chapter can do more to compile reliable information on migrant deaths and, importantly, the identities of the dead.

For one, coast guards and police forces could do more to keep records, also of people reported missing by survivors; coordinate with other agencies and coast guards to ensure there is no overlap of documentation, and communicate this information to the public. Forensic investigations into unidentified migrants whose bodies are found at sea or along the coasts should make bigger efforts

17 This is crucial in order to distinguish border-related deaths from others that are unrelated, for instance, if a migrant drowns while working as a life guard – taken from our field work in Malta.
to establish identity, working together with organizations that families of the dead are more likely to trust. Clear protocols for investigating deaths should be designed for police and other forensic actors to be able to respond to the transnational and clandestine nature of these particular “unnatural” deaths. This may necessitate cooperation with embassies, international organizations or actors in other countries, perhaps through frameworks such as those provided by the International Committee of the Red Cross (ICRC) or through civil society networks. In any case, for places that have been receiving migrants, both dead and alive, for two decades now, it is remarkable that no specialized procedures have been developed by State authorities for identifying and respecting the dead and their relatives in this context.

In addition, attention should be focused on enforcing existing regulations in this area. For instance, all migrant deaths should be properly registered in a place where their bodies are found or brought to land from the sea, using any and all forensic information available to complete registration forms. All bodies should be traceable from the moment they are found to their burial, using a consistent labelling system in the case of unidentified bodies. Mandatory DNA sampling of unidentified bodies should be standard practice, and facilities should be created to enable families to provide DNA samples to run for matches. There should be a clear procedure and chain of responsibility for collecting, registering and storing personal possessions found with the body, as they are often vital for identification. Organizations such as the ICRC and Médecins Sans Frontières have considerable expertise which European States have the opportunity to draw upon in designing and enforcing procedures in this area.

Finally, as the chapter has illustrated, there are multiple opportunities for States to collect and process data on border-related deaths. Now that death registries in southern EU Member States have been digitized, it would be relatively easy for data on death certificates to be collected centrally for the purpose of generating detailed statistics going beyond the number of migrant deaths per year per country. National statistics offices would be likely candidates for undertaking this, in particular because they already use information gathered from civil registries to produce national demographic and health statistics. However, some might question whether the State is the right actor to be collecting and publishing this kind of data. As we noted above, State institutions may have stakes in the outcomes of data collection on border-related deaths, as do all actors, evidenced by their current exclusion of migrant mortality from the volumes of irregular immigration-related statistics on arrivals, interceptions, rescues, asylum applications, detention and deportation. Therefore, an alternative would be to entrust an independent body at the national level, such as the official human rights monitoring institution, with collecting such information. As migrant mortality in the Mediterranean appears to be a European phenomenon related to European policies, it would make sense to put in place a European
Observatory, possibly as part of the Fundamental Rights Agency, to oversee data collection and ensure statistics generated at the national level remains scientific and objective. This would enable the phenomenon in the region as a whole to be monitored by an institution not directly linked to border control. This institution could also investigate possible policy responses to reduce the risk of death for migrants attempting to cross the external EU borders without authorization.

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