



Civilian Impact Monitoring Report

June 2018

Mountain Town, Yemen by Rod Waddington

A six-month report on civilian impact from armed violence in
Al-Hudaydah, Sa'ada, Sana'a, Capital and Marib.

December - May, 2018.



CIVILIAN IMPACT MONITORING PROJECT
a service of the Protection Cluster Yemen

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Executive summary

Key Trends

Armed violence is generating high civilian impact, including casualties

During the six-month period, a total of 844 incidents of armed violence with civilian impact were recorded in the five target governorates. These generated 1,828 civilian casualties, 26% of which were women and children. Furthermore, 85% of the incidents involved psychosocial trauma implications for the people affected.

The number of injured civilians increased despite an overall fall in incidents

The impact over time has not been static, but has been gradually decreasing from each two-month period to the next. However, the decline in fatalities was almost three times the decrease in incidents, meaning that the deadliness of incidents was at the highest during December and January. The number of injured civilians did not see a corresponding drop. To the contrary, the number of injured civilians was higher in the April-May period than any of the other periods, despite the overall decline in incidents.

Women and children were frequently killed or injured in armed violence

During the period, the child and female casualties increased gradually, making up larger percentages of the civilians killed and injured during February-May than during the December-January period. Women and children are also making up the overwhelming majority of vulnerable groups impacted, by armed violence with 504 incidents impacting women and children, 60 incidents impacting only children, and 37 incidents impacting women alone. In addition, 6 incidents impacted on existing IDPs, including women and children. In total, 72% of the recorded incidents impacted on vulnerable groups.

2,308 civilian structures were damaged during the six months; civilian houses made up more than half

A total of 2,308 civilian structures were damaged during the reporting period, almost triple the number of incidents, illustrating the far-reaching damage caused to civilian structures by armed violence. Houses were the most frequently impacted structures, with 856 houses damaged by armed violence during the period. In addition, 551 households comprising both houses and farms/livestock were also damaged (in some rural areas farms and houses are co-located), bringing the total number of houses damaged up to 1,407.

Infrastructure, vehicles, water facilities, education centres and healthcare facilities continue to be impacted

Civilian infrastructure was also frequently impacted (98 structures), including main roads, bridges, telecommunication infrastructure, governmental compounds, ports, and airports. Civilian vehicles were also often impacted by armed violence during movements (62 vehicles). Other structures used by civilians were also damaged, including food and water infrastructure (18), education centres(18), healthcare facilities (9), aid (5), protected sites (15), and prisons (1). Finally, 61 local businesses were damaged by armed violence and 17 markets, each involving multiple local businesses.

Protection Implications

Civilians are losing livelihood, being displaced and experiencing restricted freedom of movement as a result of armed violence

The impact from armed violence on civilian's lives, causing injuries and fatalities, as well as the impact on civilian structures, generated direct and indirect protection implications for the local populations in the five target governorates. Loss of livelihood was the overwhelmingly most common direct protection implication, impacting on 1,767 households, directly correlating to the high number of farms, markets and local businesses impacted by armed violence. Displacement was also high, with 1,422 households displaced as a result of armed violence damaging or destroying their homes. In addition, 322 households had restricted freedom of movement and assembly, and a further 270 households experienced obstruction of flight as they were targeted by armed violence during attempts to flee.

More than one million households experienced restricted access to infrastructure as armed violence impacted critical infrastructure in all governorates

Armed violence generated significant indirect protection implications. Infrastructure was the greatest implication recorded, with 1,306,937 households experiencing restricted access to infrastructure. This number includes the entire governorate populations of Al-Hudaydah, Sa'ada and the Capital, in addition to some districts in Marib and Sana'a, as critical infrastructure serving civilians in the three governorates was repeatedly damaged by armed violence. This, among others, included 40 main roads (27 of which were in Sa'ada and 10 in Al-Hudaydah), 4 bridges (3 of which were in Sa'ada), 7 telecommunication sites, 2 ports (both in Al-Hudaydah), 2 airports, 11 fuel stations (7 of which were in Sa'ada) and 13 governmental compounds (5 of which were in Sana'a Capital). In addition, fuel trucks, court buildings, stadiums and power stations were also impacted.

More than half a million households experienced restricted access to basic services, including health and education

Restricted access to basic services impacted 581,218 households as a result of armed violence damaging health facilities, education facilities and protected sites. For health facilities, this included 4 main hospitals (Hays Hospital and 22 May Hospital in Al-Hudaydah, Al-Jomhuri Hospital in Sa'ada, and Al-Sabaen Maternity Hospital in Sana'a Capital), 4 health clinics (all in Sa'ada), 3 first responders (ambulances/fire trucks). For education facilities, this included 11 schools (8 of which were in Sa'ada), 5 vocational institutes, and 1 university. For protected sites, 11 mosques (8 in Sa'ada), 2 cemeteries, and 1 historical site were damaged.

More than 50,000 households experienced restricted access to food and water as water infrastructure and aid was targeted by armed violence in Sa'ada and Al-Hudaydah

Restricted access to basic needs (food/water) impacted 50,062 households; all in Al-Hudaydah and Sa'ada governorates. This included 5 food/aid facilities, including food storage facilities, an aid distribution point and an WFP wheat truck. Water infrastructure was also significantly impacted, with a water desalination plant (Al-Hudaydah), 1 water well, 2 water pumps, 5 water drills (Sa'ada), 3 water supply projects (Hudaydah and Sa'ada), and 2 water trucks (Sa'ada) damaged by armed violence.

Geographical Distribution

Sa'ada saw the overwhelmingly majority of civilian impact, more incidents than all other governorates combined

The 844 civilian impact incidents were far from evenly distributed between the five target governorates. On the contrary, there was a significant difference in the number of incidents, with Sa'ada seeing the majority of incidents (53%), more than double the second highest, Al-Hudaydah (22%). The fewest incidents were reported in the Sana'a hub, with Marib, Sana'a Capital and Sana'a governorate seeing about 8% of incidents each.

Dynamic frontlines generated significantly higher civilian impact than static frontlines

The civilian impact recorded as a dynamic frontline emerged in Al-Hudaydah was significantly higher (192 incidents) than from the static frontlines in Nihm in Sana'a governorate (65 incidents) or Sirwah in Marib (66 incidents). Civilians in Al-Hudaydah were impacted on both sides of the frontlines by airstrikes, shelling, IEDs and landmines.

Airstrikes in urban settings generated significantly higher civilian casualty numbers

Despite only seeing 8% of the total incidents, Sana'a capital witnessed 20% of casualties, 91% of which were caused by airstrikes. Airstrikes with a recorded civilian impact in the capital on average generated 7.5 civilian casualties. In comparison, airstrikes with recorded civilian impact in other governorates generated a much lower average casualty number: in Al-Hudaydah an average of 3 civilian casualties per airstrike, in Sa'ada an average of 2 civilian casualties per airstrike, and in Marib an average of 0.5 civilian casualties per airstrike.

Civilian impact and associated protection needs are largely concentrated in specific districts

Within each governorate a trend of incidents being concentrated in certain districts emerged. In Sa'ada, most incidents were recorded in districts bordering Saudi Arabia, with 72% of incidents in the governorate occurring in border districts. In Al-Hudaydah, the impact was significantly higher in southern districts than the rest of the governorate, with 72% of incidents occurring in the south, where a military offensive was taking place. In Marib, 86% of civilian impact incidents occurred in Sirwah district, where the current frontline is located. And, in Sana'a governorate, 55% of the civilian impact was recorded in Nihm district, also an active frontline.

Targeting of civilian vehicles emerged as a trend in Al-Hudaydah and Sa'ada

Al-Hudaydah and Sa'ada together saw 89% of the incidents impacting on vehicles, ranging from individual vehicles being impacted by armed violence to mass-casualty incidents in which several vehicles and/or buses were impacted along main roads. The vast majority of these incidents were caused by airstrikes (91%), though in Al-Hudaydah there were also incidents where vehicles were impacted by landmines (3) and an IED (1). In addition to vehicles, civilians were also impacted by armed violence on related transport infrastructure, including 40 main roads (27 of which were in Sa'ada and 10 in Al-Hudaydah), 4 bridges (3 of which were in Sa'ada), and 11 fuel stations (7 of which were in Sa'ada).

The amount of destruction of civilian houses, infrastructure, education, markets and food and water facilities in Sa'ada is massive

Sa'ada saw the broadest type of impact, of the five target governorates. In addition to the highest number of incidents impacting civilian houses and farms, vehicles and infrastructure, Sa'ada also saw the majority of incidents impacting food and water infrastructure (14 out of 18). The majority of recorded UXO incidents were also in Sa'ada (12 out of 16), as well as 68 incidents of exposure to armed violence. Sa'ada also saw the highest impact on education (11 out of 17 incidents), and a high impact on markets (7), health (4), local businesses (8), and protected sites (10), in addition to first responders, aid, and IDP settlements.

Armed violence impacting on farms and local businesses in Al-Hudaydah continues to generate loss of livelihood for local communities

Al-Hudaydah saw the majority of incidents impacting on farms (56 incidents), as these were frequently targeted by airstrikes. Further impacting on the economic infrastructure in Al-Hudaydah were incidents impacting on markets (6) and local businesses (12), including factories and fishing boats. 480 households in Al-Hudaydah lost livelihood as a direct result of armed violence damaging and destroying critical sources of income in agricultural and fishing communities.

Type of armed violence and casualties

Airstrikes continues to be the main source of civilian impact in all five governorates

Civilian impact incidents were caused by eight different types of armed violence: airstrikes, shelling, IEDs, small arms fire (SAF), armed clashes, deployment, unexploded ordinance (UXO), and landmines. The vast majority of incidents were the result of airstrikes, which caused 565 incidents with civilian impact (67%). At the same time, airstrikes have a wider impact than other types of armed violence, generating larger destruction and more civilian casualties than any other type. Airstrikes made up the majority of incidents in all five governorates, but especially in Sana'a governorate (98%) and Al-Hudaydah (75%). In Sana'a capital, Marib and Sa'ada airstrikes also accounted for more than 50% of incidents.

Shelling was particularly high in Marib and Sa'ada

The other type of armed violence frequently reported was shelling, 205 incidents (24%). Apart from Sana'a governorate shelling was recorded in all governorates, but was significantly higher in Marib (31% of incidents in the governorate) and Sa'ada (34%), the latter consisting of cross border shelling generating civilian impact in border districts.

UXO incidents mainly occur in Sa'ada, while Al-Hudaydah saw almost all landmine incidents

All other types of armed violence constituted below 3 percentages; Small Arms Fire (3%), UXO (2%), Armed clashes (2%), Landmines (1%), IED (1%) and Deployment (0,5%). These were spread on the different governorates, with Sa'ada seeing most of the UXO incidents (12 out of 16), as well as the small arms fire incidents (17 out of 25). Al-Hudaydah saw most of the incidents of armed clashes (9 out of 14), IEDs (5 out of 7) and landmines (7 out of 8).

Airstrikes accounted for 80% of the civilian casualties recorded during the period

Airstrikes were the source of the majority of civilian casualties recorded in the reporting period (80%) and resulted in 1,474 civilian casualties (793 fatalities and 677 injured). This was followed by shelling, which caused 11% of the casualties. The deadliness of airstrikes was largely due to the scale of damage done by airstrikes compared to other types of armed violence, and the frequent targeting of sites where many civilians were gathered, whether homes, vehicles or public places, such as markets, restaurants and civilian infrastructure sites. Airstrikes also caused the most child and female casualties: 77% of the total child and female casualties, including 86% of the child and women fatalities, were the result of airstrikes.

Airstrikes were deadlier than shelling, but IEDs were the deadliest form of armed violence

When looking at how many civilian casualties the different types of armed violence generated on average, airstrikes were deadlier than shelling, generating an average of 2.6 casualties per incident compared to an average of 0.9 casualties for shelling. However, IEDs and landmines on average generated significantly higher civilian casualties, with 6.4 casualties per IED incident and 4.4 casualties per landmine incident.

Civilians are being killed and injured inside their homes, when moving by vehicle or feet, and at infrastructure sites

As the most common location for civilian impact incidents in the reporting period, houses were also the site of the most civilian casualties (27%), illustrating that civilians are not protected from armed violence within their own homes. A significant proportion of the civilian casualties also occurred at infrastructure sites (16%), including main roads and governmental compounds, and in vehicles when these were impacted by armed violence (11%). A significant number of civilians were also injured and killed when exposed to armed violence while moving by feet in rural and urban settings (9%), as well as in markets (7%) and farms (7%).

The Civilian Impact Monitoring Project

Introduction

The Civilian Impact Monitoring Project (CIMP) is a monitoring mechanism for real-time collection, analysis and dissemination of data on the civilian impact from armed violence in Yemen, with the purpose of informing and complementing protection programming.

CIMP is a service under the Protection Cluster Yemen and is currently implemented as a pilot project targeting 5 governorates; Al-Hudaydah, Sa'ada, Sana'a Governorate, Sana'a Capital and Marib.

CIMP collect, analyse and disseminate data in real-time to allow for early warning and early protection response directed at communities affected by armed violence, including new and emerging local conflicts. This is done through weekly flash reports on impact from armed violence in the monitored governorates, including protection forecast and information on victim assistance needs.

The six month report aims to strengthen the understanding of how armed violence across Yemen impacts on communities over time, including by understanding trends and patterns in the types of violence, its geographic spread and the subsequent impact on civilians, in order to inform long-term protection planning and response, strengthen prevention and mitigation strategies and inform advocacy at both local, national and international level for increased protection of civilians caught in armed conflict.

Methodology

CIMP collects data via three layers of information; the first layer consist of systematic, open source data on all incidents of armed violence. The data from the first layer is filtered by the CIMP team in order to evaluate incidents with possible civilian impact and those incidents are then cross-referenced to the extent possible, before going through the second layer of information, which consists of supplementary information and verification achieved through contact to protection cluster partners in the field. Finally, the data is regularly triangulated with other humanitarian databases.

The data presented in this report consist of a combination of unverified open source data, cross referenced open source data, eye witness accounts and incidents verified by protection cluster partners, and thus the data as a whole should not be treated as independently verified. CIMP works continuously on updating and verifying data, and can be contacted anytime with further information on incidents as well as enquiries on data and level of verification of specific incidents.

CIMP monitors civilian impact that occurs after an incident of armed violence have taken place, thus CIMP numbers on displacement, loss of livelihood and restriction of movements/obstruction to flight only covers households that have experienced a direct impact from armed violence, e.g. a house destroyed or a vehicle hit. Therefore, CIMP data does not include full numbers of people being displaced, loosing livelihood or experiencing restricted freedom of movement/obstruction to flight, where numbers are naturally much higher than what is captured by CIMP.

Civilian impact incidents recorded by CIMP are divided into direct and indirect impact, with associated direct and indirect protection implications. Direct impact includes incidents in which individuals or households are directly affected by the incident, e.g. damage to houses and farms, damage to markets and local businesses, impact on vehicles or as well as exposure to UXOs and armed conflict generating casualties. Indirect impact can broadly be defined as incidents of armed violence impacting on infrastructure and basic services and in turn restricting access of civilians to various vital services, infrastructure and goods, e.g. healthcare, education, food and water and infrastructure. Due to the nature of the indirect impact, the number of households impacted is often much higher than during direct impact.

Section 1: Overall data trends

1.1. Conflict developments December-May

December and January marked a quantitative shift in the almost three years of the current conflict in Yemen, which entered a more dynamic phase as events led to a partial breaking of the deadlock that had characterised most of the previous year. Over the prior 12 months, despite some minor shifts, the war had largely settled into an attritional stalemate along the well-established frontlines, with no end in sight to the fighting.

However, as the conflict has dragged on it has increasingly fractured into a series of localised conflicts as alliances have frayed and the various warring factions pursue increasingly divergent objectives. These issues came to the fore over the past two months. Critical alliances on both sides of the conflict fell apart from late-November, sparking bloody clashes for control of the country's two capitals, Sana'a and Aden, as long-simmering tensions boiled over.

Although the internecine infighting was short-lived, the developments and their ongoing fallout led to renewed fighting on various fronts, most notably on the western Red Sea coastline, where a military offensive was launched in southern Al-Hudaydah, marking the first time that fighting had broken out in the governorate.

As recorded by CIMP, the escalated hostilities have had a high civilian impact over the past six months, from the intensive street fighting in Sana'a to the military offensive in Al-Hudaydah and an increased air campaign. These new conflict dynamics played out in different ways in the five target governorates over the reporting period.

In the capital, Sana'a city, the first half of December saw the eruption of violent clashes between local allies as the sides fought pitched battles in the capital's streets. Most of the city was affected as frontlines bisected streets and the sides fought bloodily from street to street.

Tanks and other AFVs were deployed in the middle of residential neighbourhoods in the city, leaving as many as 234 people dead and almost 500 more injured in the five days of fighting. The following days saw a period of heavy bombing, which struck military targets, many of which are located within residential neighbourhoods, as well as the houses of political figures, state buildings and infrastructure.

The developments in the capital had a spill-over effect on the wider Sana'a governorate, where hostilities renewed in the contested district of Nihm in December as factions attempted to seize on the internal divisions to progress territorially. As with the capital, the governorate also saw some of the heaviest bombing reported in months, on both military and civilian targets.

These intensive clashes, though, were short-lived, and hostilities in the capital and Sana'a governorate subsequently slowed down from February. However, the governorates continued to see high-impact airstrikes, that resulted in dozens of civilian casualties. Most notably, the bombing of the Presidential Office in the capital in May that left more than 100 civilians dead or wounded.

Of the five governorates, although an active frontline, Marib was the least dynamic in the reporting period, seeing the steady rate of hostilities in the west of the governorate that has shaped the situation in the governorate for most of the past two years. Almost daily shelling and airstrikes were reported in Sirwah, with occasional armed clashes and rocket and missile launches.

The most significant military development, though, came in Al-Hudaydah, where military offensive was launched in early-December, leading to heavy armed clashes in the south of the governorate, for the first time since the start of the conflict. This created a wave of displacement, pushing the civilian population out of towns and villages in southern districts.

The fighting on the ground was supported by airstrikes, which focused on targeting local infrastructure, in particular transport routes leading to the frontlines to cut off supply lines and reinforcements. The offensive pushed into Hays and Al-Tuhayat, making rapid initial gains, before stalling along the main north-south roads in the two governorates.

This changed, though, in late-May, the frontlines in the governorate moved rapidly from the south of the governorate to the edge of Al-Hudaydah city this week. The offensive made rapid advances from 25 May along the west coast, advancing more than 100km in four days.

Armed forces moved swiftly north along the coastal road, advancing through Al-Tuhayat and neighbouring Bayt Al-Faqih as they faced surprisingly little resistance. By the start of June, fighting was only some 10km from Al-Hudaydah city, to the south of the airport. Both sides were mobilising reinforcements as, despite last-minute diplomatic efforts to mediate a political solution, an assault on the port city appeared imminent.

The offensive was concentrated on the coastal road, with in-land territory and the central main road still under control of the opposing group. As such, fighting was largely ongoing away from the main urban centres and removed from large civilian populations, meaning the direct civilian impact has been fairly limited. However, with the stated intention to advance on Al-Hudaydah city and eastward towards more heavily populated areas and more densely cultivated land the civilian impact will likely increase.

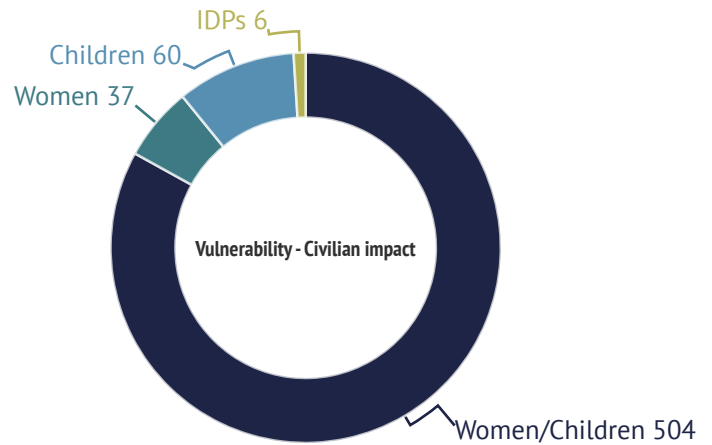
Airstrikes continued to pepper Sa'ada throughout the 6-month period. Despite not being an active front, the governorate overwhelming saw the most airstrikes in the country, resulting in a pattern of almost daily attacks on civilian structures in the northern governorate.

As has been the trend in Sa'ada, districts along the Yemen-Saudi border were the most frequently targeted, including Kitaf, Baqim and Razih. In addition, the western and northern border areas also saw a steady rate of artillery fire, often hitting residential areas, and limited armed clashes as the armed groups conducted incursions to control high ground overlooking the main crossing points and connecting roads.

1.2. Civilian impact

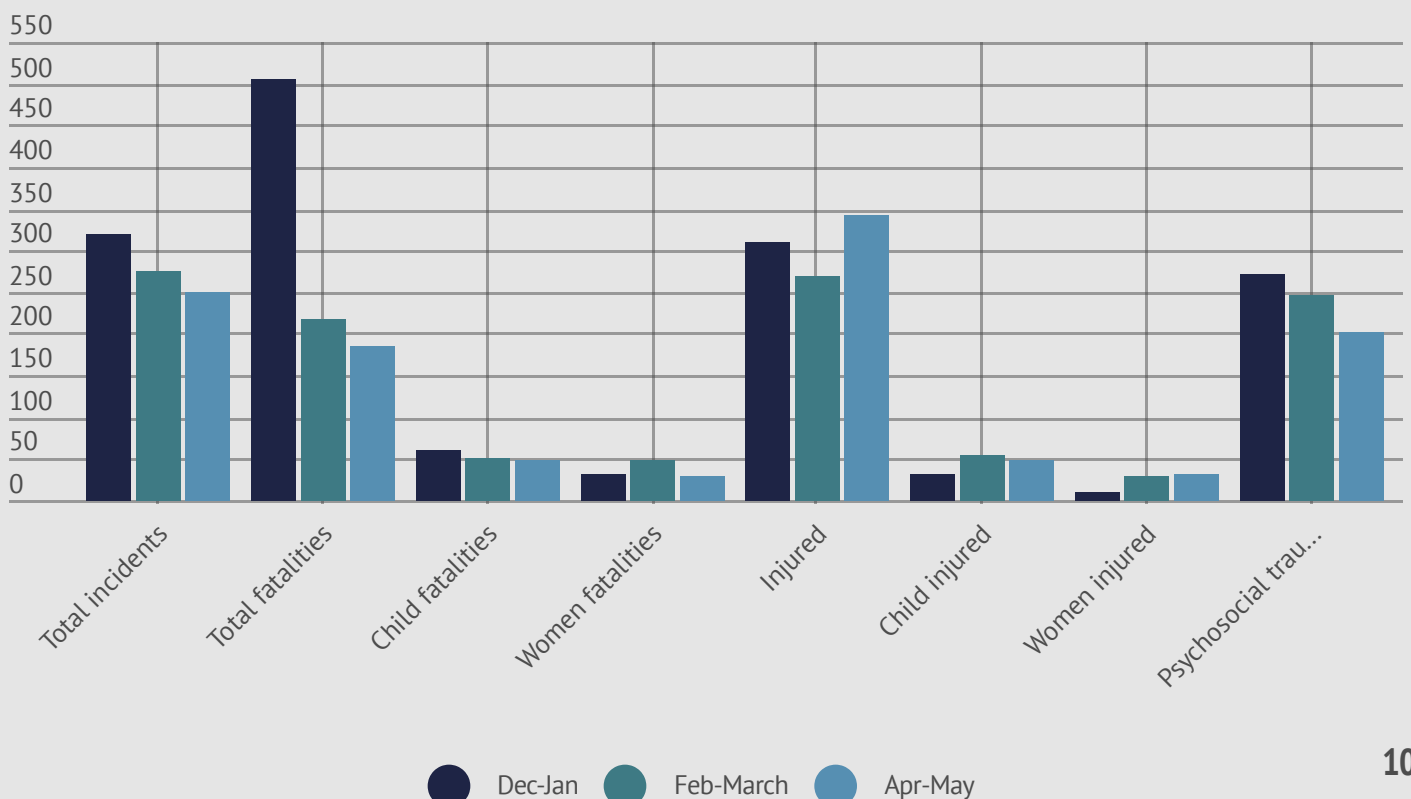
During the six-month reporting period, a total of 844 incidents of armed violence with civilian impact were recorded in the five target governorates. These generated 1,828 civilian casualties, 26% of which were women and children. Of these, 908 were civilian fatalities, including 161 child fatalities and 109 women fatalities, and 920 civilians injured, including 132 child injuries and 73 women injured. Furthermore, 720 incidents, (85%) were assessed to have psychosocial trauma implications for the people affected.

The impact over time has not been static, but has been gradually decreasing from each two-month period to the next, with December-January seeing the highest number of incidents (320), falling in February-March (274) and again in April-May (250). There has been a corresponding fall in number of civilian fatalities, though most dramatically from December-January, which saw 505 fatalities, to February-March, which saw less than half the number of fatalities (219). The decrease in fatalities was almost three times the decline in incidents, reflecting that the deadliness of incidents was at the highest during December and January. The number of injured civilians did not see a corresponding drop. Instead, the number of injured was higher in the April-May period (342) than any of the other periods, despite the overall decline in incidents.



During the reporting period, the child and female casualties increased gradually, making up larger percentages of the civilians killed and injured during February-May than during the December-January period. This is also in line with women and children making up the overwhelming majority of vulnerable groups impacted, with 504 incidents impacting women and children, 60 incidents impacting only children, and 37 incidents impacting women alone. In addition, 6 incidents impacted on existing IDPs, including women and children. In total, 72% of the recorded incidents impacted on vulnerable groups.

Civilian impact comparison

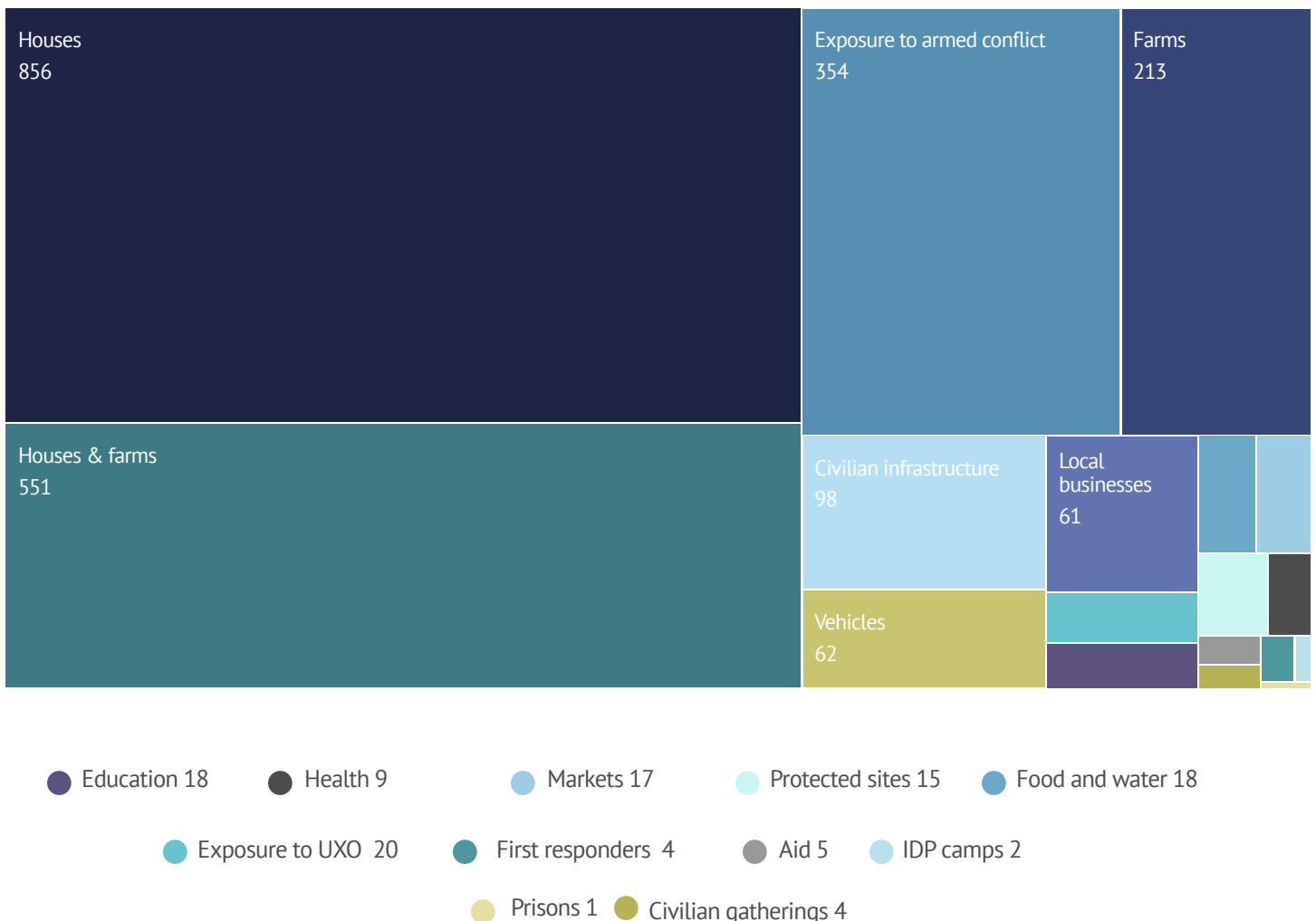


A total of 2,308 civilian structures were damaged during the reporting period, almost triple the number of civilian impact incidents, illustrating the far-reaching damage caused to civilian structures by armed violence. Houses were the most frequently impacted structure, with 856 houses damaged by armed violence during the six-month period. In addition, 551 households comprising both houses and farms/livestock were also damaged (in some rural areas farms and houses are co-located), bringing the total number of houses damaged up to 1,407. In addition to co-located houses and farms, 213 farms were also damaged. 2 IDP settlements and 4 civilian gatherings were also impacted by armed violence.

In addition to being impacted in their houses and farms, civilians were also frequently exposed to armed violence in public, with 354 incidents in which civilians were injured or killed, often while moving by feet in rural areas, as well as in urban settings during armed clashes. This included exposure to airstrikes, shelling, small arms fire and landmines. In addition, 20 incidents of exposure to UXOs were also recorded.

Civilian infrastructure was also frequently impacted (98), including main roads, bridges, telecommunication infrastructure, governmental compounds, ports and airports. Civilian vehicles were also often impacted by armed violence during movements (62 vehicles). Other structures used by civilians were also damaged, including food and water infrastructure (18), education facilities (18), health facilities (9), aid (5), protected sites (15), and prisons (1). Finally, 61 local businesses were damaged by armed violence and 17 markets, each involving multiple local businesses.

Civilian Structures Damaged: 2308



1.3. Direct protection implication

The impact from armed violence on civilian's lives, causing injuries and fatalities, as well as the impact on civilian structures, generated direct and indirect protection implications for the local populations in the five target governorates. Loss of livelihood was the most common protection implication, impacting on 1,767 households, directly correlating to the high number of farms, markets and local businesses impacted by armed violence. Destruction of farms generated a loss of income for 213 households, with the vast majority of incidents occurring in Al-Hudaydah, where industrial farming is common.

Damage to houses and farms that are co-located generated a combined protection implication of displacement and loss of livelihood for 550 households, with most incidents of this type occurring in Sa'ada, followed by Marib and Sana'a governorate, where households are often co-located with small-scale farming and livestock. Furthermore, the 17 markets impacted by armed violence, generated a loss of income to 255 local business owners. In addition, armed violence impacted on a broad range of local businesses, ranging from several factories to fishing boats, workshops, resorts, shops, restaurants, banks, and office buildings.

Displacement was also high, with 1,422 households displaced during the reporting period. These numbers only reflect displacement as a direct result of armed violence damaging or destroying private homes. The high number of people displaced as a direct result of their homes being damaged illustrates the frequency with which private homes were targeted in armed violence, ranging from individual houses hit by airstrikes to residential areas impacted by shelling and airstrikes, with residents no longer protected within their private homes.

Restricted freedom of movement and assembly was recorded when civilians were killed or injured by armed violence either during movements, in vehicles or by feet, and when civilian gatherings, including funerals, weddings and demonstrations, were directly hit by armed violence. Targeting of civilian vehicles emerged as a trend in Al-Hudaydah and Sa'ada, which together made up 89% of the incidents, ranging from individual vehicles being impacted by armed violence to mass-casualty incidents in which several vehicles and/or buses were impacted. The vast majority of these incidents were caused by airstrikes (91%), though in Al-Hudaydah there were also incidents where vehicles were impacted by landmines (3) and IED (1). Landmines and UXOs also generated restricted freedom of movements in Al-Hudaydah and Sa'ada. Finally, civilians were frequently killed or injured during exposure to airstrikes, shelling and small arms fire, during movements in rural areas, particularly in Sa'ada, and in urban settings with ongoing clashes.

Finally, obstruction to flight was recorded when civilians were prevented from fleeing armed violence, e.g. when civilians trying to flee clashes in the capital in December were shot by snipers, when IDPs fleeing violence had their vehicles hit by airstrikes, shelling or IEDs, or when IDP settlements were targeted.

DIRECT PROTECTION IMPLICATION

Restricted freedom

Displacement	Loss of Livelihood	Movement and Assembly	Obstruction to flight
			
2,444	1,767	322	270
Number of affected households	Number of affected households	Number of affected households	Number of affected households
Number of Incidents	Number of Incidents	Number of Incidents	Number of Incidents
375	264	144	12

1.4. Indirect protection implication

Armed violence also generated significant indirect protection implications. Infrastructure was the greatest implication recorded, with 1,306,937 households experiencing restricted access to infrastructure. This number included the entire governorate population of Al-Hudaydah, Sa'ada and the Capital, in addition to some districts in Marib and Sana'a, as critical infrastructure serving civilians in these governorates was repeatedly damaged by armed violence. This among others include 40 main roads (27 of which were in Sa'ada, and 10 in Al-Hudaydah), 4 bridges (3 of which were in Sa'ada), 7 telecommunication sites, 2 ports (all in Al-Hudaydah), 2 airports, 11 fuel stations (7 of which were in Sa'ada) and 13 governmental compounds (5 of which were in Sana'a Capital). In addition, fuel trucks, court buildings, stadiums and power stations were also impacted.

This was followed by restricted access to basic services impacting 581,218 households, as a result of armed violence damaging health facilities, education facilities and protected sites. For health this included 4 main hospitals (Hays Hospital and 22 May Hospital in Al-Hudaydah, Al-Jomhuri Hospital in Sa'ada and Al-Sabaen Maternity Hospital in Sana'a Capital), 4 health clinics (all in Sa'ada) and three first responders (ambulances/fire trucks). For education this included 11 schools (8 of which were in Sa'ada), 5 vocational institutes and 1 university. For protected sites 11 mosques (8 in Sa'ada and 2 in Marib), 2 cemeteries and 1 historical site were also damaged in armed violence.

Finally, restricted access to basic needs (food/water) impacted 50,062 households, however this was only recorded in Al-Hudaydah and Sa'ada governorates. This included 5 food/aid facilities, including food storage facilities, a distribution point and an WFP wheat truck. Water infrastructure was also significantly impacted, with a water desalination plant (Hudaydah), 1 water well, 2 water pumps, 5 water drills (Sa'ada), 3 water supply projects (Hudaydah and Sa'ada) and 2 water trucks (Sa'ada) damaged by armed violence, causing restricted access to water and food/aid for 50,062 households in the two governorates.

INDIRECT PROTECTION IMPLICATION - households experiencing restricted access to:



1.5. Geographical spread of incidents

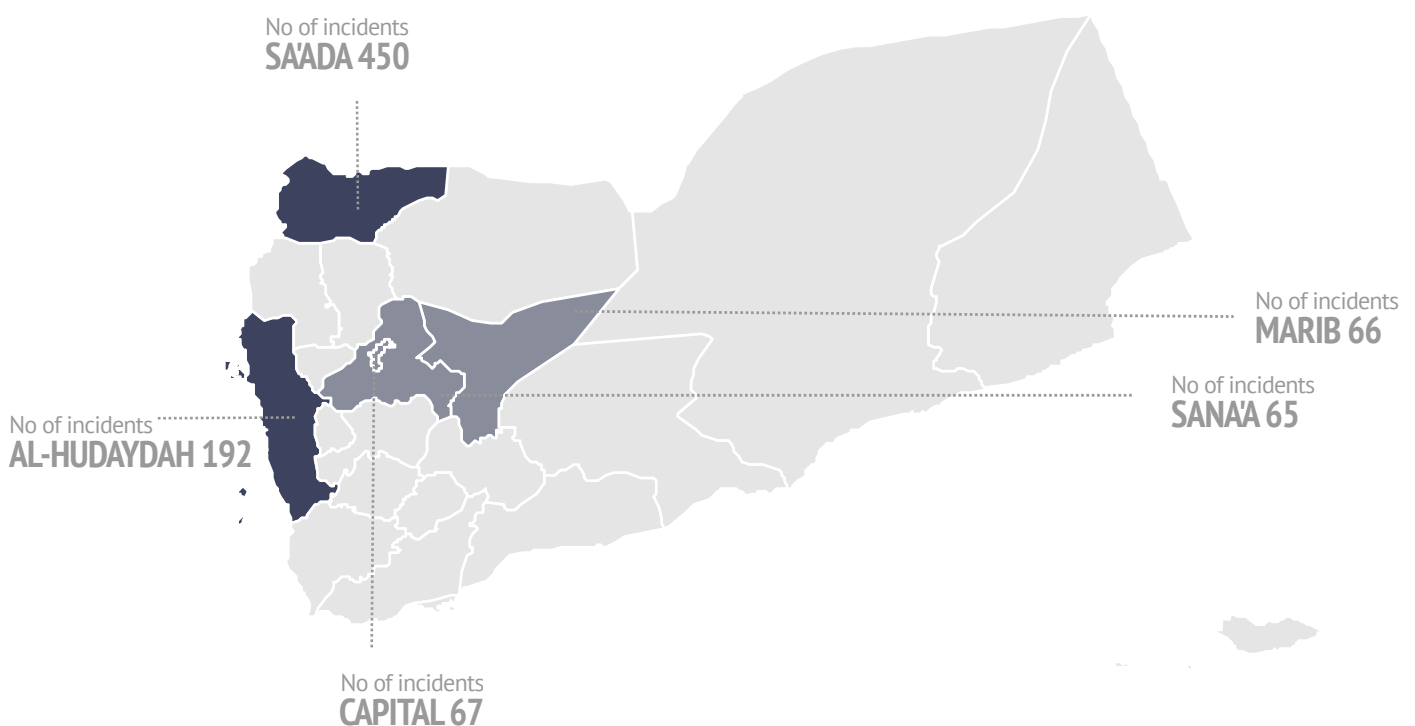
The 844 civilian impact incidents were far from evenly distributed between the five target governorates. There was a significant difference in the number of incidents between the areas, with Sa'ada seeing the majority of incidents (53%), more than double the second highest governorate, Al-Hudaydah (22%). The lowest number of incidents was recorded within the Sana'a hub, where Sana'a Capital, Sana'a governorate and Marib each saw about 8% of the total incidents.

However, the number of casualties did not follow the same pattern, with Al-Hudaydah seeing 32% of casualties, despite only seeing 22% of incidents, and Sa'ada seeing 37% of casualties with 53% of incidents. Of interest, Sana'a capital saw 20% of casualties despite only seeing 8% of incidents, illustrating that incidents of armed violence in the densely-populated city were more likely to generate high casualty counts than in rural and less-populated areas.

Within each governorate a trend of incidents being concentrated in certain districts emerged. In Sa'ada, most incidents were recorded in districts bordering Saudi Arabia, with 72% of incidents in the governorate occurring in border districts. These areas also accounted for the majority of shelling, small arms fire, and UXO incidents, in addition to airstrikes. Razih was particularly impacted, with the district seeing 26% of all the incidents recorded in Sa'ada, more than double the second most impacted district, Monabbih.

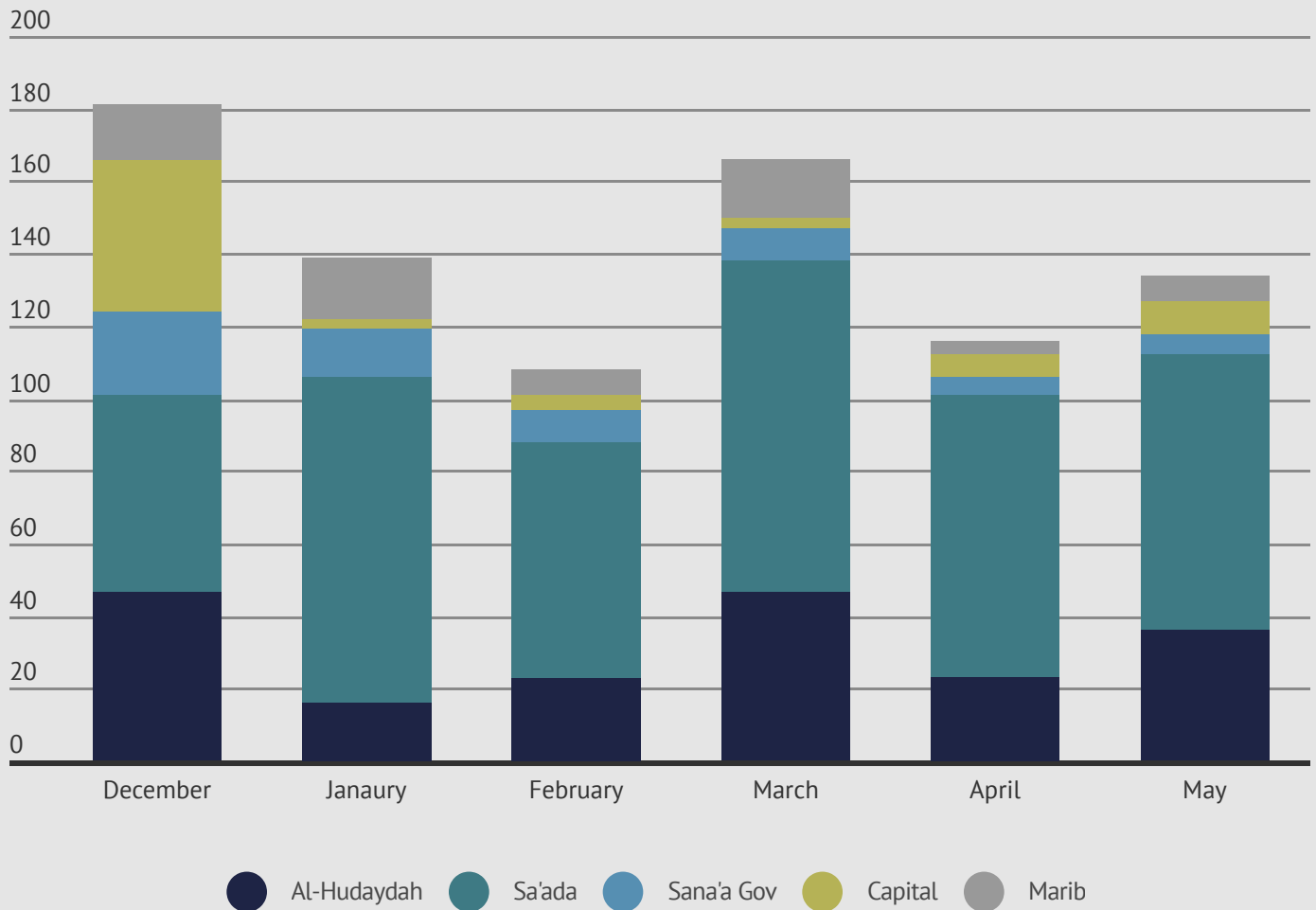
In Al-Hudaydah, the impact was significantly higher in southern districts than the rest of the governorate, with 72% of incidents occurring in southern districts, where a military offensive was taking place. Hays (44 incidents), Al-Tuhayat (31), Al-Garrahi (28), Al-Khawkhah (18), Zabid (14) and Jabal Ras (3).

In the Sana'a hub, civilian impact was also largely concentrated in specific districts. In Marib, 86% of civilian impact incidents occurred in Sirwah district, where the current frontline is located, which saw a combination of shelling and airstrikes impacting on civilians. In Sana'a governorate, 55% of the civilian impact was recorded in Nihm district, also an active frontline, although all incidents recorded in the district were the result of airstrikes. In the capital, incidents were more spread out across the different districts, though three districts saw significantly higher impact than the rest. Al-Sabaen and Al-Wihdah each saw about 21% of incidents, mainly as a result of the December fighting in the capital, while Bani Al-Harith saw 24% of the incidents in the capital, mainly the result of airstrikes.



The number of incidents were not static from month to month, but fluctuated as events on the ground unfolded, especially on the dynamic frontlines. December (181) saw the highest number of incidents during the six-month reporting period, largely in relation to the offensive in AL-Hudaydah that started simultaneously with intense street fighting in Sana'a capital.

Number of incidents per governorate per month



Apart from December, Sa'ada saw a consistently very high level of civilian impact from month to month, while the number of incidents varied more in the other governorates. In AL-Hudaydah, the impact fell as the military offensive stalled during January and February, and then more than doubled in March as the offensive renewed.

In Sana'a capital, the impact peaked during the December clashes and then fell to a consistently low level during January-March, before increasing again in April and May as airstrikes on the city increased. In Sana'a governorate, the opposite occurred, with the number of civilian impact incidents gradually decreasing from 23 in December to 6 in May. In Marib, where the frontline is also largely static, December, January and March saw the most incidents, with February, April and May seeing a reduction.

1.6. Type of armed violence

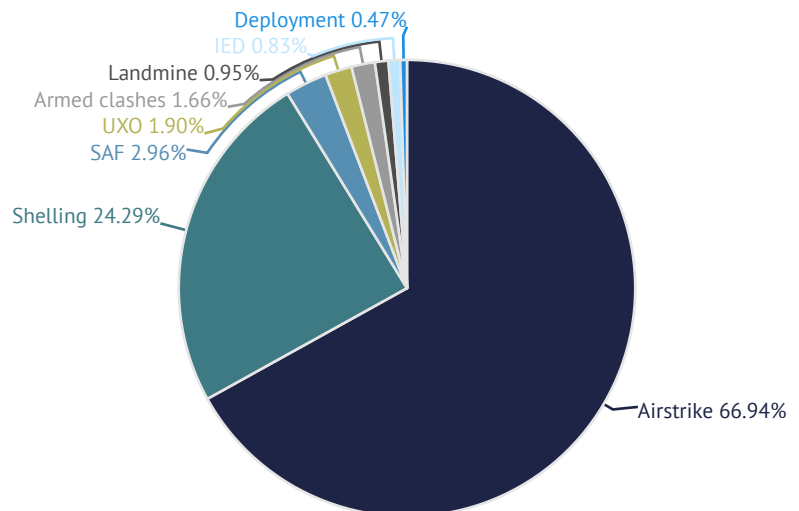
The vast majority of incidents were the result of airstrikes, which caused 565 incidents of civilian impact (67%). At the same time, airstrikes have a wider impact than other types of armed violence, generating larger destruction and more civilian casualties than any other type of armed violence. Airstrikes made up the majority of incidents in all five governorates, but especially in Sana'a governorate (98%) and Al-Hudaydah (75%). In Sana'a capital, Marib and Sa'ada airstrikes also accounted for more than 50% of incidents.

The other type of armed violence frequently reported was shelling, 205 incidents (24%). Apart from Sana'a governorate shelling was recorded in all governorates, but was significantly higher in Marib (31% of incidents in the governorate) and Sa'ada (34%), the latter consisting of cross border shelling generating civilian impact in border districts.

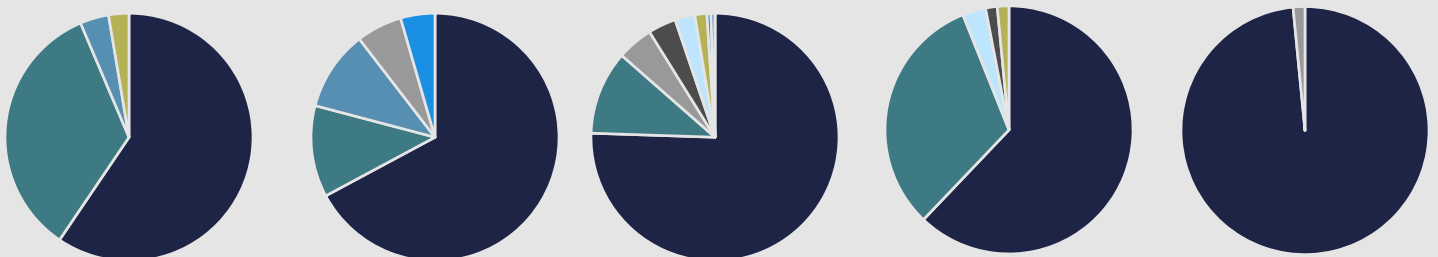
All other types of armed violence constituted below 3 percentages; Small Arms Fire (3%), UXO (2%), Armed clashes (2%), Landmines (1%), IED (1%) and Deployment (0,5%). These were spread on the different governorates, with Sa'ada seeing most of the UXO incidents (12 out of 16), as well as the small arms fire incidents (17 out of 25). Al-Hudaydah saw most of the incidents of armed clashes (9 out of 14), IEDs (5 out of 7) and landmines (7 out of 8).

The capital also saw a broad range of types of armed violence generating civilian impact during the December clashes. In addition to airstrikes, this included small arms fire (7), armed clashes (4), deployment (3), and shelling (8). However, since December only airstrikes were recorded in the capital (45).

Despite being a static frontline, primarily seeing airstrikes and shelling, Marib has also seen UXO (1), IED (2), and landmine (1) incidents, often away from the frontline.



Type of armed violence per governorate



Sa'ada
454

Capital
67

Al-Hudaydah
192

Marib
66

Sana'a
65

Airstrikes
 Shelling
 IED
 SAF
 Armed Clashes
 Deployment
 UXO
 Landmines

1.7. Type of civilian impact per governorate

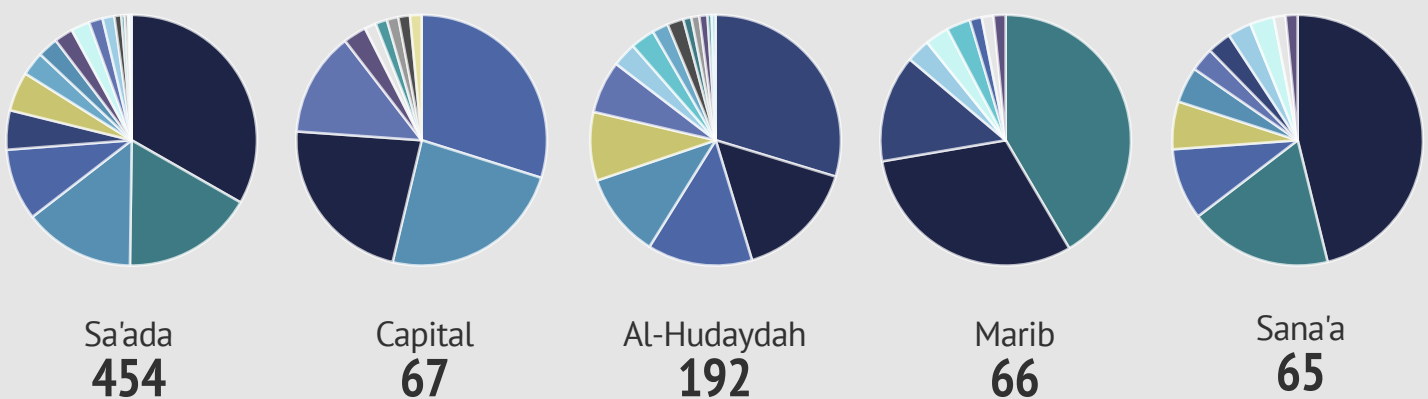
The type of civilian impact varied from governorate to governorate. Sa'ada saw the broadest type of impact, with 17 out of 18 impact categories recorded in the governorate, with the only category not recorded being prisons. Civilian houses, including houses co-located with farms, were impacted in 227 incidents, as civilian houses were frequently hit by airstrikes and cross-border shelling.

In addition, Sa'ada saw very frequent impact on civilians moving in rural areas, often in border districts, with 68 incidents in which civilians were injured or killed by small arms fire, shelling and airstrikes while moving by feet, in addition to 12 incidents in which civilians were killed or injured by UXOs. Infrastructure was also widely impacted with 42 incidents generating damage to infrastructure, in particular main roads and fuel stations. In addition to incidents impacting on infrastructure such as main roads and fuel stations, civilian vehicles (27 incidents) were also frequently targeted during movements. Sa'ada also witnessed high impact on education (11), farms (22), health (4), markets (7), local businesses (8) and protected sites (10). Finally, Sa'ada was the governorate to see the highest impact on critical food and water infrastructure (14 incidents). First responders, aid and IDP settlements were also impacted.

Al-Hudaydah also witnessed a broad impact, with farms being the main impact (56 incidents), as these were frequently targeted by airstrikes. Infrastructure (27), in particular governmental compounds and main roads, were also frequently targeted, and, continuing the trend of targeting of main roads, there were a high number of incidents impacting on civilian vehicles (18). Civilian houses were also highly impacted in Al-Hudaydah (30), as well as exposure to armed conflict and UXOs/landmines (24). Markets were impacted in 6 incidents and local businesses in 12. Health (4), food and water infrastructure (4), aid (2), and education (2) were also frequently impacted.

In Sana'a capital, civilian infrastructure was the most frequently recorded (20 incidents), followed by exposure to armed conflict, primarily during the December clashes (16) and civilian houses (15). Local businesses also made up a big proportion with 9 incidents, meanwhile civilian gatherings, first responders, aid, health and prisons each saw one incident, and education was impacted twice. In Sana'a governorate houses made up almost half of the incidents (30), meanwhile houses and farms made up 12. Infrastructure was also impacted with 6 incidents and vehicles with 4, meanwhile sporadic incidents impacted with 1-3 incidents on local businesses, civilian gatherings, education, farms, markets, protected sites and exposure to armed conflict. In Marib houses (20), houses and farms (27) and farms (9), made up the majority of the incidents, with sporadic incidents impacting on infrastructure (1), vehicles (1), civilian gatherings (1), education (1), markets (2), protected sites (2) and exposure to UXOs (2).

Type of civilian impact per governorate



1.8. Civilian casualties

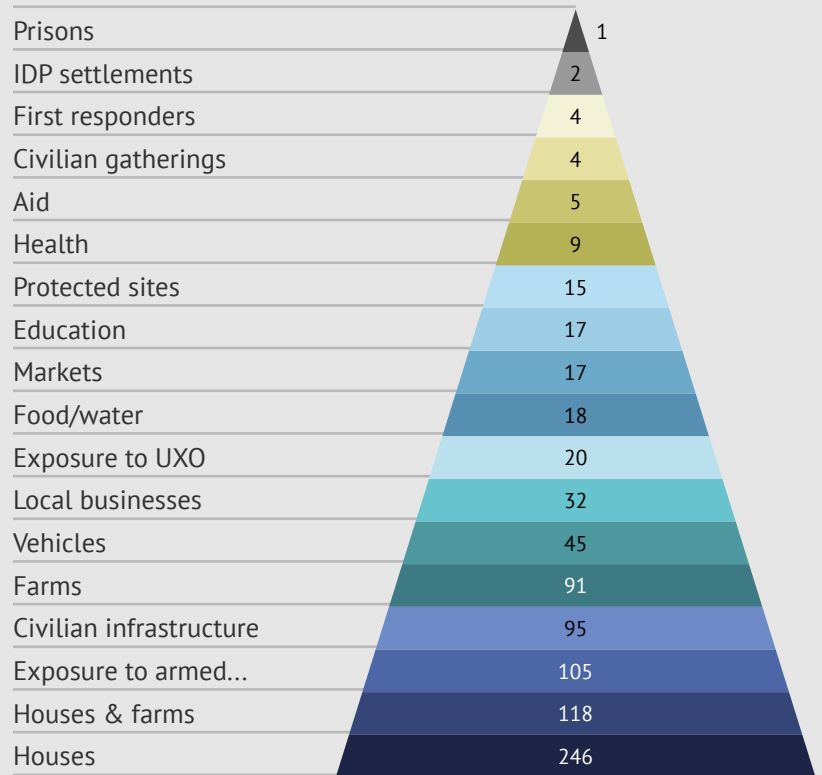
Civilian houses were by far the most frequently impacted, and together with houses and farms that are co-located, made up 43% of the total civilian impact recorded during the six months. Farms made up another 10%, bringing houses (individual and co-located) and farms up to 53% of the total when combined.

Exposure to armed conflict came next (12%), illustrating the risk to civilians when moving by feet. Infrastructure made up 11%, and civilian vehicles 5%, again showing the risks associated with movements, but in this case by vehicles.

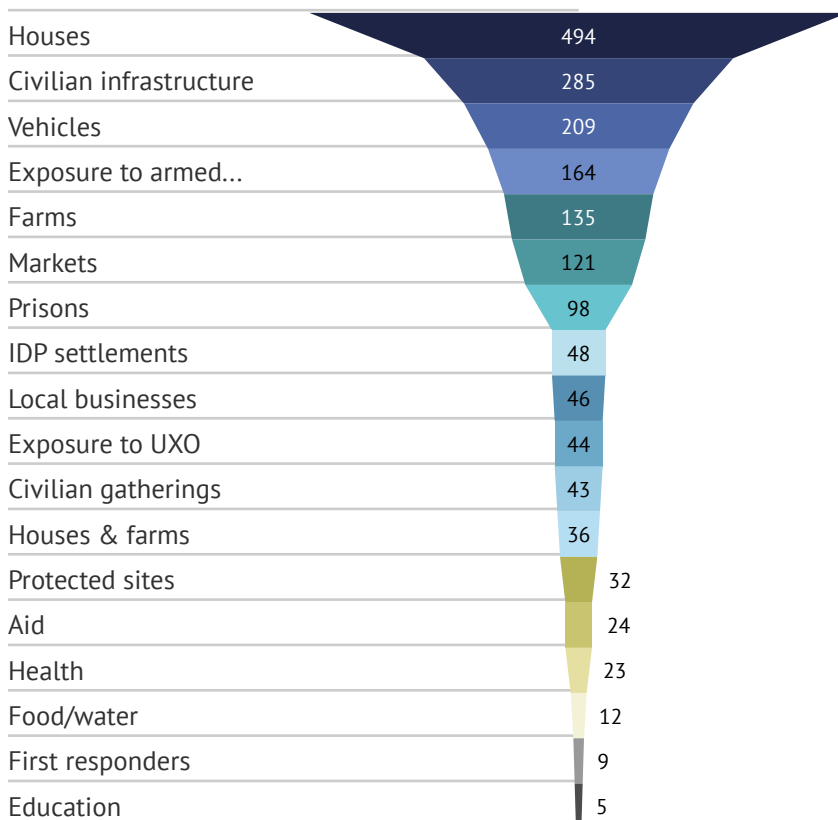
The categories that followed were local businesses, exposure to UXO (including landmines), food and water infrastructure, markets, education, protected sites, and health.

The categories that saw the fewest incidents were aid, civilian gatherings, first responders, IDP settlements, and prisons.

Total Civilian Impact incidents



Total number of casualties per category



As the most common location for civilian impact incidents in the reporting period, houses were also the site of the most civilian casualties (27%), illustrating that civilians are not protected from armed violence within their own homes.

A significant part of the civilian casualties also occurred on infrastructure sites (16%), including main roads and governmental compounds, and continuing the trend, in vehicles (11%).

Civilians were also injured and killed when exposed to armed violence while moving by feet in rural and urban settings (9%), as well as in markets (7%) and in farms (7%).

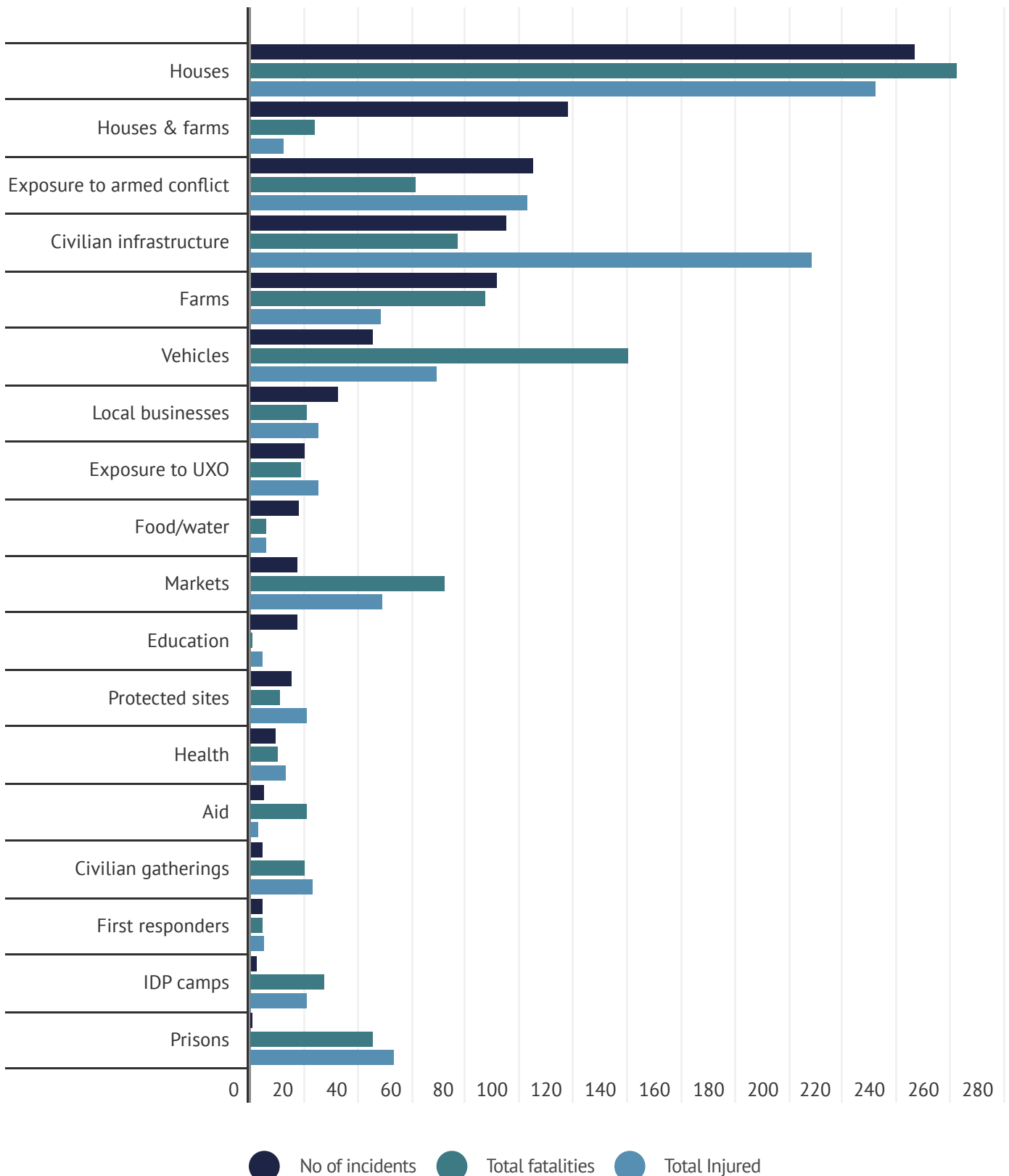
One incident impacting on a prison also generated high casualties (5%), followed by IDP settlements (3%), local businesses (3%), exposure to UXO (2%), and civilian gatherings (2%).

Overall data trends

The chart below shows the number of incidents and casualties, both fatalities and injuries, by type of civilian impact incident. As noted above, the deadlines of the incident type was not necessarily directly related to the total number of incidents.

Overall, for all categories the number of casualties was higher than the number of incidents, illustrating the range of impact of each incident. However, certain type of incidents were more deadly than others, especially infrastructure (95 incidents-285 casualties), vehicles (46 incidents-209 casualties), markets (17 incidents-121 casualties), IDP settlements (2 incidents-48 casualties), and prisons (1 incident-98 casualties).

Number of incidents, fatalities and injured per category



1.9. Casualties per type of armed violence

Airstrikes were by far the deadliest type of armed violence, accounting for 80% of the total civilian casualties during the reporting period (1,474 casualties: 793 fatalities and 677 injured). The deadliness of airstrikes was largely due to the scale of damage done by airstrikes, compared to other types of armed violence, and the frequent targeting of sites where many civilians gathered, whether homes, vehicles or public places, such as markets, restaurants and civilian infrastructure sites.

This was followed by shelling, which caused 11% of the casualties (190 casualties: 54 fatalities and 136 injuries). IED's caused 3% (45 casualties: 13 fatalities and 32 injured); landmines 2% (35 casualties: 25 fatalities and 10 injuries); UXO 2% (31 casualties: 7 fatalities and 24 injuries); SAF 2% (32 casualties: 15 fatalities and 17 casualties); and armed clashes, 1% (20 casualties: 0 fatalities and 20 injuries).

When looking at how many casualties that different types of armed violence generated on average, airstrikes were also deadlier than shelling, with airstrikes generating an average of 2.6 casualties per incident compared to an average of 0.9 casualties for shelling. However, IEDs and landmines on average generated significantly higher casualties, with 6,4 casualties per IED incident and 4,4 casualties per landmine incident.

Airstrikes also caused the most child and female casualties: 77% of the total child and female casualties, including 86% of the child and women fatalities.

The location of airstrikes was also a contributing factor in determining the deadliness of incidents, with airstrikes in urban settings generating significantly higher casualty counts than airstrikes in rural areas. Airstrikes with recorded civilian impact in the capital on average generated 7,5 civilian casualties. In comparison, airstrikes with recorded civilian impact in other governorates generated a much lower average casualty number; Al-Hudaydah an average of 3 civilian casualties per airstrike, in Sa'ada an average of 2 civilian casualties per airstrike and in Marib an average of 0,5 civilian casualties per airstrike.

Total casualties per type of armed violence

