

CIVILIAN IMPACT MONITORING PROJECT

2019 ANNUAL REPORT

1 JANUARY - 31 DECEMBER 2019

Mountain Town, Yemen by Rod Waddington

An annual report on the direct civilian impact from armed violence in Yemen.

1 January - 31 December 2019



CIVILIAN IMPACT MONITORING PROJECT
a service of the Protection Cluster Yemen

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EXECUTIVE SUMMARY

KEY TRENDS

Although the civilian casualties decreased from 2018, the proportion of child casualties increased to 1 in 4

The civilian casualty total reduced by 34% from 4,836 reported in the previous year to 3,217 civilian casualties in 2019, of whom 1,265 (39%) were children (836) and women (429). However, a greater proportion of civilian casualties were children in 2019 than in 2018. A high child casualty toll accounted for 25% of the civilian casualties in 2019, up from 20% in 2018.

The number of civilian impact incidents remained high, seeing just a 6% decrease from 2018

Although the number of civilian impact incidents and civilian casualties decreased compared to 2018, 2,213 incidents were still recorded in 2019, a drop of just 6% from the previous year, due to a series of escalations in Yemen, primarily during the first half of 2019.

The impact on civilians lessened in the latter half of the year, as a result of deals struck between parties

The first six months saw the greater number of incidents, at an average of 215 per month, which slowed over the latter part of the year, dropping to 154, as a series of de-escalation agreements were struck between the warring parties.

The highest number of civilian casualties occurred when armed violence impacted civilian houses

As with the previous year, the highest number of civilian casualties in 2019 occurred when armed violence impacted directly upon houses. Just over half (51%) of all civilian casualties as a direct result of armed violence in the past year were recorded within houses, a notable increase from 2018, when 40% of casualties were reported within homes

17% more civilian houses were impacted in 2019 than in 2018

Civilian houses remained the most commonly impacted civilian structure across the country. 1,268 incidents of armed violence impacted on civilian houses in 2019, increasing by 9% from the previous year. 5,650 civilian houses were reportedly impacted; a 17% increase from 2018.

Education facilities were the most frequently impacted type of infrastructure

36 incidents of armed violence were reported to have directly impacted on education facilities in 2019, more than any other type of infrastructure. Although this was a slight reduction from 38 incidents to have impacted on education facilities in 2018, the number of resultant casualties increased from 26 to 135 in 2019. This was due in large part to the 7 April incident in Sana'a, where a school was damaged when an airstrike hit a nearby weapons cache in Sawan in Shuaub, causing an explosion that killed 14 civilians, including 13 children, and injured another 95.

Armed violence around the Red Sea Flour Mills restricted access to critical food infrastructure

Food infrastructure was also impacted heavily. All 8 incidents impacting on food facilities were a result of repeat hostilities in the vicinity of the Red Sea Mills in Al-Hudaydah, forcing the site to suspend production, and affecting an estimated 455,571 households.

Airstrikes in 2019 resulted in less than a third of the civilian casualties they caused in 2018

The civilian impact from airstrikes significantly decreased in the past year, falling 71% from causing 1,113 civilian impact incidents in 2018 to 322 in 2019. The number of casualties caused by airstrikes also decreased by more than two-thirds in 2019, causing 795 civilian casualties compared to 2,588 in 2018.

EXECUTIVE SUMMARY

There was an increase in the number of civilian impact incidents caused by all other types of armed violence

Shellfire resulted in the greatest direct impact on civilians in 2019, accounting for 1,311 (59%) of the 2,213 civilian impact incidents nationwide, and accounting for 1,210 civilian casualties, more than any other type of armed violence and 38% of all civilian casualties nationwide. The number of incidents caused by fire from small arms and light weapons, including sniper fire, totalled 377, more than double the 182 reported in 2018, and the resultant civilian casualties also rose, by 38%, from 493 in 2018 to 678. Landmines, IEDs and UXO collectively resulted in 498 civilian casualties in 2019, up 23% from 405 the year before.

Al-Hudaydah again saw the highest number of civilian casualties and civilian impact incidents

Despite a UN-brokered ceasefire being in place throughout the year in Al-Hudaydah, the number of civilian incidents in the governorate increased by 28% compared to 2018. 966 incidents of armed violence were reported in Al-Hudaydah during 2019, the highest countrywide. Although the governorate also saw the highest civilian casualty rate countrywide, 768, this is a reduction of 62% compared to civilian casualty rates across the governorate during 2018. This is likely in part as there were fewer mass casualty incidents reported in the governorate in 2019, along with a significant decrease in civilian casualties from airstrikes, but also because the Al-Hudaydah Agreement resulted in frontlines becoming fixed in place, remaining unchanged throughout the year; when frontlines are dynamic and changeable, the impact on civilians is often significantly higher than when frontlines are static.

Rapid escalations in non-frontline areas resulted in a high civilian impact

Also in the Al-Hudaydah hub, Hajja saw a turbulent start to 2019, as conflict escalated in Kushar district from mid-January, including an intensive air raid campaign, prompting an uptick in the civilian impact of the conflict on the local population and highlighting the dangers of dynamic frontlines to civilian populations who have not previously been exposed to armed violence. 305 civilian casualties were reported in Hajja in 2019, just a slight decrease compared to 323 in 2018, and the number of incidents of armed violence rose by 9% from the previous year, from 90 to 98.

Airstrikes were again the deadliest type of armed violence to impact on civilians in the Sana'a hub, resulting in several mass civilian casualty incidents during 2019

On 1 September, airstrikes hit a prison in Dhamar, killing 156 people and injuring another 50. The incident was responsible for over half of the civilian fatalities reported across the Sana'a hub in 2019. Another airstrike incident was responsible for 77 civilian casualties in Sana'a city in May, and in April, a weapons cache exploded next to a school in the capital, having reportedly been hit by an airstrike, resulting in 110 civilian casualties, 52% of whom were children. Throughout the year, airstrikes were responsible for 438 civilian casualties across Sana'a hub, 67% out of a total of 652.

Fighting in residential neighbourhoods in Taiz city took a heavy toll on the civilian population

Fierce fighting in residential neighbourhoods in Taiz city caused an 81% increase in civilian casualties, from 137 civilian casualties in the city in 2018, to 248 in 2019. The fighting also impacted on critical health infrastructure. 3 incidents impacted directly on the Ath Thawrah and Al-Mudhaffar hospitals, restricting access to healthcare for as many as 32,589 households. An MSF-supported hospital in Al-Mokha city on the west coast was also damaged in 2019, when a missile attack hit a nearby military camp.

Fighting on the Qa'atabah frontlines in Al-Dhale resulted in severe access constraints

In Aden hub, the majority of civilian casualties were reported in Al-Dhale (304), as fierce fighting developed on the frontlines in Qa'atabah district from late March. 7 bridges were also destroyed in Al-Dhale in 2019, 5 of which were in Qa'atabah district, posing severe access restrictions on major routes, impacting the flow of civilian traffic and goods, and also hindering humanitarian access.

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 monitor civilian impact from armed violence countrywide, divided into 5 hubs; Al-Hudaydah, Sa'ada, Sana'a, Aden and Ibb.

CIMP collects, analyses and disseminates 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 daily reports on impact from armed violence for each hub, instant flash reports on significant events that require rapid follow-up from protection partners and weekly, monthly and quarterly analysis to inform protection strategies.

The annual 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 systematic, open source data on all incidents of armed violence. The data is filtered by the CIMP team in order to evaluate incidents with possible civilian impact and those incidents are then further researched and cross-referenced via multiple sources and graduated based on level of credibility. When available, video material, lists of victims and supplementary information from protection cluster partners is incorporated.

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, losing 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 transport infrastructure. Due to the nature of the indirect impact, the number of households impacted is often much higher than during direct impact.

As CIMP aims to collect and disseminate data on civilian impact that occurs as a result of armed conflict, some incidents are excluded. This includes incidents related to crime, domestic violence and small arms fire incidents that occurs away from areas of active conflict and have less than two casualties. Small arms fire incidents are always included when they occur in areas of active conflict.

SECTION 1: OVERALL DATA TRENDS

1.1. KEY CONFLICT DEVELOPMENTS

The conflict in Yemen in 2019 was characterised by a series of escalations on the various frontlines, and subsequent de-escalation agreements between the warring parties, including in the north of the country along the border with Saudi Arabia, and in the south, where developments were predominantly focussed around Aden, Abyan and Shabwa. The agreements generally decreased, but did not halt, the ongoing hostilities. As a result, although the number of civilian impact incidents and civilian casualties decreased compared to 2018, 2,213 incidents were still recorded in 2019, a drop of just 6%.

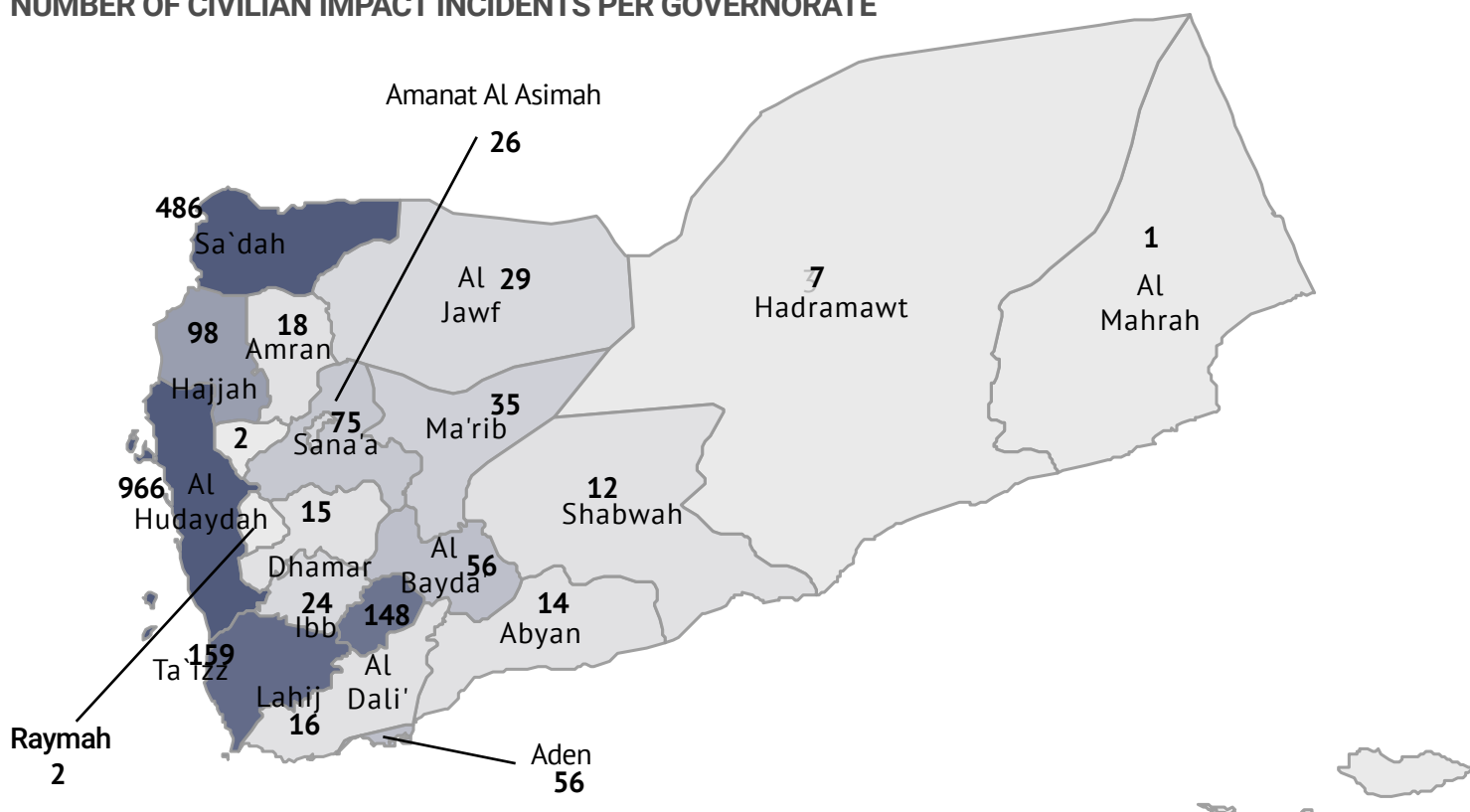
The start of the year also saw a ceasefire taking effect in Al-Hudaydah, one of the most notable political deals struck following the signing of the Stockholm Agreement in December 2018. While the ceasefire fixed the frontlines in place, it did not stop exchanges of fire between the conflicting parties' respective positions. As a result, the overall number of civilian impact incidents and civilian casualties fell this year, but the governorate still saw the highest of each across the country.

In the north of the country, along the Yemen-Saudi border, a de-escalation arrangement was reached from September after a series of high-profile cross-border attacks threatened to exacerbate the regional dimensions of the conflict. The partial truce agreement led to a notable decrease in airstrikes, which had been the main source of civilian impact in 2018. The second half of the year saw the fewest air raids since the start of the conflict in 2015.

Another significant deal struck this year was the Riyadh Agreement, signed in November, to bring an end to fighting in the south of the country. Heavy clashes erupted in Aden in August, threatening to spread to neighbouring governorates. Tensions were particularly heightened in Shabwa and Abyan, until regional intervention quelled the hostilities.

The other frontlines were largely unchanged throughout the year, with most fronts remaining static, especially in the second half of the year as the overall conflict stagnated. The main exception was Al-Dhale, where fighting re-erupted in April and daily hostilities were reported in the north-east of the governorate through to the end of the year. Across the rest of the country, localised developments continued to drive incidents of armed violence.

NUMBER OF CIVILIAN IMPACT INCIDENTS PER GOVERNORATE



1.2. CIVILIAN IMPACT

OVERALL DATA TRENDS

In 2019, 2,213 incidents of armed violence with a direct civilian impact were recorded in Yemen. These generated 3,217 civilian casualties, of whom 1,265 (39%) were children (836) and women (429). Of these, 1,013 were civilian fatalities, including 275 children and 138 women, and 2,114 were injured civilians, of whom 561 were children, and 291 were women. Furthermore, 1,983 (90%) incidents were assessed to have resulted in psychosocial trauma implications for the affected civilians.

All of these totals were lower than the previous year. The number of civilian impact incidents fell by 6%, from 2,361 in 2018, accompanied by an even greater decrease in the civilian casualty total, which reduced by 34% from 4,836 in the previous year. The number of women and children directly impacted by armed violence also declined, though at a lower rate than the total casualty numbers, from 1,533 to 1,265, an 18% decrease. As a result, although the total decreased, the proportion of civilian casualties who were either women or children increased from the previous year, rising from 32% to 39%. This was mainly driven by the child casualty toll, which accounted for 25% of the civilian casualties in 2019, up from 20% in 2018.

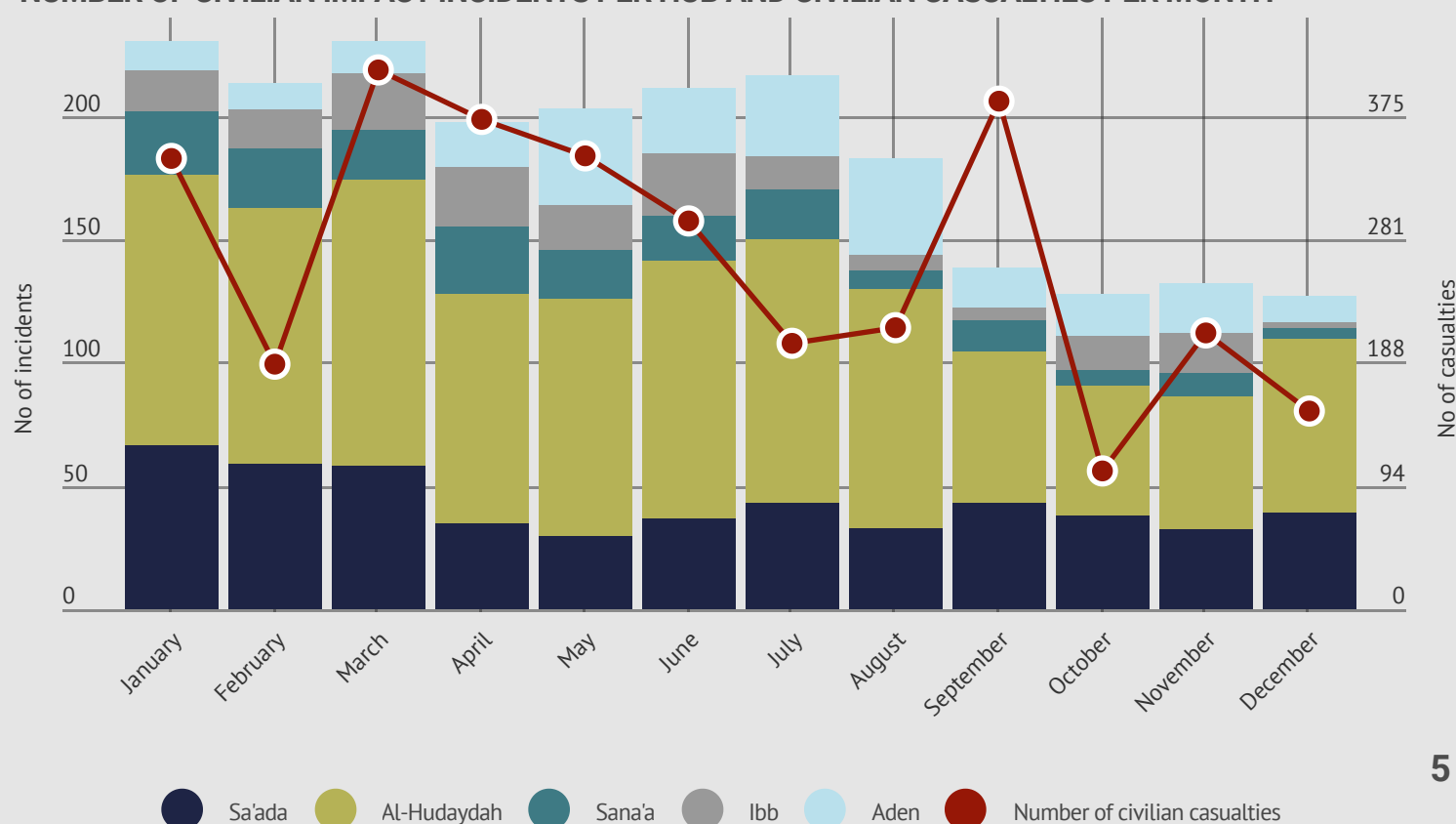
2019 saw an average of 184 civilian impact incidents and was not uniform throughout the year, neither in intensity nor location. The first six months saw the greater number of incidents, at an average of 215 per month, which slowed over the latter part of the year, dropping to 154, as a series of de-escalation agreements were struck between the parties.

With that said, Al-Hudaydah was the most impacted hub, accounting for almost half (48%) of all civilian impact incidents in 2019, despite a UN-brokered ceasefire being in place throughout the year in Al-Hudaydah governorate. This was more than double the second-most affected hub, Sa'ada (23%). The Al-Hudaydah hub also saw more civilian casualties than in any other hub in 2019, 1,076 (34%), while Sa'ada hub saw the fewest, 392 (12%), as the intensity of airstrikes in the north of the country, the main cause of casualties in 2018, dropped off. The second-most civilian casualties this year were instead recorded in the Sana'a hub, 652 (20%), driven by several mass civilian casualty incidents as a result of airstrikes pushed up the total.

COUNTRYWIDE CIVILIAN IMPACT SNAPSHOT 1 JANUARY - 31 DECEMBER 2019

Civilian impact incidents	2,213	Incidents causing psychosocial trauma	1,983
Total civilian casualties	3,224	Incidents impacting vulnerable groups	1,653
Children	828		
Women	420		
Total Fatalities	1,104	Incidents impacting Children & Women	1,369
Children	276	Children	177
Women	138	Women	77
Total Injuries	2,120	IDPs	22
Children	552	Refugees	8
Women	282		

NUMBER OF CIVILIAN IMPACT INCIDENTS PER HUB AND CIVILIAN CASUALTIES PER MONTH



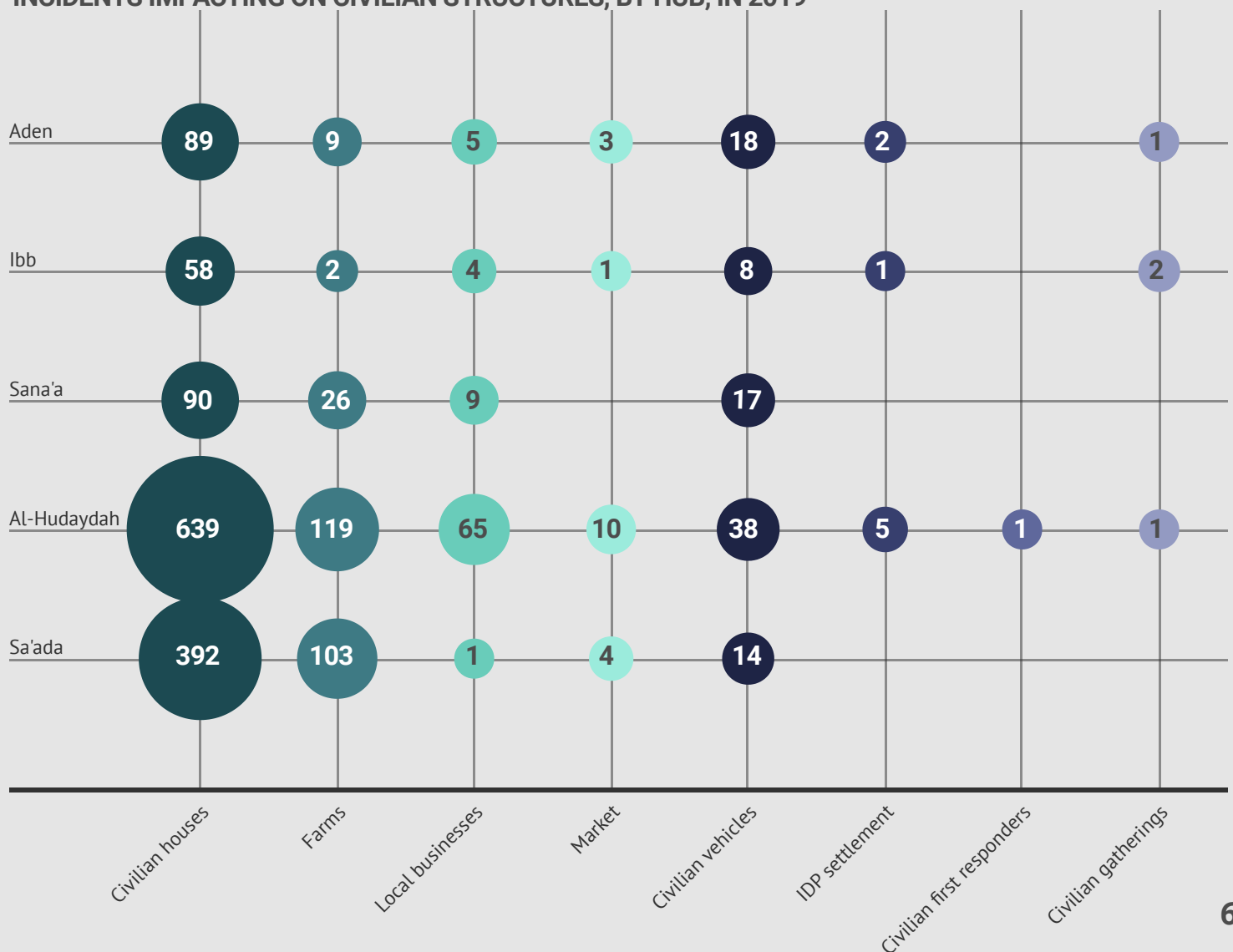
1.3. CIVILIAN STRUCTURES IMPACTED

Civilian houses remained the most commonly impacted civilian structure. 1,268 incidents of armed violence impacted on civilian houses in 2019, increasing by 9% from the previous year. 5,650 civilian houses were reportedly impacted; a 17% increase from 2018. Conversely, the number of incidents impacting farms decreased by 45%, to 260 incidents. The number of civilian casualties resulting from attacks on houses and farmland in 2019 decreased by 40%, to 1,063. 2019 saw a shift from airstrikes being the most common type of armed violence to impact civilian houses and farms to shelling, which accounted for 78% of all incidents, resulting in 717 civilian casualties.

Throughout the year, 95 incidents impacted on civilian vehicles, resulting in 280 civilian casualties, decreasing by 62% compared to 2018 figures. Of these, 55 impacted on cars, resulting in 202 casualties, while 8 impacted on buses, resulting in 19 casualties, a 93% reduction from the year before. Landmines accounted for highest number of casualties in incidents impacting on civilian vehicles, with 36 landmine incidents resulting in 114 casualties; 41% of the total. Airstrikes were the second most harmful type of armed violence to impact on vehicles, with 24 incidents accounting for 30% of the resultant civilian casualties. This is a significant reduction from the year before, when airstrikes accounted for 76% of civilian casualties caused by incidents of armed violence impacting on civilian vehicles.

There were also 84 incidents reported to have impacted on local businesses in 2019, resulting in 108 civilian casualties. Of these incidents, 65 (77%) were reported in Al-Hudaydah governorate, as ongoing hostilities resulted in repeated incidents impacting on local businesses. Of the 108 casualties, however, 42 (39%) were the result of an incident in Al-Mokha, in Taiz, where a VBIED attack in January killed 6 civilians and injured another 36, including the customers of a nearby café and shops. Recorded separately, 21 incidents of armed violence also impacted on markets, resulting in 189 civilian casualties, as the high population density in marketplaces exacerbates the potential for armed violence to cause civilian harm. 152 (80%) of civilian casualties as a result of armed violence impacting on markets were from shelling incidents in Sa'ada.

INCIDENTS IMPACTING ON CIVILIAN STRUCTURES, BY HUB, IN 2019



1.4. CIVILIAN INFRASTRUCTURE IMPACTED

OVERALL DATA TRENDS

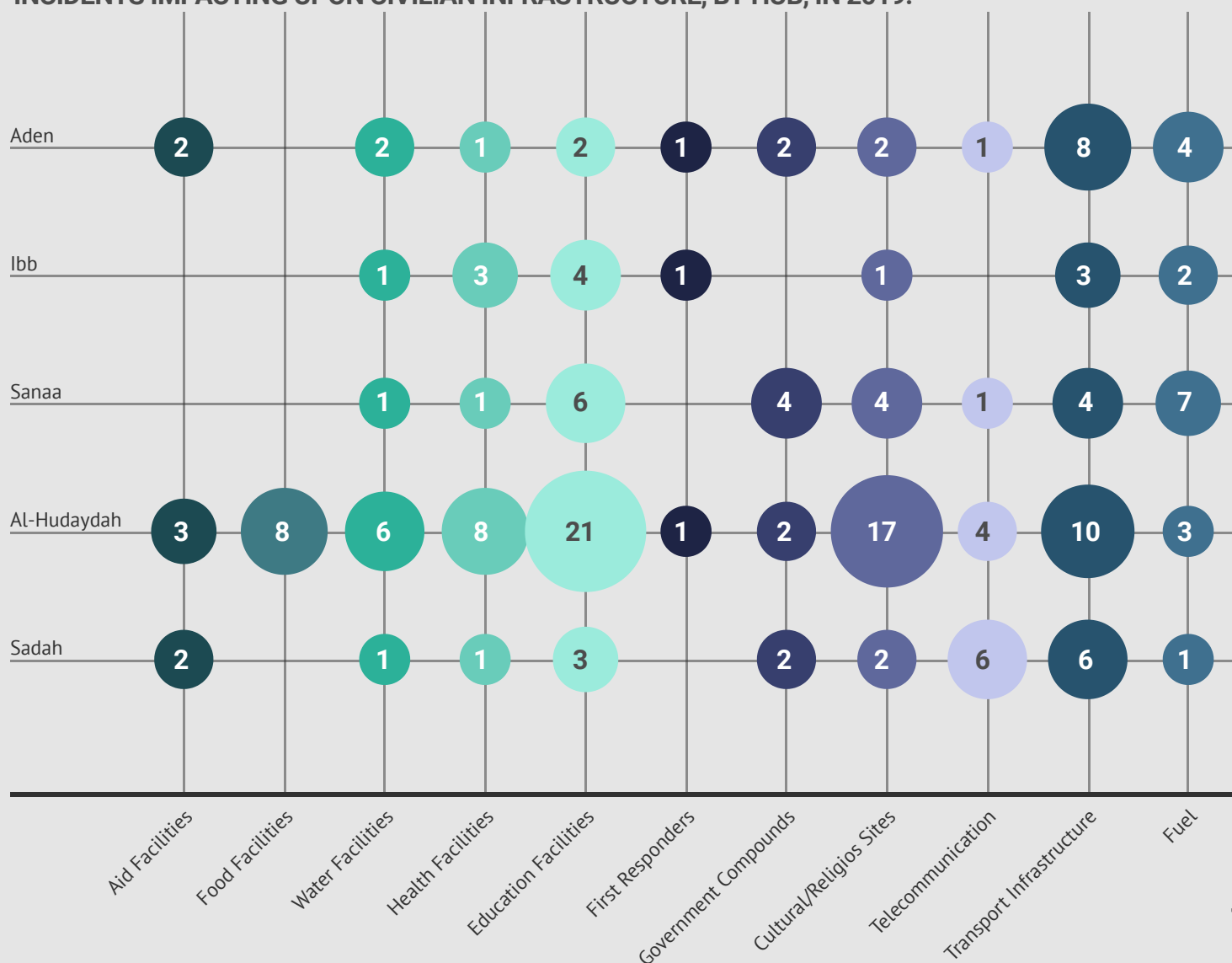
In 2019, the number of incidents impacting on civilian infrastructure decreased by more than 75%, with 168 incidents, compared to 371 incidents the year before. The most common type of armed violence to impact on infrastructure changed from airstrikes to shelling. Of the 168 incidents, 90 were caused by shelling (53%) and 50 caused by airstrikes (30%), a significant decrease compared to 2018, when 76% of incidents impacting on civilian infrastructure were the result of airstrikes.

The type of infrastructure impacted ranged from aid, health, education, water, food, fuel, governmental compounds, transportation, education, cultural and religious sites. Education facilities were the most frequently impacted type of infrastructure (36 incidents; 21%), followed by transportation (31 incidents; 18%). This marks a change from the year before, when 39% of all incidents impacting on civilian infrastructure impacted transport infrastructure. Among incidents impacting on schools was the 7 April incident in Sana'a, where a school was damaged when an airstrike hit a nearby weapons cache in Sawan, killing 14 civilians, including 13 children, and injuring another 95. There were also repeat instances of the university faculties in Al-Hudaydah coming under fire. In total, incidents impacting on education posed restricted access to education for an estimated 35,000 households.

Critical infrastructure also continued to be impacted, with 9 incidents impacting on food facilities, 6 incidents impacting on civilians' access to aid and 11 incidents impacting on water facilities, hindering civilian access to basic provisions against a backdrop of a deteriorating humanitarian situation. An estimated 505,436 households experienced restricted access to these three critical types of infrastructure in 2019. All 9 incidents impacting on food facilities were a result of attacks on the Red Sea Mills in Hudaydah, forcing the site to suspend production, and affecting an estimated 455,571 households.

Religious and cultural sites are protected under international humanitarian law, but were affected by hostilities in all five hubs, with the highest proportion of incidents reported in the Al-Hudaydah hub (26%). The most commonly impacted type of protected site was mosques, accounting for 73% of all incidents, while 5 cemeteries were also impacted.

INCIDENTS IMPACTING UPON CIVILIAN INFRASTRUCTURE, BY HUB, IN 2019:



1.5. PROTECTION IMPLICATIONS

OVERALL DATA TRENDS

IDPs were reportedly directly impacted in 22 incidents of armed violence, likely exacerbating the vulnerability of an already threatened group. Of these incidents, 15 were assessed to have directly posed obstruction to flight, either through impacting IDPs on the move, in vehicles, or those in IDP settlements or alternate living arrangements. 111 households are assessed to have faced obstruction to flight from armed conflict as a direct result of armed violence, bringing also challenges associated with heightened psychosocial trauma due to repeated exposure to conflict. IDP settlements were directly impacted in 8 incidents, 6 of which were on account of shellfire, including 2 in Al-Khawkhah in Al-Hudaydah, and 2 in Harad, in Hajja. Of 85 civilian casualties as a result of armed violence impacting on IDP settlements, Hajja saw 69 (81%). This also included an incident when shelters housing IDPs in Sawmala in Mustaba were hit by airstrikes on 11 August, killing 9 civilians, including 5 children and 2 women, and injuring 18, including 4 children and 6 women, highlighting also the vulnerability of women and children in IDP settlements to armed violence.

Houses were the most commonly impacted type of civilian structure as a direct result of armed violence, likely resulting in displacement for the properties impacted and also those nearby, as houses become inhabitable or the threat of harm becomes too great to risk remaining in place. 5,640 households are estimated to have been displaced as a direct result of armed violence in 2019, up 16% from 4,846 in 2018. Along with houses, farmsteads were at times also impacted, particularly in rural areas, adding further implications such as loss of livelihood to the levels of displacement, as well as impacting on a potentially critical means of sustenance. 1,184 households are estimated to have been directly impacted by armed violence impacting on farmland in 2019.

Armed violence also resulted in restrictions on freedom of movement and assembly for 1,218 households in 2019, either as a result of being impacted while moving in vehicles (92 incidents), or in instances whereby no structure was impacted, for example when a civilian was moving on foot in open ground (498 incidents). Incidents impacting on transport infrastructure pose similar restrictions to freedom of movement. 168,062 households were assessed to have faced restricted access to transportation options due to roads and bridges being impacted by armed violence in 2019. This is not only due to physical damage to these routes posing restricted access, but also the perceived danger of using such routes, linked to the threat of further violence along the route.

DIRECT PROTECTION IMPLICATIONS

DISPLACEMENT



Number of
affected households
5,640

Number of
Incidents
1,268

LOSS OF LIVELIHOOD



Number of
affected households
5,102

Number of
Incidents
362

RESTRICTED FREEDOM OF MOVEMENT AND ASSEMBLY



Number of
affected households
1,218

Number of
Incidents
586

OBSTRUCTION TO FLIGHT



Number of
affected households
111

Number of
Incidents
15

INDIRECT PROTECTION IMPLICATIONS - households experiencing restricted access to:



Health, education, first
responders, worship

341,466

Number of
Incidents
79



Transport, telecommunication, media,
fuel, governmental buildings, electricity

1,502,815

Number of
Incidents
63



Water facilities, aid, food
storage

505,436

Number of
Incidents
26

1.6. TYPES OF ARMED VIOLENCE

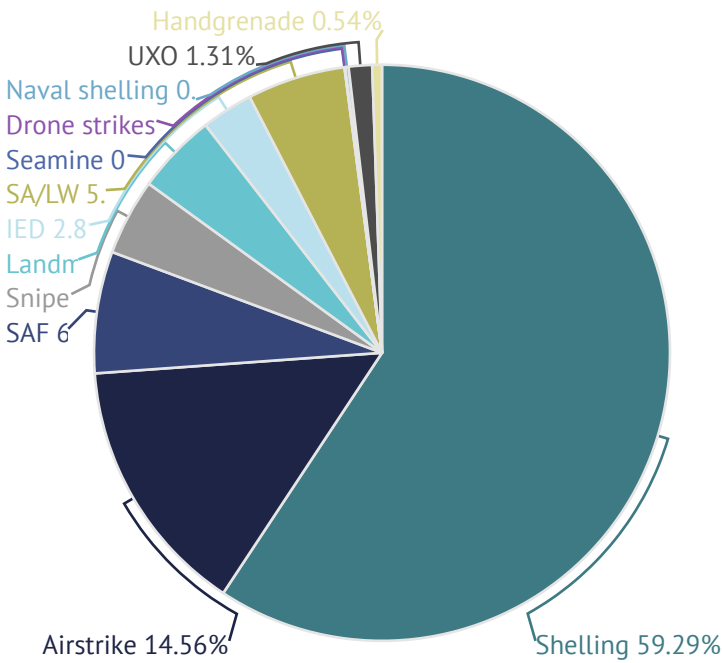
Shellfire was the main type of armed violence reported to have directly impacted on civilians in 2019, accounting for 1,311 of the 2,213 incidents, 59% of the total. This was an increase of almost 50% from 2018, when shellfire was the second leading source of civilian impact incidents, causing 898 incidents. The most significant change between the two years, though, was in the impact of airstrikes, which significantly decreased in the past year, falling 71% from causing 1,113 civilian impact incidents in 2018 to 322 in 2019. This was a trend that was carried over from the final quarter of 2018, when shelling overtook airstrikes as the leading cause of civilian impact, a result of the overall rate of air raids notably decreasing compared to the intensity of the previous four years.

Except for airstrikes, there was an increase in the number of incidents caused by every other type of armed violence in 2019. The highest year-on-year increase was in small arms and light weapons fire (SA/LW), which resulted in 120 incidents in 2018, more than doubling to 273 in 2019, and seeing an increase in every hub. The most substantial rise was reported in Al-Hudaydah, where SA/LW incidents increased more than from 21 to 89 incidents; although the Al-Hudaydah ceasefire froze the frontlines, despite the accompanying deployment of UN-overseen monitors and joint observation posts, daily exchanges of fire continued.

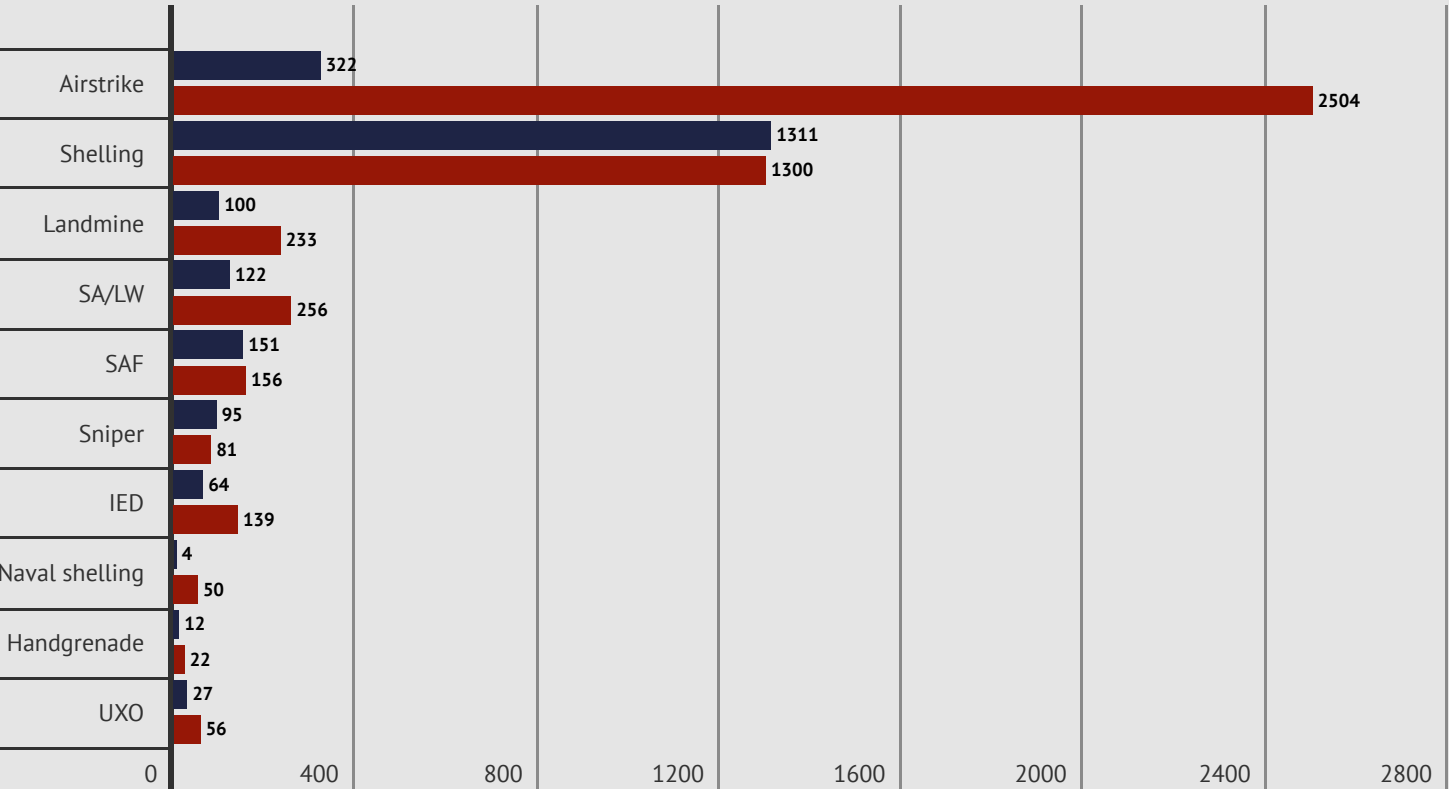
The number of civilian casualties caused by the different types of armed violence mostly followed the rate of incidents. Shellfire was the leading cause, accounting for 38% of the civilian casualties in 2019, followed by airstrikes, with 25%. The most significant change from the previous year was in the casualties of airstrikes, which decreased by more than two-thirds in 2019, causing 795 civilian casualties compared to 2,588 in 2018.

OVERALL DATA TRENDS

CIVILIAN IMPACT INCIDENTS BY TYPE OF ARMED VIOLENCE



TOTAL CIVILIAN CASUALTIES BY TYPE OF ARMED VIOLENCE



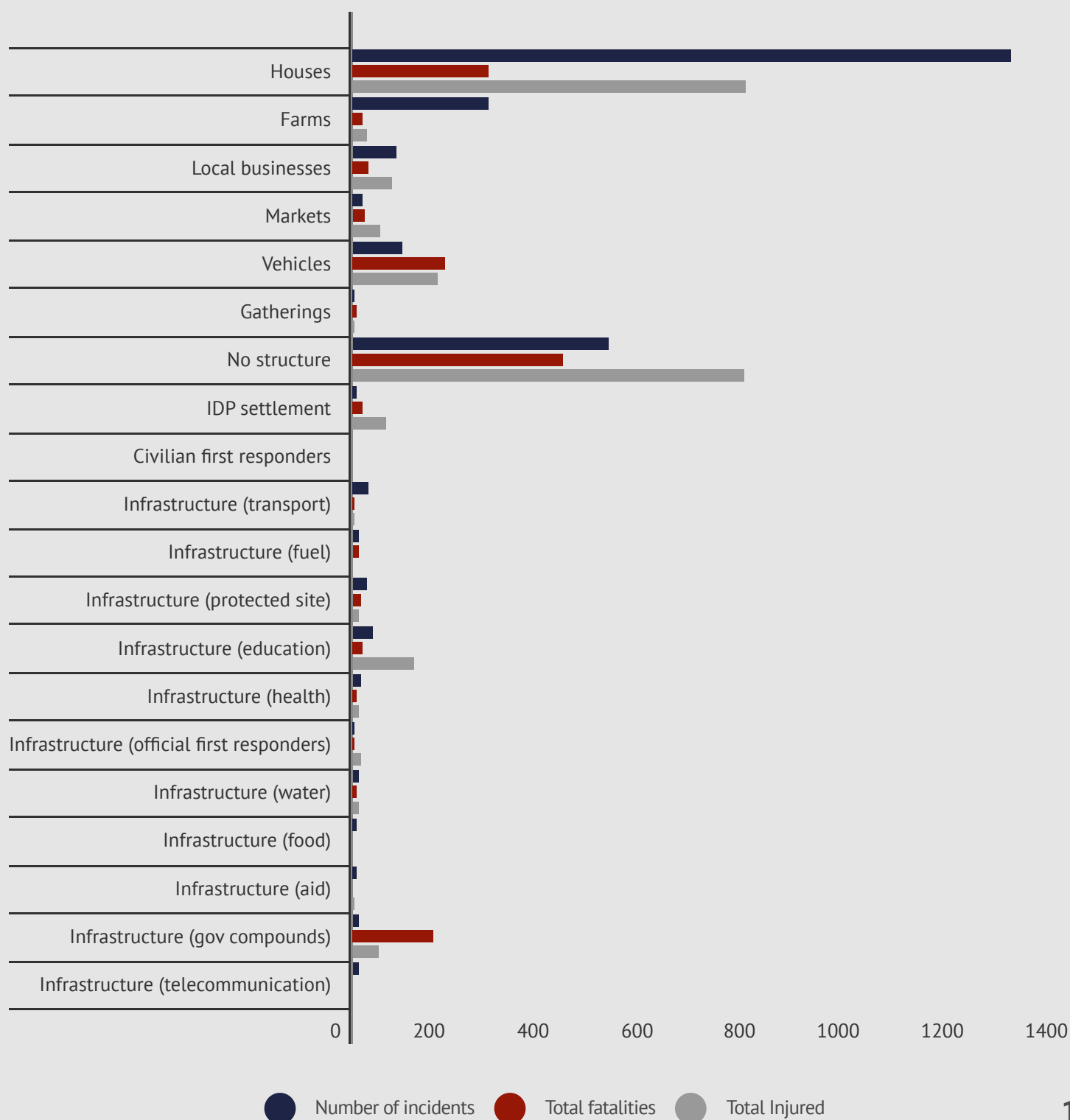
1.7. CASUALTIES PER CIVILIAN STRUCTURE

OVERALL DATA TRENDS

As with the previous year, the highest number of civilian casualties in 2019 occurred when armed violence impacted directly upon houses. Just over half (51%) of all civilian casualties as a direct result of armed violence in the past year were recorded within houses, a notable increase from 2018, when 40% of casualties were reported within homes. Of the 1,042 civilian casualties within houses, 577 (55%) were children (354) and women (223), reflecting the domestic nature of the affected spaces.

After houses, civilian vehicles were again the next highest, with 280 civilian casualties, though this was significantly lower than in 2018, when 768 casualties were reported as a result of armed violence impacting on vehicles, partly the result of mass civilian casualty incidents, in which dozens of civilians were killed and wounded in buses. The largest increase for last year was in education infrastructure, where 135 civilian casualties were recorded in 2019, a more than fourfold increase from the 26 in 2018. The majority of the casualties this year came in a single incident: airstrikes and subsequent explosions that damaged a school in Sana'a city in April, killing and injuring 109 civilians, including 56 children and 22 women.

NUMBER OF INCIDENTS, FATALITIES AND INJURIES BY CIVILIAN STRUCTURE



AL-HUDAYDAH HUB: AL-HUDAYDAH AND HAJJA

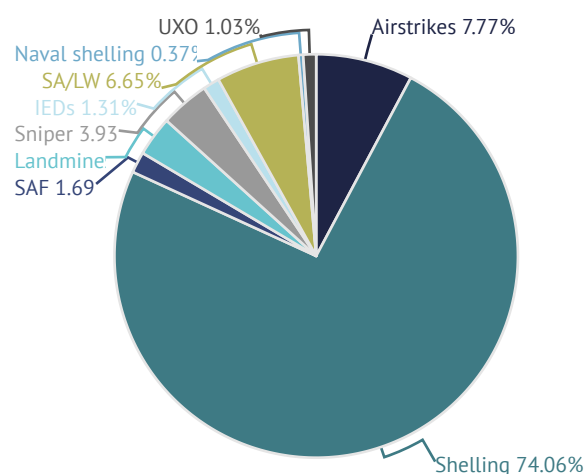
1,068 incidents of armed violence were reported in the Al-Hudaydah hub during 2019, the highest countrywide and averaging 89 incidents per month. Despite the start of the Al-Hudaydah ceasefire in late 2018, this is an increase of a third compared to the 803 incidents reported across the hub last year. The hub also saw the highest civilian casualty rate country-wide, which, at 1,076, was a third of the country-wide total, although dropped 55% compared to 2018.

Across the hub, shelling was responsible for the most civilian casualties, 580, followed by airstrikes, which caused 214. Of 580 civilian casualties from shellfire in the hub, Al-Hudaydah saw 494 (85%). However, of 214 airstrike casualties in the hub, Hajja saw 199 (93%), as the ceasefire resulted in a significant reduction in airstrikes on Al-Hudaydah governorate. However, fire from small arms and light weapons caused 156 civilian casualties in Al-Hudaydah, a threefold increase from 55 in 2018.

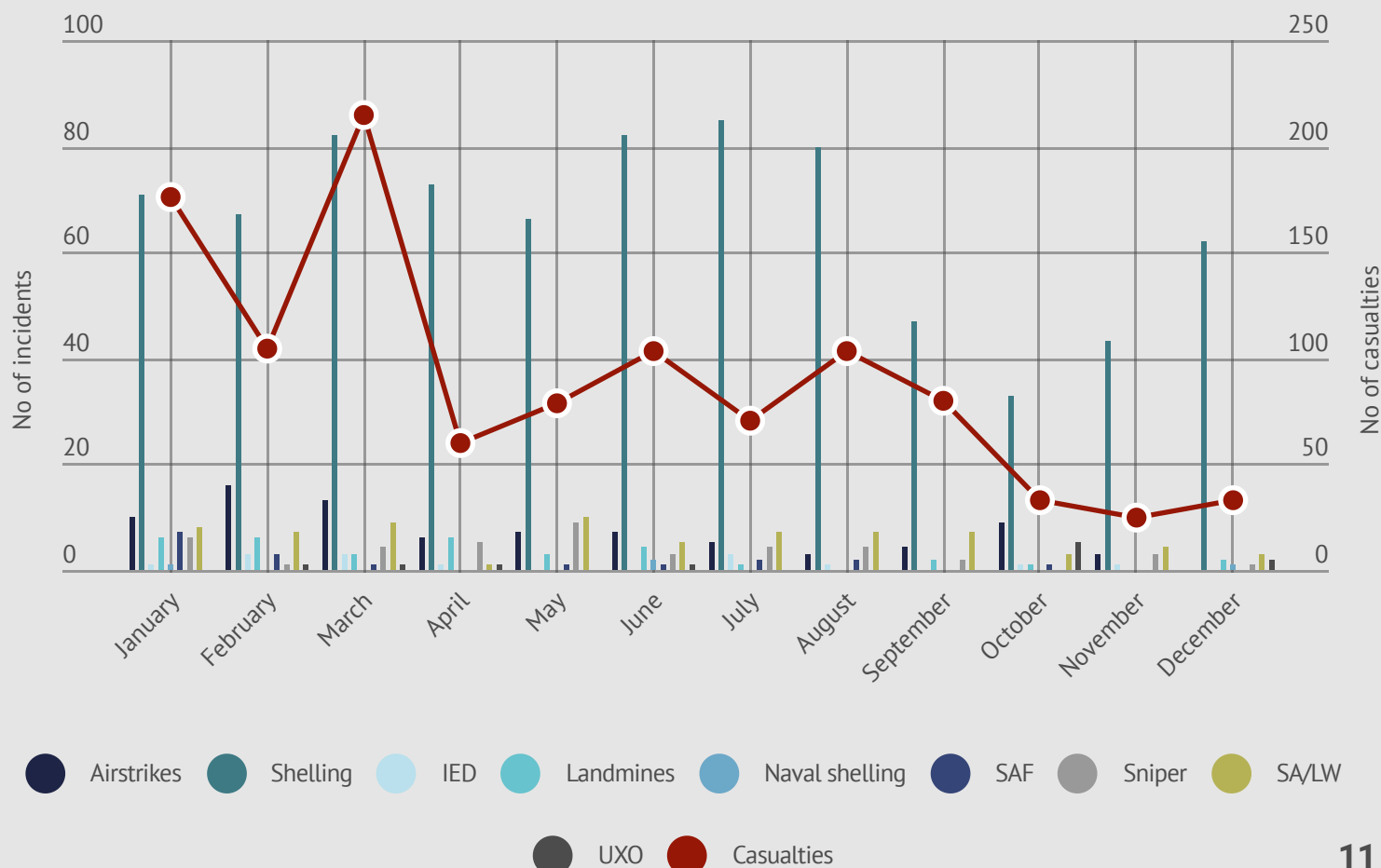
Al-Hudaydah governorate saw the most notable increase in civilian impact incidents in the hub, up 37% from 705 in 2018, to 966 in 2019. Despite the ceasefire, which commenced on 18 December 2018, the governorate continued to be one of the focal points in the conflict throughout the year, as a steady exchange of fire between opposing parties persisted. Although frontlines remained fixed, the civilian impact of armed violence in Al-Hudaydah remained high due to the close proximity of the fighting to the civilian population. Hajja also saw an increase in civilian impact incidents, up 9%, from 90 to 98. Although hostilities decreased throughout the year, there was fierce fighting in early 2019 in Kushar district, while the main frontlines in Harad, Hayran, Abs and Midi saw ongoing hostilities.

Over the course of the year, hostility rates saw a gradual decline in Al-Hudaydah, while political efforts underpinning the ceasefire continued. In Al-Hudaydah city, this decline was reinforced by the establishment of joint observation posts on key frontlines in the city outskirts in mid-October. However, while hostility rates in the city decreased further, reflected in a drop in civilian casualties and civilian impact incidents, fighting appeared instead to refocus to the southern frontlines, where the civilian impact increased.

CIVILIAN IMPACT INCIDENTS BY TYPE OF ARMED VIOLENCE



NUMBER OF INCIDENTS, TYPE OF ARMED VIOLENCE AND CIVILIAN CASUALTIES PER MONTH



CIVILIAN IMPACT SNAPSHOT

Civilian impact incidents	1,068	Incidents causing psychosocial trauma	925
Total civilian casualties	1,082		
Children	329	Incidents impacting vulnerable groups	821
Women	189		
Total Fatalities	290	Incidents impacting Children & Women	693
Children	96	Children	84
Women	58	Women	32
Total Injuries	792	IDPs	12
Children	233	Refugees	0
Women	131		

AL-HUDAYDAH HUB

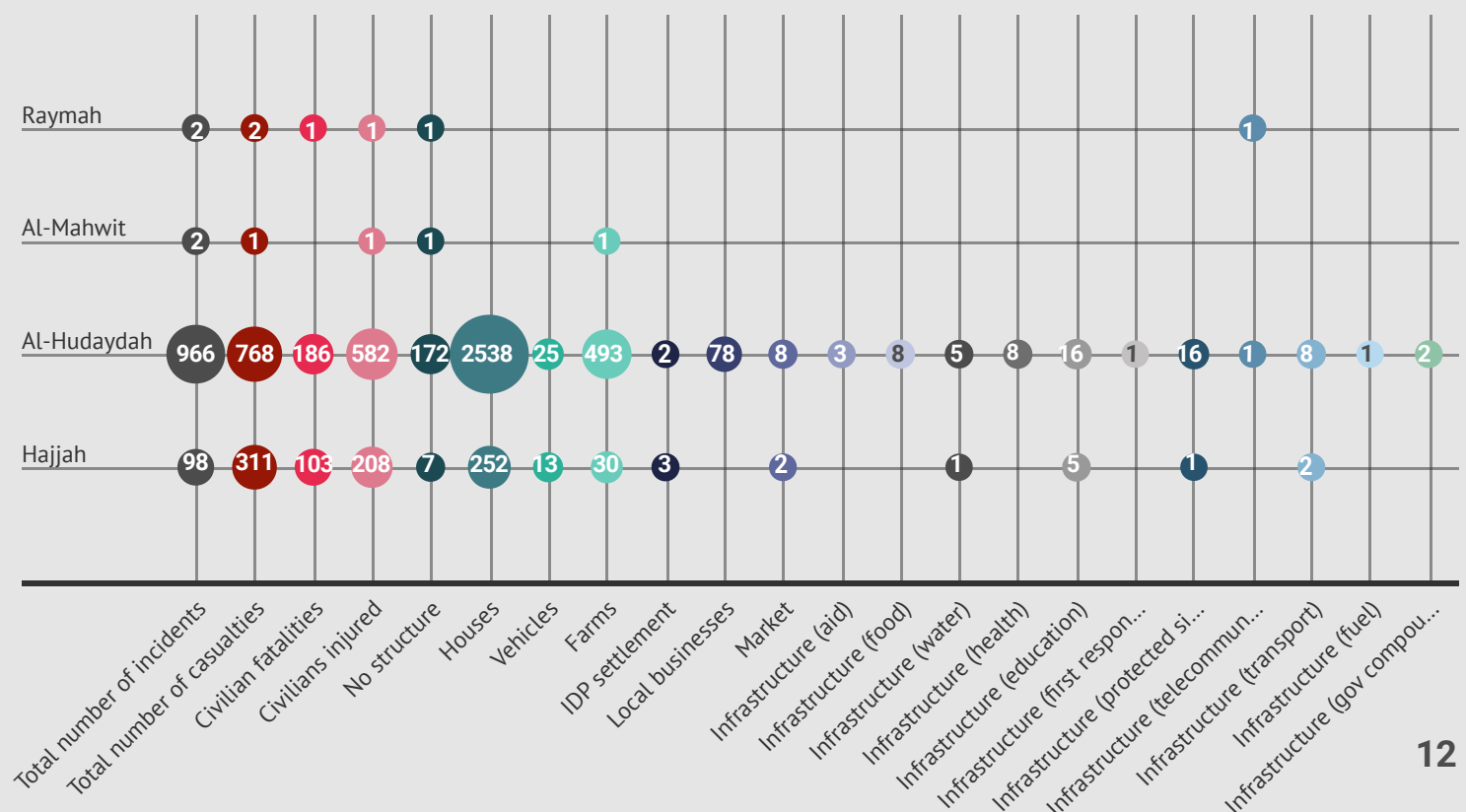


Of 1,076 civilian casualties in the Al-Hudaydah hub, 338 were reportedly children and 198 women. Overall casualties across the hub decreased by 55%, less than half compared to last year, but the number of child casualties only decreased by 24%. The proportion of children casualties of the total therefore increased, from 19% in 2018 to 31% in 2019. The proportions are particularly stark in Al-Hudaydah, where 250 (33%) of the 768 civilian casualties reported in 2019 were children, compared to 17% in 2018.

Hajja saw a turbulent start to 2019, as conflict escalated in Kushar district from mid-January, including an intensive air raid campaign, prompting an uptick in the conflict's impact on the local population and highlighting the dangers of dynamic frontlines to civilian populations who have not previously been exposed to armed violence. Kushar was the district with the highest record of civilian casualties in Hajja in 2019, 89, having not seen any in 2018. Over 70 households were estimated to have been displaced in Kushar as a result of the fighting, and 3 schools were hit by airstrikes in the district, restricting access to education for an estimated 3,000 households. A bridge was also impacted, restricting access to transport infrastructure for over 15,000 households.

There was an increased impact on food and education infrastructure in the past 12 months. 8 incidents reportedly impacted food infrastructure in the hub: all were repeat instances of shellfire on the Red Sea Flour Mills, in a contested area on the outskirts of Al-Hudaydah city. The incidents pose continued restricted access to critical food supplies for as many as 500,000 households. 16 incidents were reported to have impacted on education facilities in the hub in 2019. 5 of these were schools, while 11 were incidents impacting on Al-Hudaydah University medical and engineering faculties. As is the case across the country, civilian houses and farms were the most impacted civilian structures.

CIVILIAN IMPACT PER GOVERNORATE



AL-HUDAYDAH ●

2,539 households displaced

3,717 households losing livelihood

16 households experiencing obstruction to flight

198 households experiencing restricted freedom of movement and assembly

9,620 households experiencing restricted access to official first responder services

112,875 households experiencing restricted access to health services

15,000 households experiencing restricted access to education

3,400 households experiencing restricted access to protected sites

455,571 households experiencing restricted access to transport services

35,364 households experiencing restricted access to

2,000 households experiencing restricted access to fuel

41,793 households experiencing restricted access to government compounds

10,000 households experiencing restricted access to water facilities

455,571 households experiencing restricted access to food

455,571 households experiencing restricted access to aid

32,173 households experiencing restricted access to recreation

The above map shows concentration of civilian impact incidents per district

HAJJA:

252 households displaced

60 households losing livelihood

74 households experiencing obstruction to flight

60 households experiencing restricted freedom of movement and assembly

5,000 households experiencing restricted access to education

100 households experiencing restricted access to protected sites

304,143 households experiencing restricted access to transport services

2,000 households experiencing restricted access to water facilities

RAYMAH:

8 households experiencing restricted freedom of movement and assembly

14,341 households experiencing restricted access to telecommunication services

AL-MAHWIT:

1 household losing livelihood

1 household experiencing restricted freedom of movement and assembly

The above map shows concentration of civilian impact incidents per district

SA'ADA HUB: SA'ADA AND AL-JAWF

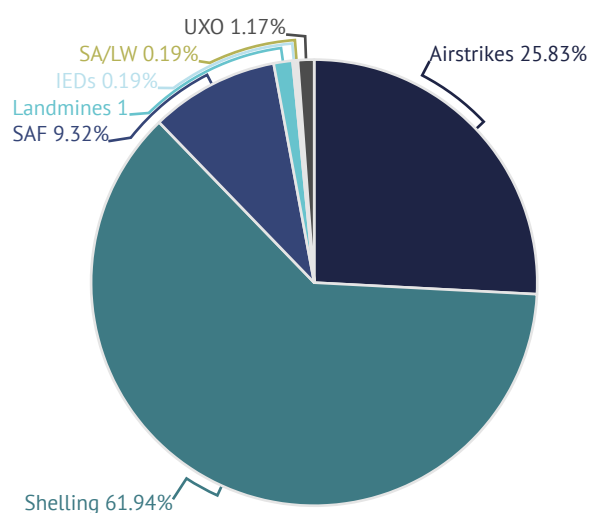
There were 515 incidents of armed violence reported to have impacted directly on civilians in the Sa'ada hub in 2019, half the 1,026 incidents reported in the Sa'ada hub during 2018. The vast majority of incidents in the hub were recorded in Sa'ada governorate (486, 94%), with the remaining 29 reported in Al-Jawf governorate.

As in 2018, incidents in the Sa'ada hub were caused overwhelmingly by shelling and airstrikes. 452 incidents from shelling and airstrikes collectively accounted for 88% of incidents across the hub in 2019, 133 (26%) of which were caused by airstrikes, and 319 (62%) by shelling, compared to last year when airstrikes accounted for 46% of incidents and shelling for 49%. In 2019 shelling significantly superseded airstrikes, due in part to a partial ceasefire on the border, which resulted in a reduction in airstrikes across the country. The ceasefire came into effect from September 2019, from which time a further decrease in civilian impact incidents was recorded across the hub.

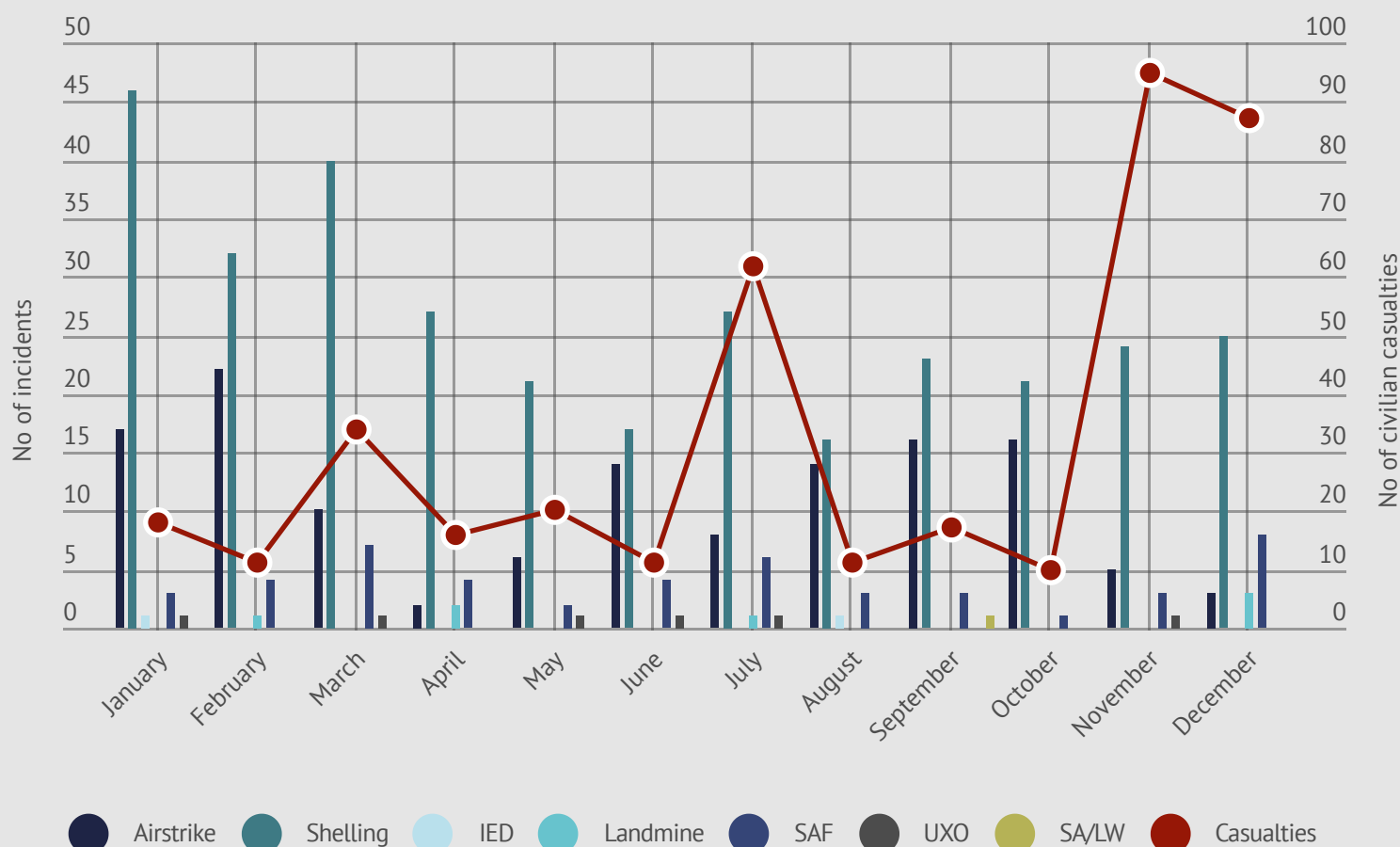
While incident rates decreased by half, the number of civilian casualties across the hub decreased by 64%, from 1,088 to 392. The decrease was most notable in Sa'ada governorate. Civilian casualties spiked in the final quarter of 2019, however, to the highest in the country. A large proportion of the civilian casualties in Sa'ada were reported in Monabbih in November and December, where several mass casualty shelling incidents brought the district casualty toll up to 150, 46% of the governorate total.

In Al-Jawf, by contrast, the majority of civilian casualties were on account of explosive remnants of war, in particular landmines, which caused 41 civilian casualties, along with 4 civilian casualties from IEDs and 2 from UXO. Collectively, ERW was responsible for 47 civilian casualties in Al-Jawf, 71% of the total, and threefold the 16 such casualties recorded last year. This was also the second highest casualty toll from landmines after Al-Hudaydah, where 59 civilian casualties were reportedly caused by landmines.

CIVILIAN IMPACT INCIDENTS BY TYPE OF ARMED VIOLENCE



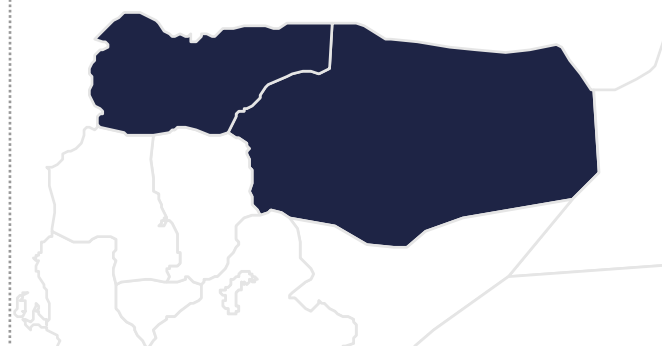
NUMBER OF INCIDENTS, TYPE OF ARMED VIOLENCE AND CIVILIAN CASUALTIES PER MONTH



CIVILIAN IMPACT SNAPSHOT

SA'ADA HUB

Civilian impact incidents	515	Incidents causing psychosocial trauma	488
Total civilian casualties	392	Incidents impacting vulnerable groups	438
Children	86	Incidents impacting Children & Women	407
Women	36	Children	18
Total Fatalities	152	Women	7
Children	31	IDPs	1
Women	13	Refugees	5
Total Injuries	240		
Children	55		
Women	23		

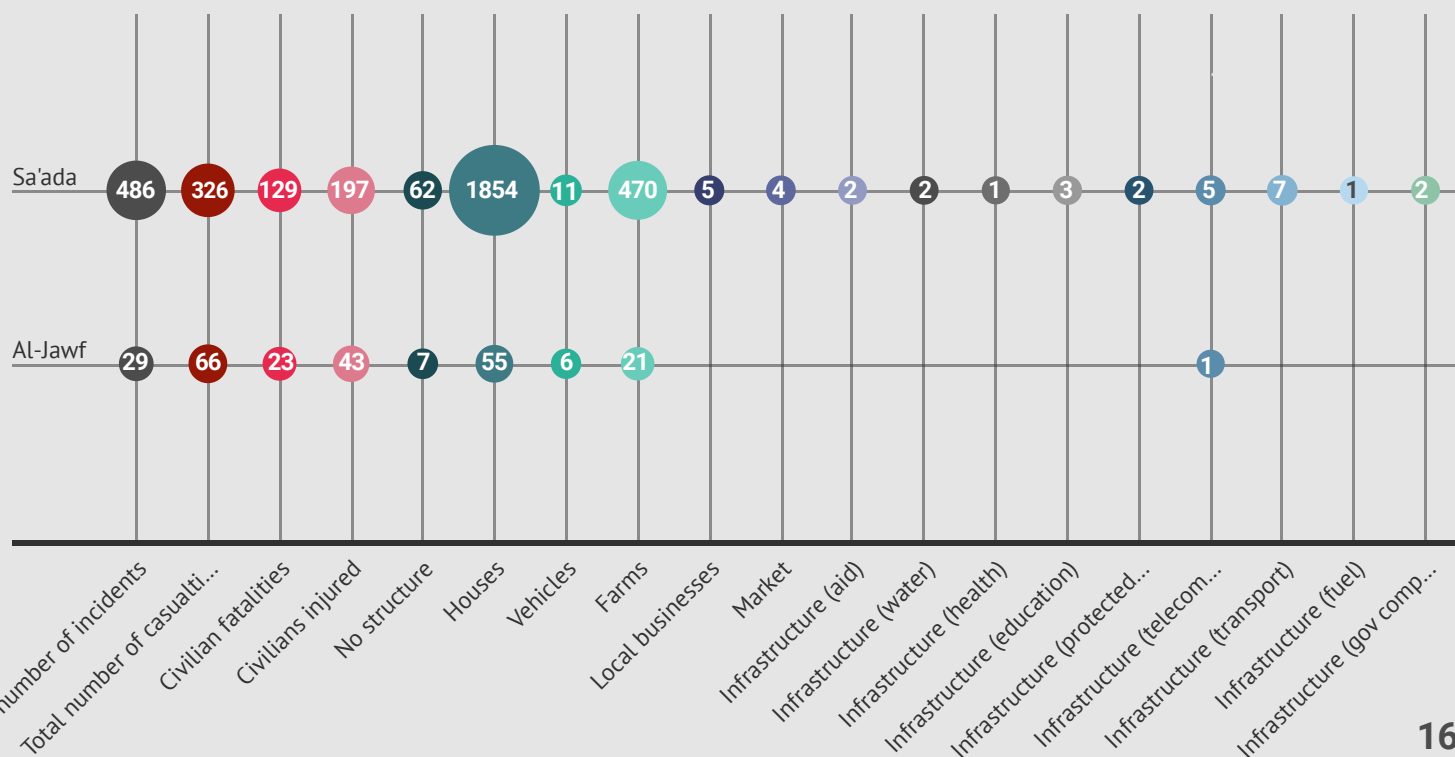


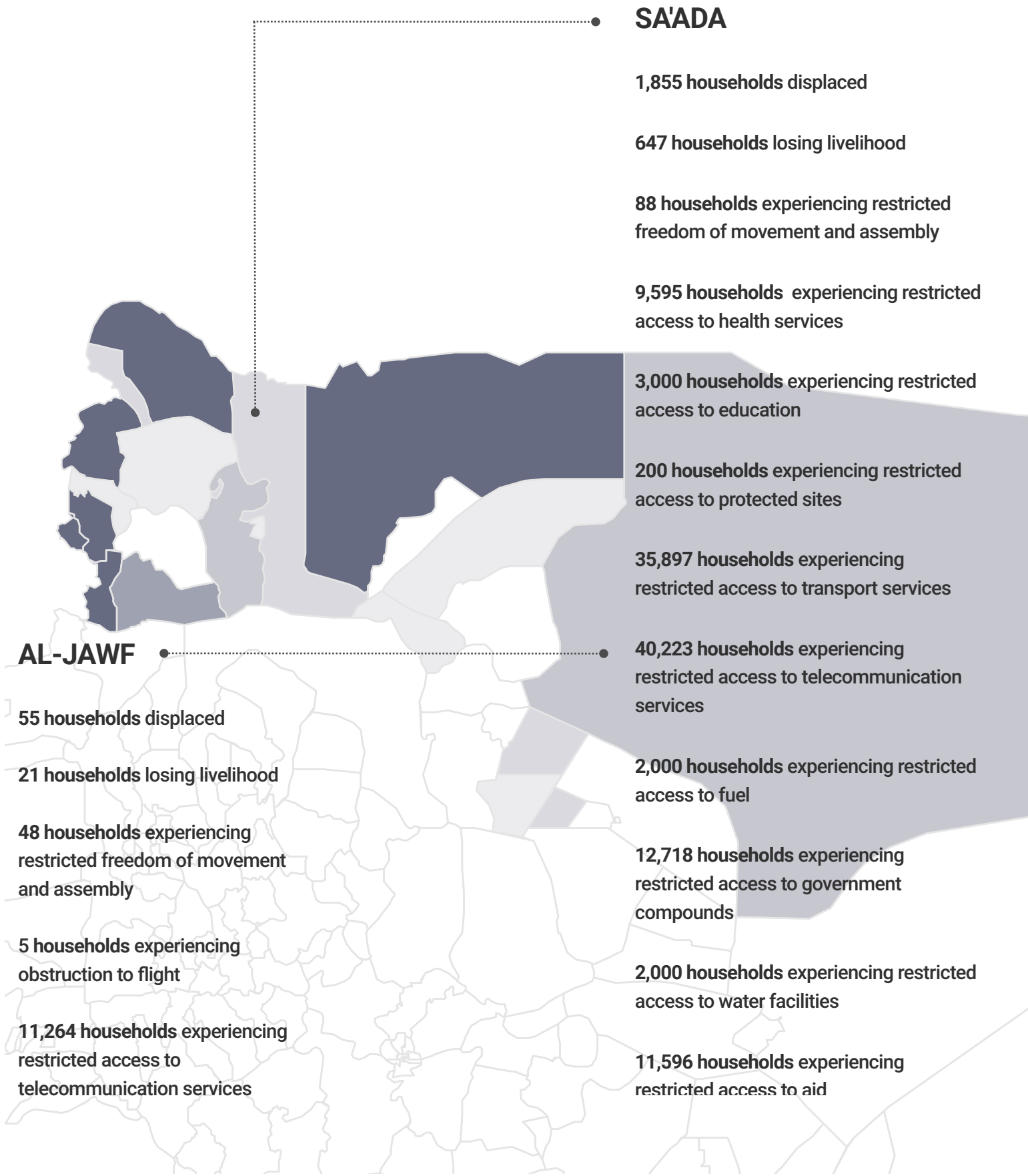
Along with an overall decrease in civilian casualties, the number of child casualties decreased by 80%, from 326 in 2018 to 64 in 2019. Furthermore, the proportion of child casualties in Sa'ada governorate also decreased. 19% of the casualties in Sa'ada governorate were children in 2019, 1 in 5, compared to 32% in 2018, 1 in 3. The number of women casualties also decreased by over 80% in the governorate. Conversely, in Al-Jawf, there were more child casualties reported in 2019 than in 2018, rising from 17 to 22, up to 1 in 3 of the total civilian casualty toll. This included 11 child casualties on account of shellfire, while 9 were caused by landmines.

Shelling in Monabbih resulted in several mass civilian casualty incidents. There were 3 mass casualty incidents as a result of shellfire in the Ar Raquw marketplace in Monabbih, near the border with Saudi Arabia, in November and December 2019, resulting cumulatively in 112 civilian casualties, over 35 of whom were reported to have been killed. In each incident, the majority of the casualties were reportedly Somalis and Ethiopians, who form the largest component of refugee and migrant groups travelling to, and through, Yemen. The Ar Raquw market in Monabbih is located in an area known as a border crossing point for migrants, but fierce fighting near the border poses severe restrictions to freedom of movement.

Aside from the Al-Raquw marketplace incidents, incidents impacting on civilian houses resulted in the highest number of civilian casualties across the hub (71; 18%), followed by incidents impacting on civilian vehicles (63; 16%). The hub saw more incidents impacting on telecommunications infrastructure than all of the other hubs combined. All 6 incidents reported to have impacted on telecommunications towers in the hub, 5 in Sa'ada and 1 in Al-Jawf, were caused by airstrikes.

CIVILIAN IMPACT PER GOVERNORATE





The above map shows concentration of civilian impact incidents per district

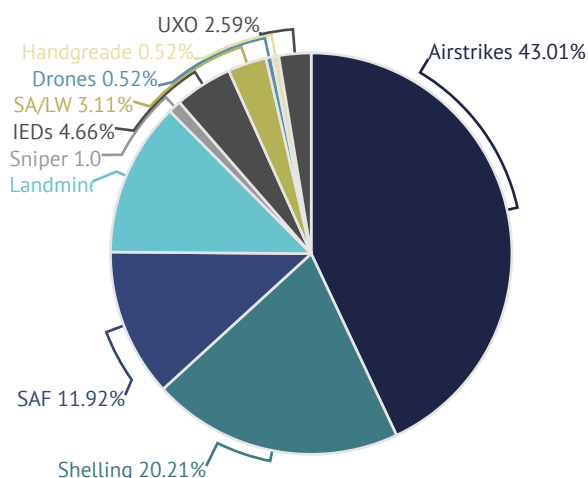
SANA'A HUB: AMRAN, MARIB, SANA'A GOVERNORATE, SANA'A CAPITAL, DHAMAR AND AL-BAYDA

There was a 22% decrease in the number of incidents of armed violence reported to have impacted on civilians in the Sana'a hub in 2019, falling to 195, from 249 in 2018. The three governorates to have seen the highest rate of civilian impact incidents in 2019, coinciding with fighting on key frontlines in the conflict, were Al-Bayda (57), Sana'a (43) and Marib (36). As a key gateway between southern and northern parts of Yemen, the volatility of frontlines in Al-Bayda was closely linked to southern conflict developments. With strategic routes and territory, Al-Bayda saw the weight of fighting across the hub in 2019.

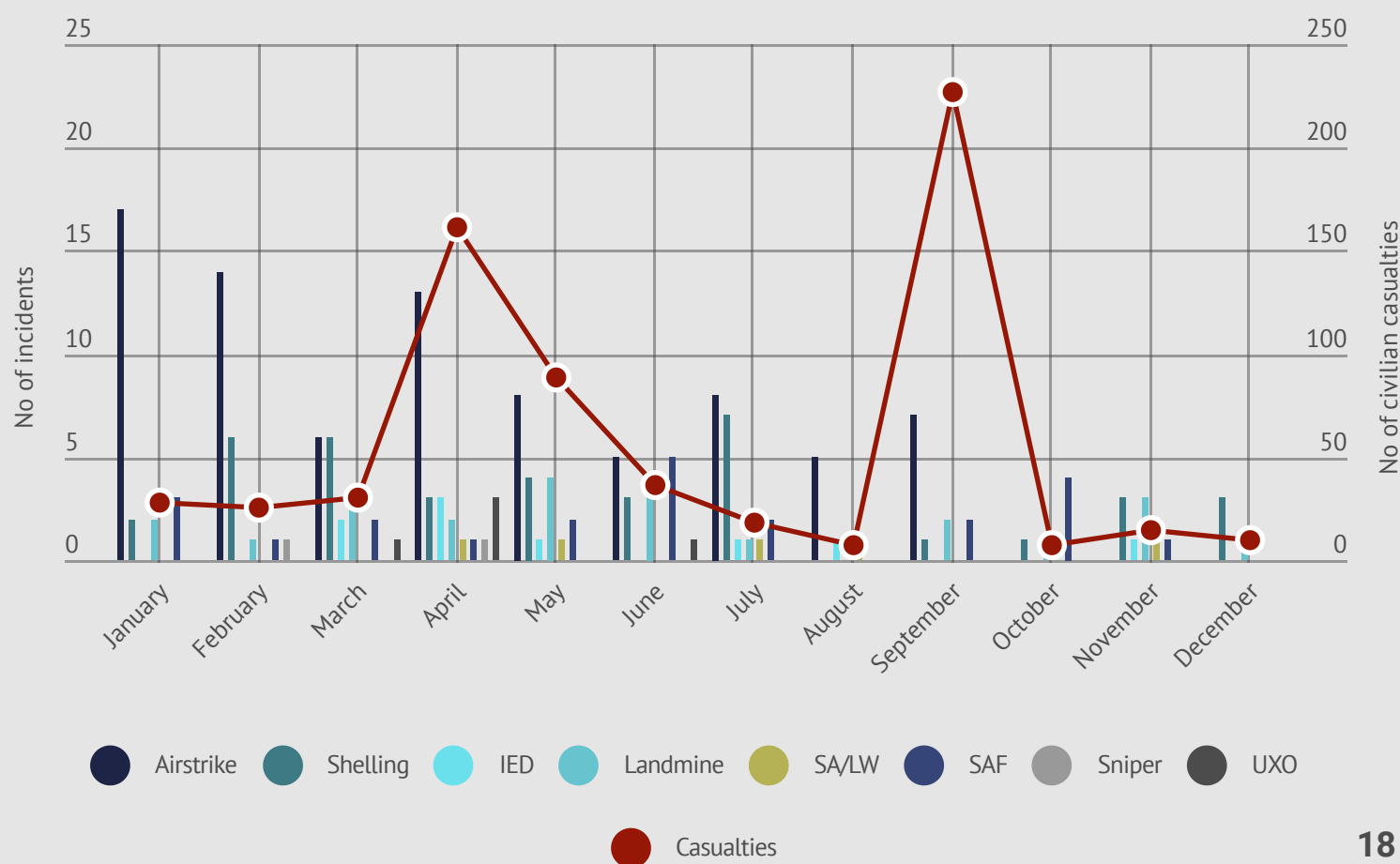
However, civilian casualty numbers mapped differently across the hub. Despite the decrease in incident rates, armed violence was directly accountable for 652 civilian casualties, an increase of 14% from the 572 recorded the year before. 298 (46%) of these were fatalities, including 38 children. Throughout the year, on average, 13 civilian casualties were reported in the hub on a weekly basis, although this was driven by several mass casualty incidents as a result of airstrikes in Dhamar and the capital city. Dhamar saw the highest civilian casualty count, at 225, 164 (73%) of whom were fatalities. The capital, Sana'a, saw the second highest record of civilian casualties, with 210 reported, 87 (41%) of whom were children.

On 1 September, airstrikes hit a prison in Dhamar, killing 156 people and injuring another 50. The incident was responsible for 32%, almost a third, of civilian casualties, and for 52%, over half, of the civilian fatalities reported across the Sana'a hub in 2019. Another airstrike incident was responsible for 77 civilian casualties in Sana'a city in May, and in April, a weapons cache exploded next to a school in the capital, having reportedly been hit by an airstrike, resulting in 110 civilian casualties, 52% of whom were children. Throughout the year, airstrikes were responsible for 438 civilian casualties across the hub, 67% out of a total of 652.

CIVILIAN IMPACT INCIDENTS BY TYPE OF ARMED VIOLENCE



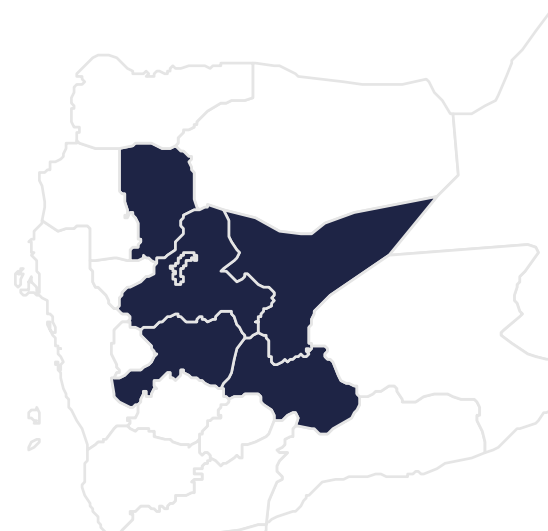
NUMBER OF INCIDENTS, TYPE OF ARMED VIOLENCE AND CIVILIAN CASUALTIES PER MONTH



CIVILIAN IMPACT SNAPSHOT

SANA'A HUB

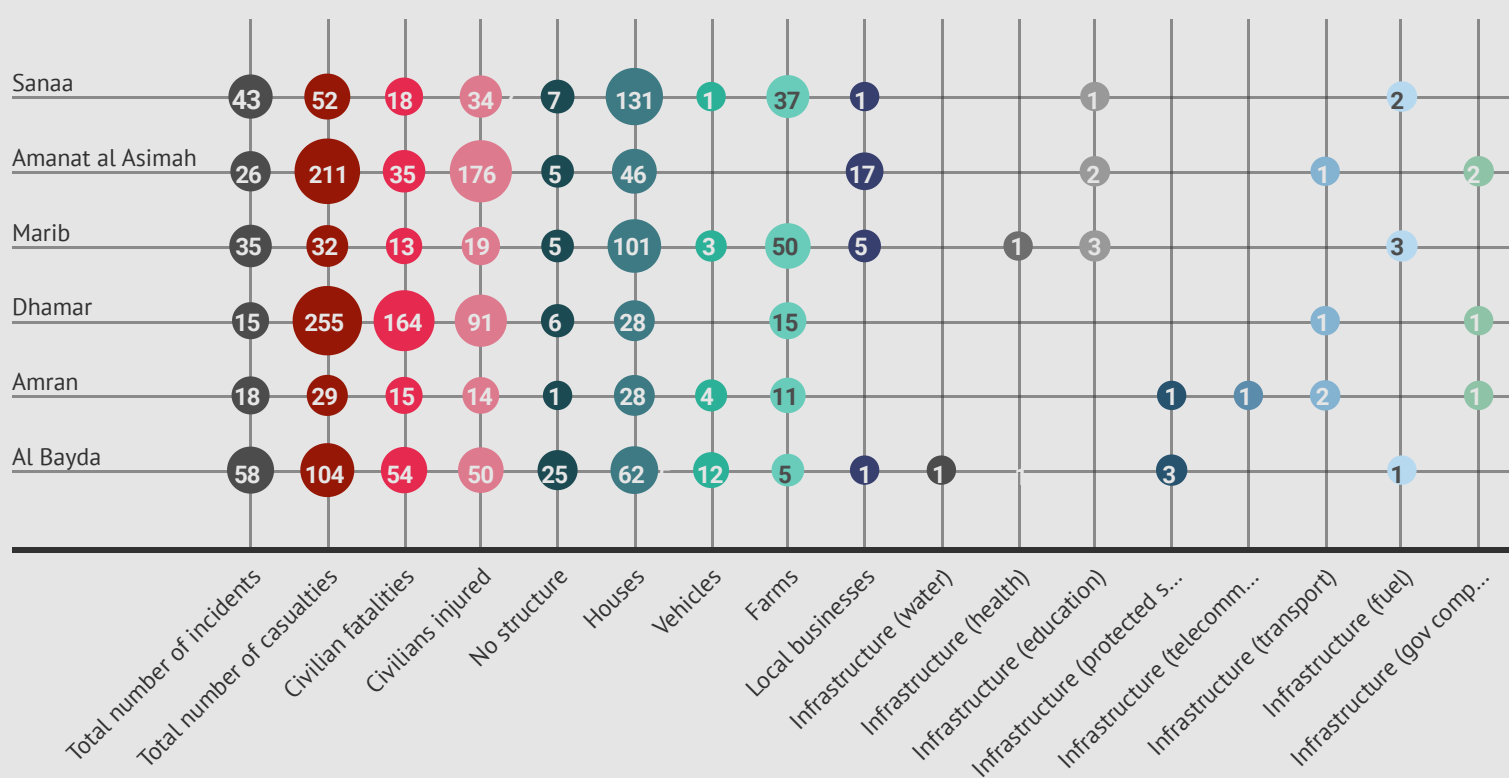
Civilian impact incidents	193	Incidents causing psychosocial trauma	168
Total civilian casualties	653		
Children	158	Incidents impacting vulnerable groups	123
Women	66		
Total Fatalities	299	Incidents impacting Children & Women	100
Children	39	Children	16
Women	14	Women	4
Total Injuries	354	IDPs	3
Children	119	Refugees	0
Women	52		



The most frequently impacted types of infrastructure in the Sana'a hub were education facilities, impacted in 6 incidents. Of these, 3 were in Marib, and 3 in Sana'a, including 2 in the capital city. Incidents impacting on education infrastructure are assessed to have restricted access to education for as many as 12,000 households across the Sana'a hub in 2019. The airstrike causing a weapons cache explosion on September 1, drove a high casualty rate among children in the capital, with Sana'a seeing the majority of child casualties across the hub, 112 (71%) out of a total of 158. Almost twice as many children, a 47% increase, were reportedly harmed across the hub in 2019 compared to 2018, when 84 children were killed or injured by armed violence in the hub. There was also an increase in casualties among women, 66 of whom were killed or injured by armed violence in 2019, 25% more than the 53 women casualties reported in the hub in 2018.

Across the hub, civilian houses were the most commonly impacted structure, impacted in 90 incidents, 34% of the total. This was followed by incidents in which no structure was impacted, indicating that civilian casualties occurred on open ground, away from any civilian structure. In Al-Bayda, more incidents were reported to have taken place in open ground than to have impacted civilian houses, due in large part to the high number of incidents caused by explosive ordnance in the governorate. 18 of 25 incidents to have occurred in open ground, and 30 of 54 civilian casualties, were as a result of IED and landmine incidents. In total, explosive ordnance incidents in Al-Bayda resulted in 53 (51%) of the 104 civilian casualties in the governorate, more than caused by any other type of armed violence, and the second highest civilian casualty toll from EO across the country in 2019, after Al-Hudaydah.

CIVILIAN IMPACT PER GOVERNORATE



SANA'A

101 households displaced

137 households losing livelihood

13 households experiencing restricted freedom of movement and assembly

1,000 households experiencing restricted access to education

MARIB

96 households displaced

55 households losing livelihood

12 households experiencing restricted freedom of movement and assembly

6 households experiencing obstruction to flight

7,523 households experiencing restricted access to health services

3,000 households experiencing restricted access to education

100 households experiencing restricted access to food

6,000 households experiencing restricted access to fuel

AMANAT AL-ASIMAH

46 households displaced

332 households losing livelihood

10 households experiencing restricted freedom of movement and assembly

8,000 households experiencing restricted access to education

421,210 households experiencing restricted access to transport services

44,625 households experiencing restricted access to government compounds

51,856 households experiencing restricted access to electricity services

The above map shows concentration of civilian impact incidents per district

AMRAN

28 households displaced

11 households losing livelihood

12 households experiencing restricted freedom of movement and assembly

100 households experiencing restricted access to protected sites

13,618 households experiencing restricted access to transport services

3,823 households experiencing restricted access to government compounds

9,165 households experiencing restricted access to telecommunications services

AL-BAYDA

62 households displaced

6 households losing livelihood

58 households experiencing restricted freedom of movement and assembly

2,000 households experiencing restricted access to fuel

300 households experiencing restricted access to protected sites

2,000 households experiencing restricted access to water facilities

DHAMAR

20 households displaced

15 households losing livelihood

2,000 households experiencing restricted access to transport services

35,933 households experiencing restricted access to government compounds

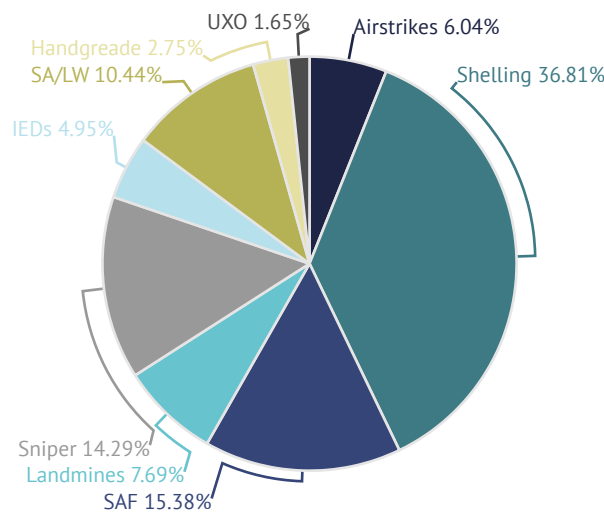
IBB HUB: IBB AND TAIZ

The Ibb hub saw 183 incidents with a direct civilian impact in 2019, the fewest of all the hubs, accounting for just 8% of all incidents country-wide. This was largely in line with the previous year, when 186 incidents were recorded in the hub. As with 2018, the vast majority of the incidents in the hub occurred in Taiz governorate, 154 incidents (84%), which hosts multiple active frontlines as well as various conflicting parties. Only 24 civilian impact incidents were recorded in Ibb governorate, though this was twice the total in 2018.

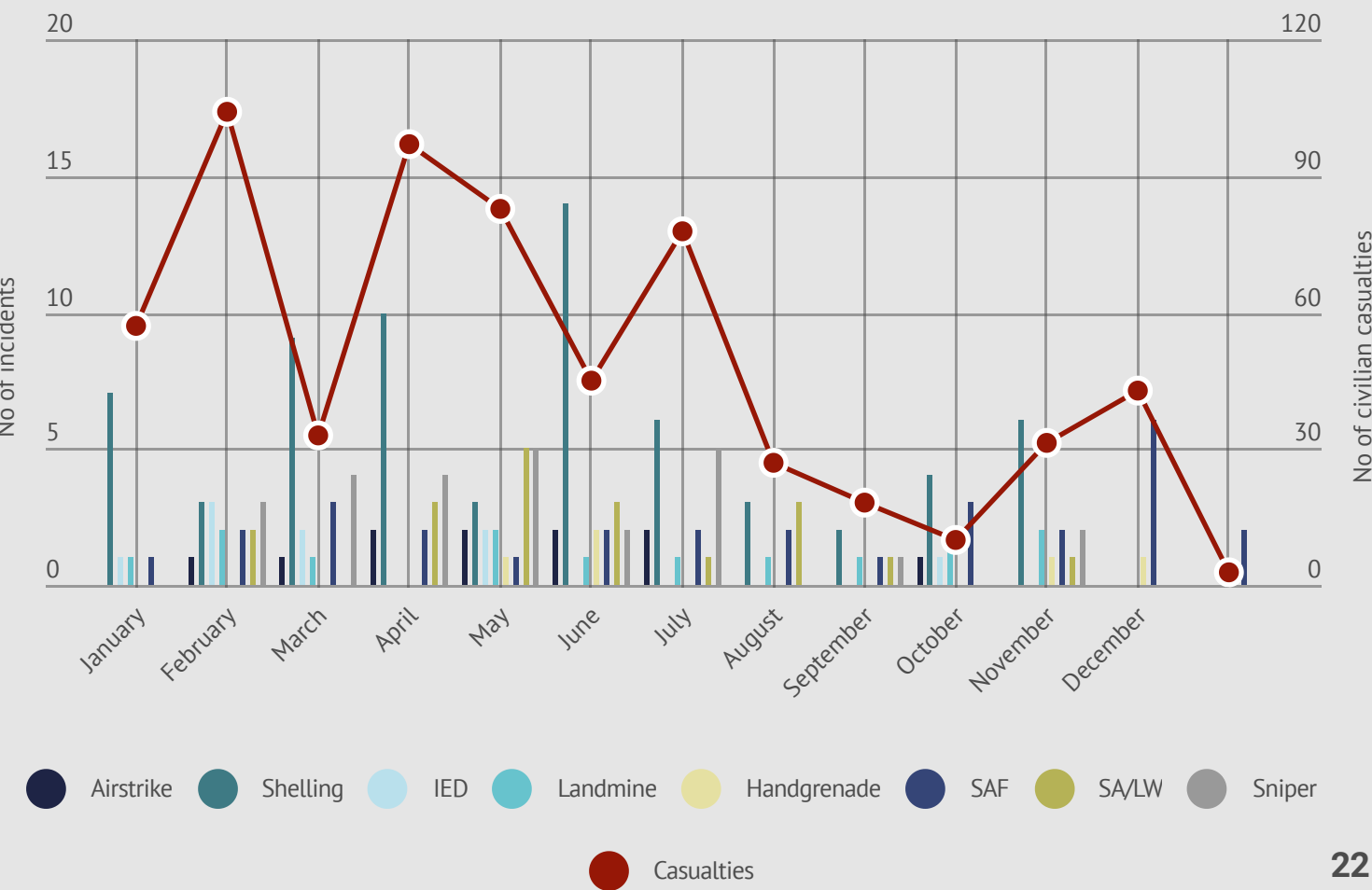
The hub saw several spikes in incidents with a civilian impact, mainly driven by sustained outbreaks of fierce infighting between rival armed groups in Taiz city, where factions clashed over control of revenue streams, including tax collection from local markets. These bouts of fighting had a particularly significant civilian impact as they were taking place within the densely-populated residential areas of the city, surrounded by houses and other civilian infrastructure; areas that were, for the most part, away from the frontlines in the overall conflict. These outbursts of infighting in the city also resulted in notable increases in civilian casualties as the local population was caught up in the violence, often trapped in their homes, unable to flee the hostilities or access healthcare or basic necessities.

As a result, small arms and light weapons fire (SA/LW) caused the second most civilian impact incidents in the hub in 2019, 47 (26%). This was a 41% increase on the previous year, when SA/LW accounted for 34 incidents. It also caused the most civilian casualties in the hub, 188 (35%), rising from 102 in 2018. The second most common type of armed violence to impact on civilians was shellfire, causing 67 incidents and 185 civilian casualties. The most notable change from the previous year was in airstrikes, only 11 of which were reported in 2019, a 74% decrease from the 43 reported last year.

CIVILIAN IMPACT INCIDENTS BY TYPE OF ARMED VIOLENCE



NUMBER OF INCIDENTS, TYPE OF ARMED VIOLENCE AND CIVILIAN CASUALTIES PER MONTH



CIVILIAN IMPACT SNAPSHOT

IBB HUB

Civilian impact incidents	183	Incidents causing psychosocial trauma	171
Total civilian casualties	572	Incidents impacting vulnerable groups	118
Children	121		
Women	59		
Total Fatalities	191	Incidents impacting Children & Women	66
Children	65	Children	32
Women	27	Women	17
Total Injuries	381	IDPs	2
Children	56	Refugees	1
Women	32		

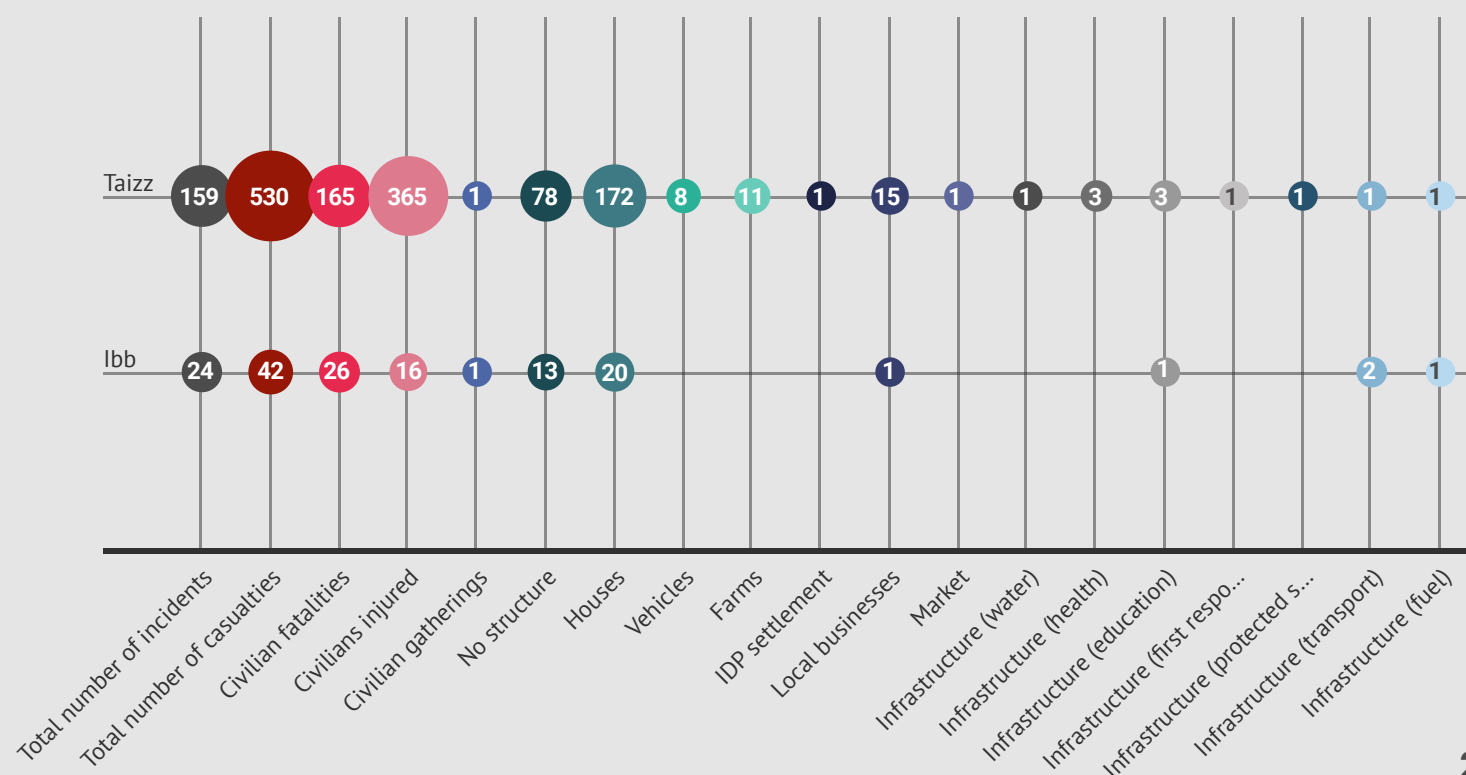


An average of 16 civilian impact incidents per month was reported in the Ibb hub in 2019, a slight increase from the 15 recorded on average the previous year. The number of civilian casualties also rose, increasing 15% from 498 to 572. Most of the rise in incidents and casualties was recorded in Taiz city, where several rounds of sustained fighting broke out between competing armed factions during the first three-quarters of the year before a tenuous truce was brokered, pushing the tensions outside the city to surrounding areas. The number of civilian impact incidents in the city went up from 114 to 137, a 20% increase. Civilian casualties, though, jumped from 137 to 248, an 81% spike, mainly due to the fierce infighting in residential neighbourhoods.

The fighting in the city impacted local civilian infrastructure, including 3 incidents affecting medical infrastructure, namely the Ath Thawrah and Al-Mudhaffar hospitals, which restricted access to healthcare for as many as 32,589 households. One other medical facility was also damaged in the past year, an MSF-supported hospital in Al-Mokha city on the west coast, which was damaged in a missile attack on a nearby military camp.

Al-Mokha also saw a significant increase in civilian casualties in the past year, 79 in total, more than double the 37 reported in 2018. More than half of these came in a single incident, when an IED attached to a motorcycle exploded near a café, reportedly killing 6 civilians and injuring another 36. The district saw 2 more mass civilian casualty incidents this year: 4 civilians killed and 8 injured in another IED explosion, and 6 civilian killed and 10 injured in the aforementioned missile strike on a military site in Al-Mukha city. Only 1 such incident was reported in the district in 2018, caused by airstrikes.

CIVILIAN IMPACT PER GOVERNORATE



IBB

20 households displaced

1 household losing livelihood

31 households experiencing restricted freedom of movement and assembly

1,000 households experiencing restricted access to education

2,000 households experiencing restricted access to fuel

21,611 households experiencing restricted access to transport

TAIZ

175 households displaced

41 households losing livelihood

4 households experiencing obstruction to flight

298 households experiencing restricted freedom of movement and assembly

28,132 households experiencing restricted access to first responder services

73,573 households experiencing restricted access to health services

5,165 households experiencing restricted access to transport services

3,000 households experiencing restricted access to education

100 households experiencing restricted access to protected sites

2,000 households experiencing restricted access to fuel

2,000 households experiencing restricted access to water facilities

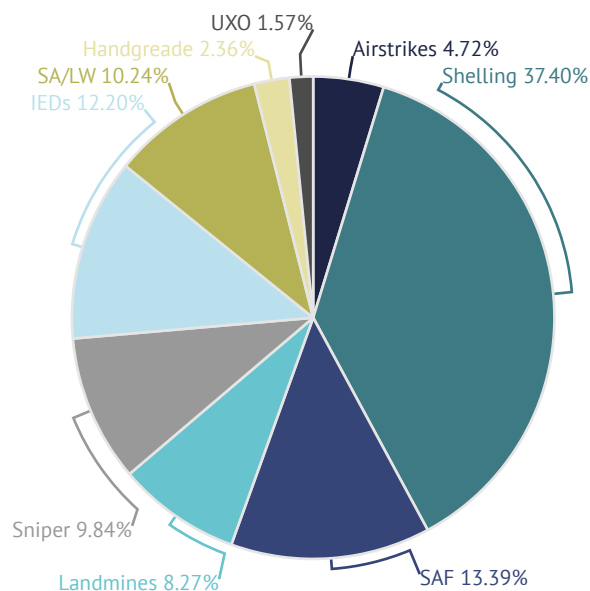
The above map shows concentration of civilian impact incidents per district

ADEN HUB: ADEN, ABYAN, AL-DHALE, AL-MAHRA, HADRAMAWT, LAWJ, SHABWA AND SOCOTRA

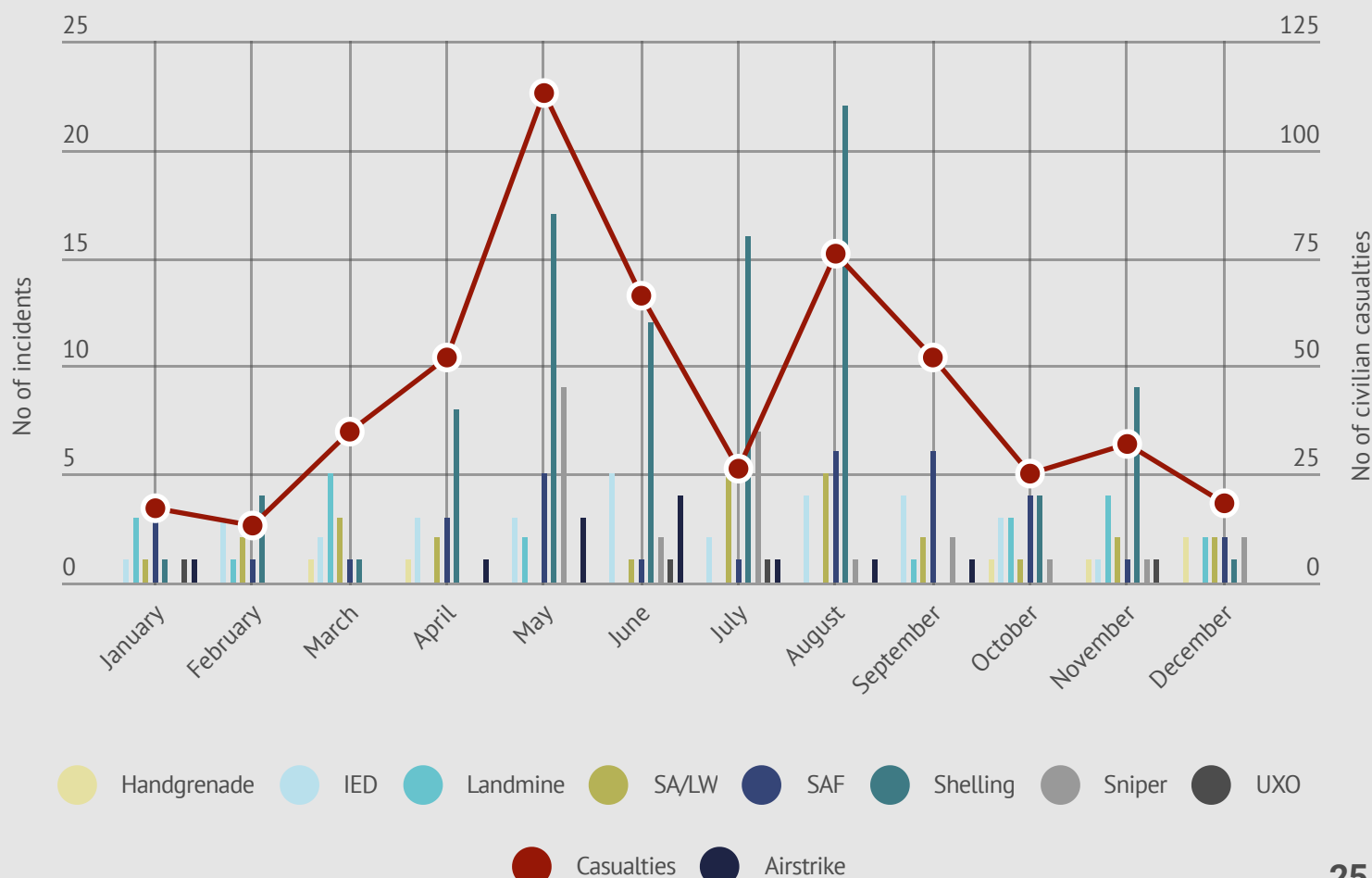
The number of incidents reported to have directly impacted on civilians in the Aden hub more than doubled from 2018 to 2019, from 101 to 260 incidents. The two main dynamics driving the increased civilian impact were an escalation on the frontlines in Qa'atabah district in Al-Dhale from late-March, and also violence across the south following an eruption of heavy clashes in Aden from August, as actors competed for control of the city. The violence threatened to destabilise the security situation in neighbouring governorates, until the Riyadh Agreement was signed in November, while in Al-Dhale, fighting is ongoing. Exacerbated by the dynamic nature of the frontlines in Al-Dhale, May was the deadliest month in the Aden hub, with 113 civilian casualties reported, followed by August, which saw 76 civilian casualties.

The number of civilian casualties reported in the hub also increased from 402 in 2018 to 525 in 2019. Furthermore, the proportion of child casualties increased from 12% in 2018 to 26% in 2019. The majority of civilian casualties were reported in Al-Dhale (304), while Aden followed (104). Of 525 civilian casualties, shelling was responsible for the most. A third (171) of civilian casualties reported across the hub in 2019 were on account of shellfire, the vast majority of whom (145, 85%) were reported in Al-Dhale, as the swift uptick in hostilities took a heavy toll on the civilian population. Incidents of fire from small arms and light weapons (SA/LW), including snipers, jointly resulted in the next highest number of civilian casualties, 152 (29%). While Al-Dhale again saw the highest numbers (54, 36%), 48 civilians were also reportedly killed or injured by SA/LW in Aden, the majority of whom in the second half of the year, when violence escalated in the city.

CIVILIAN IMPACT INCIDENTS BY TYPE OF ARMED VIOLENCE



NUMBER OF INCIDENTS, TYPE OF ARMED VIOLENCE AND CIVILIAN CASUALTIES PER MONTH



CIVILIAN IMPACT SNAPSHOT

Civilian impact incidents	254	Incidents causing psychosocial trauma	231
Total civilian casualties	525		
Children	134	Incidents impacting vulnerable groups	153
Women	70		
Total Fatalities	172	Incidents impacting Children & Women	103
Children	45	Children	27
Women	26	Women	17
Total Injuries	353	IDPs	4
Children	89	Refugees	2
Women	44		

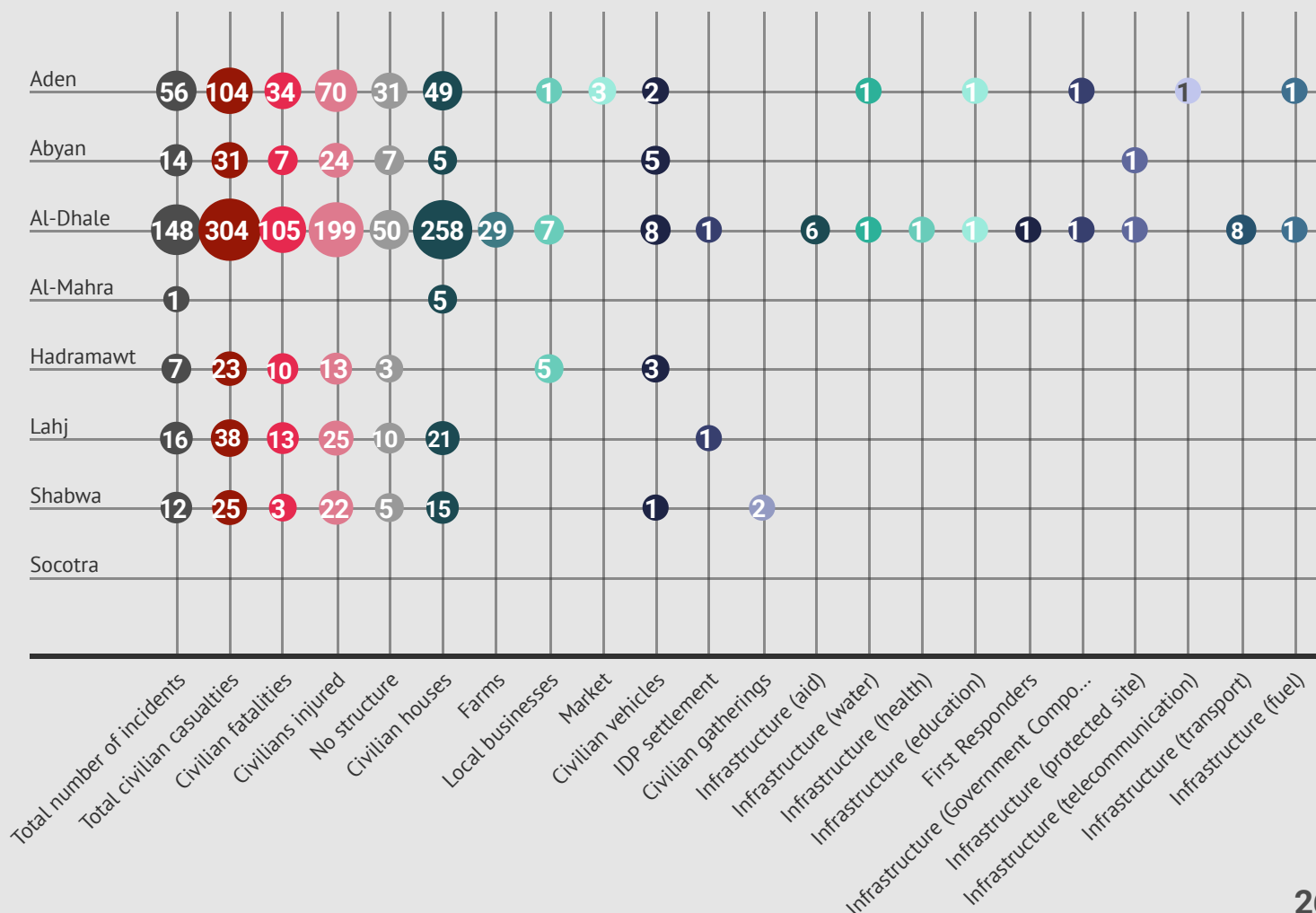
ADEN HUB

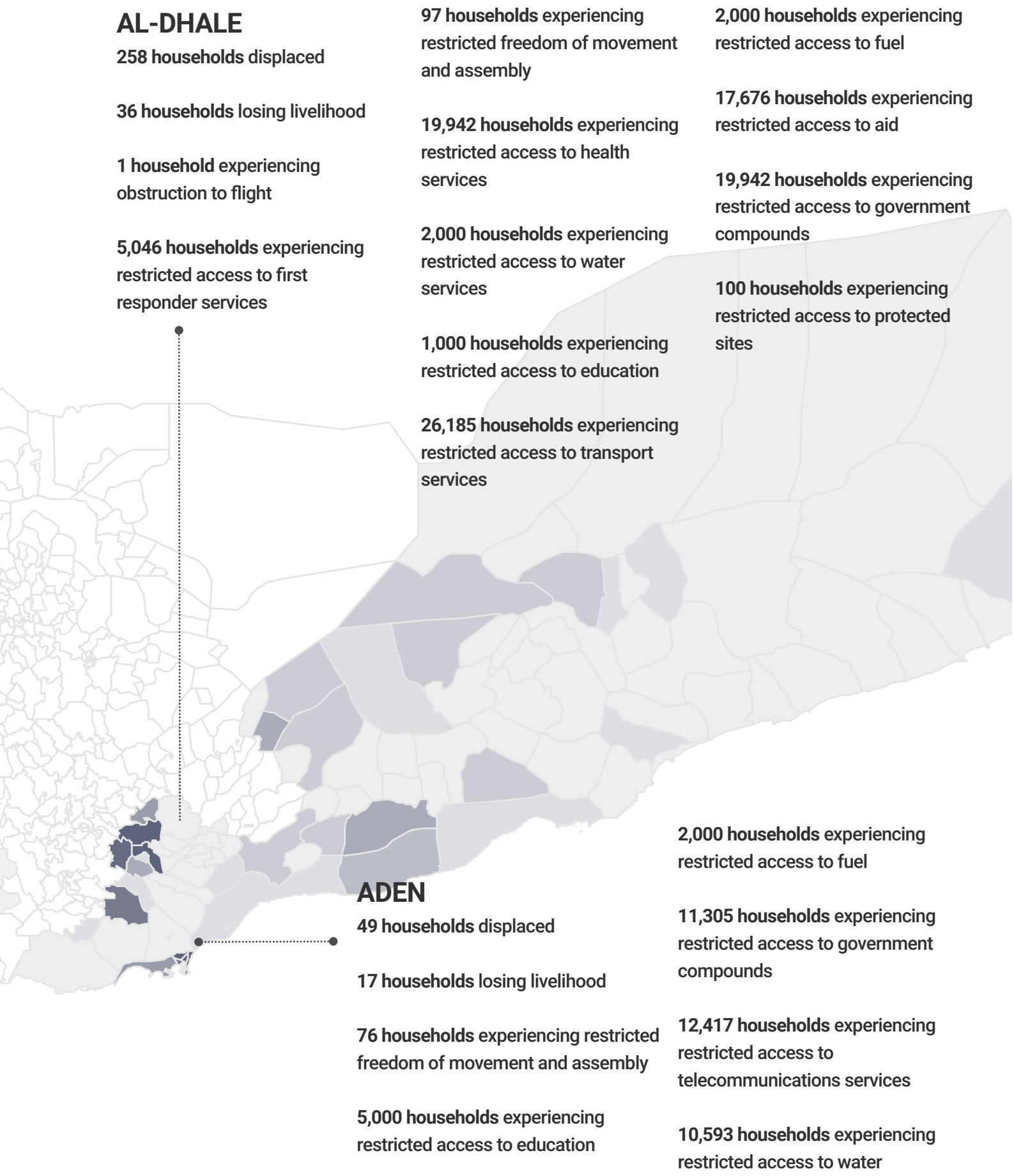


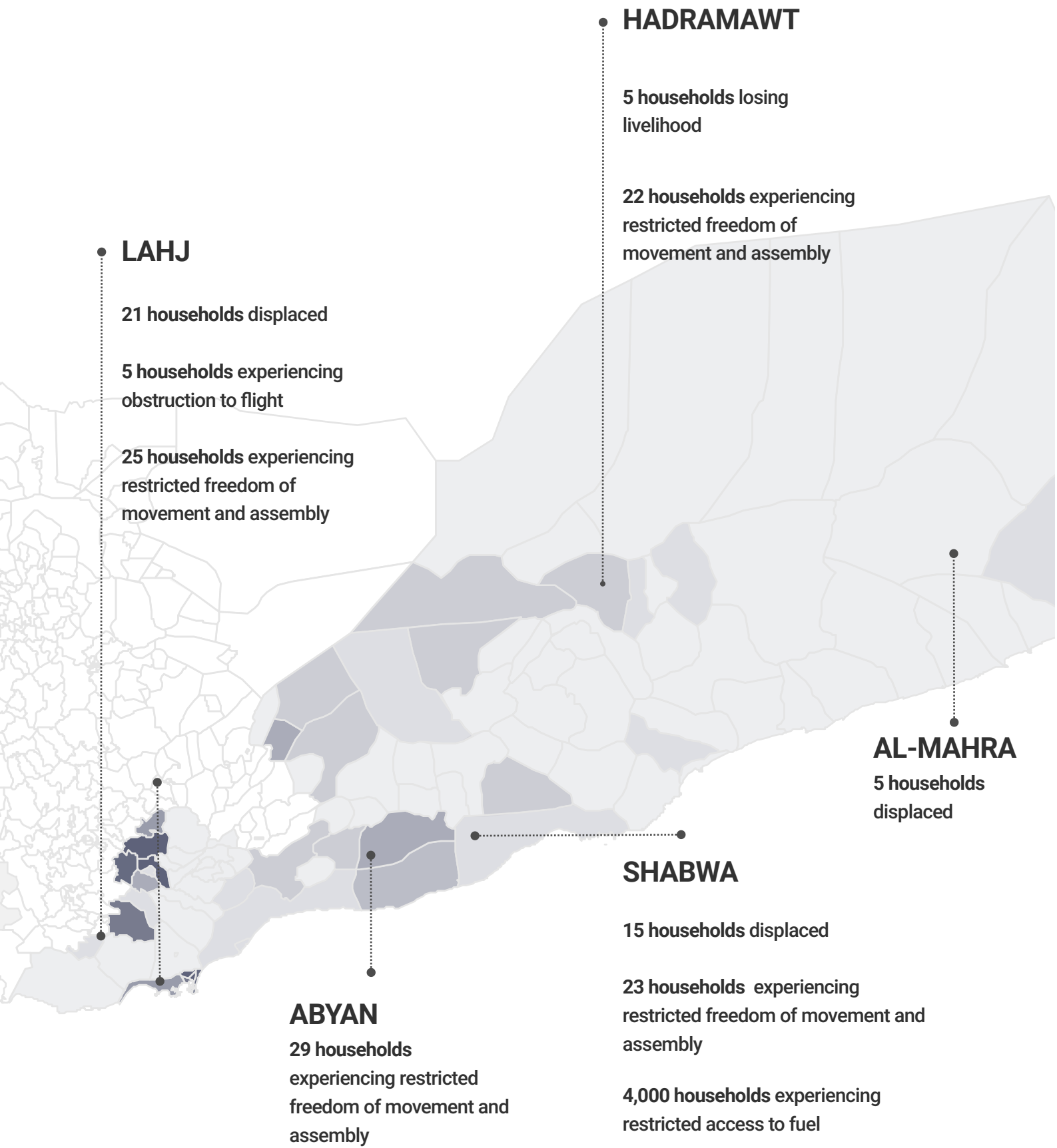
The most impacted civilian structure in the Aden hub was civilian houses, more than tripling, from 103 to 353 houses directly impacted by armed violence in 2019. Armed violence impacting on houses resulted in 173 civilian casualties, the majority of whom were a result of incidents of shelling (103), and airstrikes (56). Out of all governorates in the Aden hub, Al-Dhale saw the highest record of impacted houses (258), of which 77% (198) were in Qa'atabah district, where heavy fighting was ongoing throughout the year. Aden saw the second highest number of houses impacted (49), with Ash Sheikh Othman district seeing the highest numbers (18).

The second most impacted structure were civilian vehicles, of which 19 were affected, resulting in 54 casualties. Another trend, continuing from 2018, was the destruction of bridges with improvised explosives. In 2019, 7 bridges were destroyed in Al-Dhale, 5 of which were in Qa'atabah district. The year before, 3 bridges were destroyed across the hub. Such incidents pose severe access restrictions, often on major routes, impacting the flow of civilian traffic and goods, and also hindering humanitarian access.

CIVILIAN IMPACT PER GOVERNORATE







The above map shows concentration of civilian impact incidents per district