2018 saw a total of 405 civilian casualties as a result of 148 landmine, IED and UXO incidents, of whom almost half, 180 (44%), died. The first six months of 2019 saw 123 such incidents, causing 332 civilian casualties, of whom 129 (39%) died. The graphs below show incidents, casualties and fatalities in all of 2018 compared to the first six months of 2019.

The map shows the distribution of casualties caused by EO, mapped over casualties caused by other types of armed violence, including airstrikes, shellfire and fire from small arms and light weapons. There is a strong correlation between the two, with the density in incidents corresponding closely with the three main fronts in the conflict; on the west coast in Al-Hudaydah, in the northern border governorates or Hajja and Sa’ada, and on the southern fronts running through Taiz, Al-Bayda and Al-Dhale. Away from the main fronts, there is also a cluster of EO incidents reported to have caused civilian casualties around the capital city, as EO poses a threat on both active and dormant frontlines. By contrast, the eastern parts of the country, have seen significantly fewer reports of casualties as a result of EO.

Civilian casualty rates from explosive ordnance during the first six months of 2019 are almost double the figures seen during the same time period in 2018. The most notable increases have been seen among child casualty rates, which on average have almost tripled. All country-wide casualty and incident figures have shown an increase across the comparative time periods.

Furthermore, the first 6 months of 2019 have already seen 83% of the number of incidents, and 82% of the number of civilian casualties as seen during 12 months in 2018.
The map shows that landmine incidents were largely concentrated in or near current frontline areas, including in Al-Hudaydah, Al-Bayda, Taiz and Al-Dhale governorates. However, the average casualty toll per landmine incident was lower than for IEDs and UXO. On average, 2 civilians were injured or killed in each landmine incident reported to have directly harmed civilians during the first six months of 2019. UXO, meanwhile, although further from the frontlines, resulted in an average of 3 civilian casualties per incident, while IEDs caused on average twice as many, at 6 civilian casualties per incident. Local environmental factors, such as population density, are likely to heavily impact the civilian casualty toll.

Al-Hudaydah, which continues to see the highest rate of hostilities impacting on civilians, saw the greatest impact from EO during the first six months of the year in terms of incident numbers. However, the highest casualty toll was reported in Taiz, which saw the third highest incident rate. The charts below reinforce the divergence between incident rates and casualty toll, with the chart on the left showing the districts with the highest EO incident rates in the first six months of 2019, and the chart on the right showing the highest civilian casualty tolls.

**Case study 1: UXO in Sana’a**
UXO has the propensity to impact civilians away from the main frontlines. In an incident in Sana’a on 3 April, 2 children were killed and 15 others were injured when UXO reportedly exploded on the premises of a school in Hamdan, serving as a pertinent reminder of the lasting legacy of explosive remnants of warfare, even in relatively calm areas. 45 (80%) of the 56 civilian casualties caused by UXO in the first half of 2019 were children, their susceptibility likely heightened due to natural inquisitiveness.

**Case study 2: Landmines in Al-Bayda**
Compared to 2018, Al-Bayda saw the civilian casualty toll from EO increase fivefold in the same period in 2019, from 7 to 37, 25 (67%) of whom were caused by landmines. Half of these were reported in Az Zahir, coinciding with a recent flare in hostilities in the governorate. 34% of civilian casualties in Al-Bayda in the the first six months of 2019 were caused by landmines alone.

**Case study 3: IEDs in Taiz**
The port city of Al-Mokha, in Taiz, saw 2 IED incidents, just 3 weeks apart, impacting on civilians. The first, on 28 January, killed 6 civilians and injured 36 when a WBIED exploded near a cafe. On 14 February, a second WBIEED, this time in a market, killed 4 civilians and injured 8. A further 14 civilian casualties were reported in another 2 IED incidents in Taiz Old City, on the busy Jamal Street, on 4 March and 12 May. From IEDs alone, Taiz saw 74 civilian casualties; over half (55%) of the country-wide total from IEDs.
Children are particularly vulnerable to harm from landmines, IEDs and UXO. During the first six months of 2019, 1 in 4 fatalities from such incidents was a child, and every 1 in 3 civilians reported to have been injured by EO were children. In 2018, of 405 civilian casualties caused by EO, 73 (18%) were children. This has leapt dramatically in 2019, seeing child casualties making up 31%, 102, of the casualty toll during the first six months of the year. By 15 May, 2019 had already seen more child casualties than during all of 2018. Landmines have been responsible for the most child casualties, at 48, with a mortality rate of 40%, followed by UXO, in which 1 in 5 children to have been injured have died. IEDs have caused the fewest child casualties, but 67% of these have died from their injuries.

The Civilian Impact Monitoring Project is a service under the United Nations Protection Cluster for the collection, analysis and dissemination of open source data on the civilian impact from armed violence in Yemen, to inform and complement protection programming. For further information, please visit www.civilianimpactmonitoring.org.