

Israeli nuclear weapons capability

【Overview】

Israel, along with India and Pakistan, continues to possess nuclear weapons outside the NPT regime. Production of its nuclear arsenal likely began in the 1960s, Israel maintains its 'ambiguity policy', neither confirming nor denying that it has nuclear weapons.

Only limited information is available about Israel's nuclear capability but it is believed to possess two types of ground-launched ballistic missiles and airborne bombs. Also, Israeli submarines operating in the high seas (see footnote 2) may carry cruise missiles. Here, we estimate such SLCMs to number 10, thereby pegging Israel's arsenal at 90 warheads as of April 2020. It is thought that Israel, as India and Pakistan do, separately maintain their nuclear warheads and ground-launched missiles.

As of late 2014, Israel has around 300 kg of high enriched uranium (HEU) and approximately 900 kg of weapons-grade plutonium (**International Panel on Fissile Material 2018**). To manufacture a nuclear bomb, depending on technical levels and other factors, it requires 12-18kg of HEU or 4-6kg of plutonium. Accordingly, Israel possesses nuclear fissile material equivalent to 167-250 warheads. With higher levels of technical sophistication, however, it is possible to obtain a bomb from 2-4kg plutonium, in which case the same Israeli stockpile would suggest an arsenal of 225-450 warheads (**Union of Concerned Scientists 2009**). Kristensen and Norris suggest that Israel has not converted all its fissile material into nuclear warheads, and estimate the number of warheads in conjunction with the intelligence on their nuclear weapons delivery capabilities (**Kristensen, Hans M. & Norris, Robert S. 2014**).

Israel is considered one of the states in the Middle East with the more sophisticated missile technology and is said to possess missiles of multiple ranges.

In the region, there have been calls for a weapons of mass destruction-free zone (WMDfZ) banning nuclear and other WMDs. Israel, however, has shown little enthusiasm for such a zone, claiming priority for regional peace and stability. When the first international conference for a WMDfZ met at United Nations Headquarters in November 2019, both Israel and the United States chose not to attend.

Updated: June 1, 2020

- Nuclear warheads 80-90
- Nuclear weapons delivery vehicles ^{1) 2)}

Type / designation	No. of nuclear warheads	Range (km)	Payloads (kg)	Year first deployed	Remarks
Ground-launched ballistic missile	50				
Jericho 2	25	1,500 - 1,800	750 - 1,000	1990	3)
Jericho 3	25	< 4,000	1,000 - 1,300	In development	4)
Airborne bomb ⁵⁾	30				
F16A/B/C/D/I	30	1,600	5,400	1980	6)
Submarine-launched cruise missile	(10)				

【Notes】

- 1) The source for information on no. of nuclear warheads, delivery range, payloads and year first deployed is **Kile, Shannon N. & Kristensen, Hans M. 2019**.
- 2) Israel is set to deploy six German-made Dolphin-class attack submarines. Five have already been turned over to Israel, and the sixth will be delivered in 2020 (**NTI 2019**). Out of five submarines, there are old Dolphin-class and the rest are improved version of Dolphin II-class (**NTI2019**).
- 3) Solid-propellant. Two-stage. Road-Mobile. Expected to be replaced in phases by the Jericho 3 variant through 2026 (**Missile Defense Project 2018-1**).
- 4) Solid-propellant. Three-stage. Road – & Rail-Mobile (**Missile Defense Project 2018-2**). Test launch seemed to be conducted on July 12, 2013 (**Schell, Phillip Paton & Kristensen, Hans M. 2014**).
- 5) It is believed that part of the 25 F15 Strike Eagle aircrafts (called Lahm in Israel) carry out nuclear missions (**Schell, Phillip Paton & Kristensen, Hans M. 2014**).
- 6) It is believed that part of the 205 aircraft carry out nuclear missions (**Schell, Phillip Paton & Kristensen, Hans M. 2014**).

【Source】

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