



# NORTH KOREA

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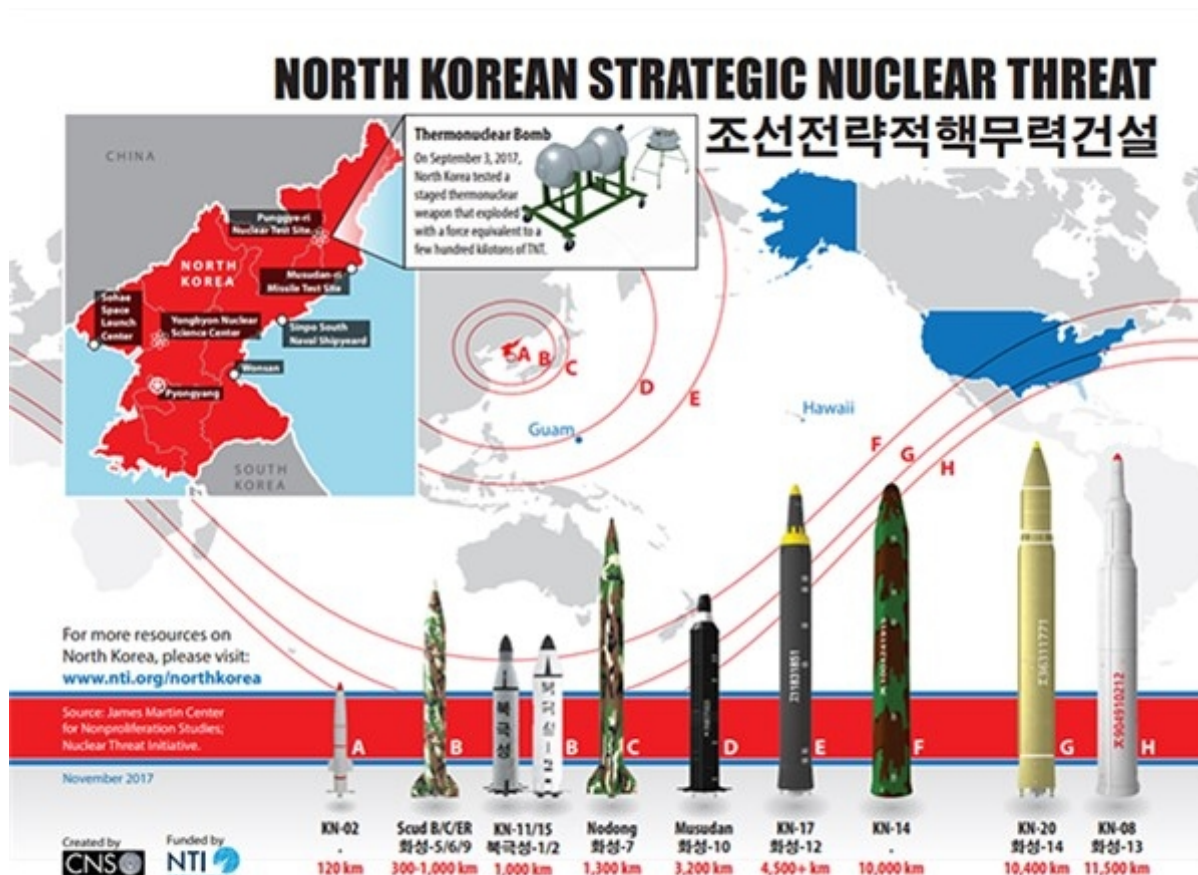
## Overview

Last Updated: December, 2017

North Korea (formally, the Democratic People's Republic of Korea or DPRK), has active and increasingly sophisticated **nuclear weapons** and ballistic missile programs, and is believed to possess chemical and biological weapons capabilities.

North Korea unilaterally withdrew from the **Treaty on the Non-Proliferation of Nuclear Weapons (NPT)** in January 2003, is not a party to the **Comprehensive Nuclear-Test-Ban Treaty (CTBT)**, and has conducted six increasingly sophisticated nuclear tests since 2006. The DPRK is not a party to the **Chemical Weapons Convention (CWC)**, and is believed to possess a large chemical weapons program. Despite being a state party to the **Biological and Toxin Weapons Convention (BTWC)** and **Geneva Protocol**, evidence suggests North Korea may maintain an offensive biological weapons program.

In defiance of the international community, which has imposed heavy **sanctions** on North Korea for its illicit behavior, the country has continued to escalate its **WMD** activities. In July 2017, North Korea successfully tested its first **intercontinental ballistic missile (ICBM)**, and in September 2017 it conducted a test of what it claimed was a **thermonuclear weapon**. [1]



\*Graphic shows DPRK capabilities as of November 2017

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## Nuclear

North Korea's nuclear ambitions date to the Korean War in the 1950s, but came to the attention of the international community in 1992, when the [International Atomic Energy Agency \(IAEA\)](#) discovered that its nuclear activities were more extensive than declared. [2] The revelations led North Korea to withdraw from the IAEA in 1994. In an effort to prevent North Korean withdrawal from the NPT, the [United States](#) and North Korea negotiated the [Agreed Framework](#), in which Pyongyang agreed to freeze its nuclear activities and give access to IAEA inspectors in exchange for U.S.-supplied [light water reactors](#) and energy assistance. [3] The Agreed Framework broke down in 2002. [4] North Korea unilaterally withdrew from the NPT in January 2003, prompting [China](#), [Japan](#), [Russia](#), [South Korea](#), and the United States to engage North Korea in the Six-

Party Talks in a further attempt at a diplomatic solution to the country's nuclear program. The talks fell apart in 2009, and no serious diplomatic initiatives to denuclearize North Korea have occurred since. [5] North Korea produces both **weapons-useable plutonium** and **enriched uranium**, with one U.S. government estimate in 2017 suggesting the country may be producing enough nuclear material each year for 12 additional nuclear weapons. [6]

## Biological

North Korea signed the Geneva Protocol and acceded to the Biological and Toxin Weapons Convention (BTWC) in 1987. U.S. intelligence sources consider North Korea capable of biological weapons production and weaponization. [7] [8] However, open source information on the status of the DPRK's biological weapons program varies. The 2016 Defense White Paper by South Korea's Ministry of National Defense estimates that the DPRK possesses the causative agents of **anthrax** and smallpox, among others. [9] The U.S. Secretary of Defense's 2015 report assesses that North Korea may consider the use of biological weapons as an option, contrary to its obligations under the Biological and Toxins Weapons Convention (BTWC), but does not reference specific agent stockpiles. [10]

## Chemical

North Korea is not a signatory to the Chemical Weapons Convention (CWC). [11] The DPRK's pursuit of chemical weapons dates to 1954, and it most likely obtained indigenous offensive CW production capabilities in the early 1980s. [12] A South Korean 2016 Defense White Paper estimates that North Korea has stockpiled between 2,500 and 5,000 tons of CW agent. [13]

Pyongyang has concentrated on acquiring **mustard**, **phosgene**, **sarin**, and **V-type chemical agents**. Reports indicate that the DPRK has approximately 12 facilities where raw chemicals, precursors, and agents are produced and/or stored, as well as six major storage depots for chemical weapons. [14] The United Nations Human Rights Council

reported that North Korea may have tested chemical weapons on prisoners and the disabled in February 2014, though it could not independently confirm the accuracy of defector accounts. [15] In February 2017, the half-brother of North Korean leader Kim Jong-un, Kim Jong-nam, was assassinated in the Kuala Lumpur international airport. Following the attack, Malaysian officials announced that Kim Jong-nam was killed by suspected North Korean agents wielding the nerve agent **VX**. [16]

## Missile

North Korea possesses a large and increasingly sophisticated **ballistic missile** program, and conducts frequent missile test launches, heightening East Asian tensions. In 2017, North Korea successfully tested the Hwasong-14 and Hwasong-15, its first ICBMs, which experts believe are capable of delivering a nuclear payload anywhere in the United States.

North Korea's initiated its ballistic missile program in the late 1970s and early 1980s, when it acquired Soviet **Scud**-type missiles from **Egypt** and reverse-engineered them. [17] In the early 1990's, with assistance from **Iran** and several other countries, North Korea began producing Nodong medium-range ballistic missiles (MRBM). [18] North Korea has developed and tested a number of new missiles since Kim Jong-un's ascension to leadership in 2011, such as the Intermediate-Range Hwasong-12 and the Pukguksong solid fuel missiles. [19] In addition to its land-based ballistic missiles, North Korea has successfully tested a **submarine-launched ballistic missile**, the Pukguksong-1. [20] North Korea also has a **Space Launch Vehicle**, the Unha, which uses technologies closely related to its ballistic missiles. [21] North Korea is not a member of the **Missile Technology Control Regime (MTCR)**.

*Visit the CNS/NTI **North Korea Missile Test Database** for a comprehensive visualization of all of North Korea's missile tests since 1984. Visit the **North Korean Ballistic Missile Models page** to interact with 3D models of North Korea's missiles.*

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**FACILITY TYPES****Biological****Chemical****Missile****Nuclear**[Q INTERACTIVE FACILITIES MAP](#)**Get the Facts on North Korea**

- Conducted nuclear tests in 2006, 2009, 2013, 2016, and 2017
- Not party to the CWC and believed to possess 2,500-5,000 metric tons of chemical weapons
- Active exporter of ballistic missile components, technology, and design data



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