Bio Terror Bible

EXPOSING THE COMING BIO-TERROR PANDEMIC

BIOTERRORBIBLE.COM: Despite the fact that the United States and its European Union allies have been researching, planning and drilling for a major bio-terror attack and the subsequent pandemic, the nations of Egypt, Iran, Iraq, Libya, North Korea and Syria have been quietly set up over the last decade as potential bio-terror scapegoats. Based on the evidence available, it appears that the U.S., Israel and South Korea may be the future victims of major false-flag bio-terror attacks.

While the world is distracted by the rhetoric and propaganda in respect to North Korea's missile program, North Korea has been quietly been set up as a bio-terror state that will likely play a pivotal role in the upcoming war of bio-terror. Based on recent news and events, it is highly likely that North Korea will attack South Korea with a bio-terror agent possibly causing a pandemic in the region.

Title: U.S. Report Finds Active Biological Weapons Programs In Iran, North Korea, Russia And Syria
Date: September 7, 2005
Source: NTI

Abstract: The U.S. State Department has found that Iran, North Korea, Russia and Syria are maintaining biological weapons programs, the Associated Press reported last week (see *GSN*, March 29).

The State Department also found that China still has “some elements” of a biological weapons program, while experts failed to agree on Cuba’s bioweapons production capacity, AP reported.

The findings were outlined in the State Department’s “Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments” report. The congressionally mandated report, covering the two-year period ending in December 2004, details individual country’s WMD capabilities and missile proliferation efforts, according to AP.

According to the report: Based on available intelligence, Iran is believed to have an offensive biological weapons program; North Korea has a “dedicated, national-level effort to develop a BW capability; Russia “continues to maintain” a weapons program; and Syria would be in violation of the Biological Weapons Convention if it was a member.

China “maintains some elements of an offensive BW capability,” while Cuba has at least a “limited offensive BW research and development effort,” the report found (George Gedda, Associated Press/*Baltimore Sun*, Aug. 30).

China rejected the report’s findings, according to *Voice of America*.

“These statements are far from the truth, and are irresponsible,” said Zhang Yan, director general of the Chinese Foreign Ministry's arms control department. “We hope that the U.S. side will stop such erroneous practices, and we also express our strong dissatisfaction” (Luis Ramirez, *Voice of America*, Sept. 1).

Russia has also challenged statements made in the report regarding its weapons programs, RIA Novosti reported last week.

“Those are not new accusations,” the Russian Foreign Ministry said in a statement. “The Russian Foreign Ministry has had to comment on similar points in other ‘research papers’ that put Russia in a group of countries violating nonproliferation agreements without providing any evidence many times before.”

The Foreign Ministry said the report presents “a one-sided and distorted picture of the implementation of the Strategic Arms Reduction Treaty.”

Russia said the State Department offered no evidence that it has failed to honor its Chemical Weapons Convention and Biological Weapons Convention commitments (NTI, 2005).

Title: N Korea 'Tests Weapons On Children'
Date: July 24, 2009
Source: Al Jazeera

Abstract: Ex-special forces captain says biological and chemical weapons tested on human guinea pigs.

When Im Chun-yong made his daring escape from North Korea, with a handful of his special forces men, there were many reasons why the North Korean government was intent on stopping them.

They were, after all, part of Kim Jong-il's elite commandos - privy to a wealth of military secrets and insights into the workings of the reclusive regime.

But among the accounts they carried with them is one of the most shocking yet to emerge – namely the use of humans, specifically mentally or physically handicapped children, to test North Korea's biological and chemical weapons.

"If you are born mentally or physically deficient, says Im, the government says your best contribution to society… is as a guinea pig for biological and chemical weapons testing."

Even after settling into the relative safety of South Korea, for 10 years Im held on to this secret, saying it was too horrific to recount.

But with Kim's health reportedly failing, and the country appearing increasingly unpredictable, Im felt it was time he spoke out.

Daughter Given Up

The former military captain says it was in the early 1990s, that he watched his then commander wrestle with giving up his 12-year-old daughter who was mentally ill.

The commander, he says, initially resisted, but after mounting pressure from his military superiors, he gave in.

Im watched as the girl was taken away. She was never seen again.

One of Im's own men later gave him an eyewitness account of human-testing.

Asked to guard a secret facility on an island off North Korea's west coast, Im says the soldier saw a number of people forced into a glass chamber.

"Poisonous gas was injected in," Im says. "He watched doctors time how long it took for them to die."

Other North Korean defectors have long alleged that the secretive nation has been using political prisoners as experimental test subjects.

Some have detailed how inmates were shipped from various concentration camps to so-called chemical "factories".

'Widespread Practice'

But Im's is the first account of mentally-ill or physically challenged children being used.

Security analysts believe Kim oversees one of the most aggressive and robust biochemical weapons programmes in the world.

A member of the special forces' Brigade No.19, Im says he was trained on how to use biochemical weapons against the "enemy" – including how to fire them from short-range "bazooka-style" weapons.

He says such training was normal practice for all elite units.

Today it is estimated the country has accumulated a stockpile of more than 5,000 tonnes of biochemical weaponry; from mustard gas, to nerve agents such as sarin, to anthrax and cholera.

The extent of the stockpile is a concern to Kim Sang-hun, a retired UN official who has spent years investigating the North's chemical and biological weapons programme.

He believes over the past 20 years, the programme has advanced at a startling pace, specifically because the country’s rulers approve and support the use of human test subjects.

"Human experimentation is a widespread practice," Kim says.

"I hoped I was wrong, but it is the reality and it is taking place in North Korea and it is taking place at a number of locations."

There are some who question claims that the North conducts human trials. But Kim says he has interviewed hundred of defectors who, more times than not, volunteer personal vivid accounts.

"The programme is now a commonly known fact in the North Korean public," he says.

As a former member of the elite special forces, Im agrees.

While the government may be secretive about a lot of things, he says "when it comes to human experimentation, most know it happens".

Investigating what he says are serious UN violations regarding the rights of children and prisoners, Kim Sang-hun has amassed a vast amount of evidence.

Compiled in folders at his home in Seoul are reams of testimonies and documents.

Some bear what appear to be official government stamps approving the transfer of prisoners from camps to chemical "factories".

He says he believes these are, in reality, experimental weapons sites.

He has pinpointed at least three to five labs that he believes are situated in different parts of the country, including one just a few kilometres north of the capital, Pyongyang.

Security analysts suspect there are as many as 20 such plants across the country.

Biochemical Threat

As the world's attention focuses on the North's nuclear programme, Im is worried the international community will miss what he believes is the more imminent threat posed by the country's biochemical arsenal.

Arms experts say at least 30 per cent of North Korea's missile and artillery systems are capable of delivering such weapons. With each successive test, they warn the North's accuracy improves, and so too its range.

The UN Security Council now says it believes three of the seven missiles tested by the North on July 4 were Scud-ER missiles, which are known to be more accurate and have a range of 1,000km.

Tokyo is roughly 1,160km from the base on North Korea's east coast from where the missiles were fired, while other parts of Japan are closer.

Im believes the government would not hesitate to use such arms, saying he has seen the "ruthlessness" of the country's leaders.

During his escape from North Korea in December 1999, Im says he and his men battled their way out, chased by dozens of members of other commando units.

"I myself killed three men," he says. "Then after swimming across the half frozen Tumen river into China, we sold our guns, and left that life behind."

Im now devotes his time to gathering intelligence about the North's military capabilities.

Even a decade after his escape, the threat he still poses to the North Korean government means that he now lives under the constant protection of South Korea's National Intelligence Service (Al Jazeera, 2009).

Title: North Korea's Biochemical Threat
Date: October 1, 2009
Source: Popular Mechanics

Abstract: While its nuclear test spurs outrage, North Korea has grown a vast biochemical weapons arsenal in secrecy. We investigate Kim Jong Il's deception, plus his rogue nation's human trials and its deadly harvest's terror potential.

Fifty miles south of the Chinese border lies the rural town of Chongju. Like many North Korean towns, it is a small, impoverished place where people scratch a bare existence from government-controlled farms. What photographs exist of Chongju reveal a brown landscape of depleted-looking fields and shanty-style houses. It is hard to believe anything of value grows here.

But, according to intelligence reports, something precious to the North Korean regime may be under cultivation in Chongju. Beyond the shacks stands an installation suspected of being a component in North Korea's bioweapons (BW) research and development program. The effort is steeped in a level of secrecy possible only in a totalitarian state, but it is thought to encompass at least 20 facilities throughout the country. Another 12 plants churn out chemical weapons.

In late November, delegates of the signatory countries to the Biological and Toxin Weapons Convention (BTWC) met at the United Nations office in Geneva for the sixth review of the treaty since its inception in 1972. The meeting took place just weeks after North Korea publicly added the third prong to its capacity for weapons of mass destruction (WMD) by testing a nuclear device.

On day one, the U.S. delegate, Assistant Secretary of State John C. Rood, charged North Korea, along with Iran and Syria, with violating the ban on researching and developing biology for war. "We have particular concerns with the activities of North Korea ... in the biological weapons context, but also because of their ... support for terrorism and their lack of compliance with international obligations," Rood said. Internationally, it is widely agreed that the country is aggressively developing several weapons of mass destruction.

North Korea has been a signatory to the BTWC since March 1987. But, according to defectors, South Korean intelligence agencies and other sources, the nation's Fifth Machine Industry Bureau has led a successful effort to build one of the world's most extensive biochemical warfare programs. The weaponry is thought to have the potential to decimate North Korea's southern neighbor and the 28,000 U.S. troops stationed there, and to disrupt the regional economy. The gravest danger may be that North Korean dictator Kim Jong Il could sell his weapons to terrorists.

In contrast to the global frenzy triggered by North Korea's nuclear weapons test, the threat of biochemical WMDs has prompted a muted response from the West. The reason may be what former weapons inspector Christopher Davis has dubbed "nuclear blindness," which he defines as "the tunnel vision ... brought on by the mistaken belief that it is only the size of the bang that matters."

Dual-Use Deception

North Korea’s Chemical and Bioweapons (CBW) program appears to be modeled on that of the former Soviet Union, which covertly constructed a massive biological weapons infrastructure within the shell of a civilian research organization called Biopreparat. Inside Biopreparat, the Soviets developed deadly agents that included weaponized forms of anthrax and pneumonic plague.

Intelligence reports from the United States and South Korea list anthrax, smallpox, pneumonic plague, cholera and botulism toxins as leading components of North Korea's bioweapons projects. "Information from U.S. government sources indicates that North Korea is capable of growing several biological agents," says Michael Stebbins, head of Biology Policy at the Federation of American Scientists. And, he says, the country "has the infrastructure to weaponize them."

Anthrax is believed to be one of North Korea's most fully developed biological weapons. Growing anthrax on a large scale is relatively easy: It can be done with basic brewing equipment. Sources indicate that North Korea also has developed the ability to mill anthrax (grinding the cake into microscopic powder), and to treat it to form a lethal and durable weapon. An attack might use a modified missile that cruises at low altitude to spray a fine mist of weaponized germs over its target area. The resulting deaths and injuries could number in the thousands.

Following the same model that it employs in its BW program, the North Korean regime has folded a chemical weapons (CW) initiative into its civilian chemical industry. A 2003 CIA report stated: "Pyongyang continue[s] to acquire dual-use chemicals that could potentially be used to support [its] long-standing CW program. North Korea's CW [can] produce bulk quantities of nerve, blister, choking, and blood agents, using its sizable, although aging, chemical industry." An example is mustard gas, famously employed during World War I. It is made using 2-chloroethanol, a byproduct of carbide production.

Daniel Pinkston, director of the East Asia Nonproliferation Program at the Center for Nonproliferation Studies in Monterey, Calif., says most assessments of North Korea's WMD capabilities point to a chemical weapons stockpile of some 5000 tons of agents, including large amounts of sarin, mustard gas

and hydrogen cyanide. That would make it one of the largest chemical arsenals in the world. Up to 30 percent of the country's missile and artillery stocks is capable of delivering such chemicals, according to the Nuclear Threat Initiative, an organization that monitors nuclear, biological and chemical weapons proliferation.

North Korea is the only world government that has never signed, acceded to or even responded to invitations to join the Chemical Weapons Convention. There appears to be a good reason for that: Unlike the BTW Convention, the chemical weapons treaty mandates independent inspections.

Human Trials

North Korea's biological and chemical weapons have never been deployed against outside enemies. According to defectors, however, they have been used inside the country on human test subjects. The victims: political prisoners.

Former prisoner Lee Sun Ok described one such test before the U.S. House Committee on International Relations: "In February 1990, I was asked by the chief guard to follow him to an administration warehouse ... He ordered me to check out six bundles (five pairs in each bundle) of gas masks with rubber gowns, which looked like a sea diver's kit. When I returned to my prison chamber, a total of 150 prisoners, several from each unit, were selected and separated from the other[s]. The selected prisoners were mostly crippled and weak women who had less labor value."

Later, said Lee, "I saw many prisoners lying on the slope of a hill, bleeding from their mouths and motionless, enveloped by strange fumes and surrounded by scores of guards in the gas masks ... I delivered earlier in the morning."

Additionally, a South Korean human rights activist has obtained what he claims are documents authorizing the transfer of prisoners for WMD experimentation. "The above person is transferred ... for the purpose of human experimentation with liquid gas for chemical weapons," one document reads.

The Terror Potential

Tens of thousands of American troops and millions of civilians reside within range of North Korea's missiles. However, Robert Templer, Asia Program director for the International Crisis Group, says the most threatening scenario may not be a direct attack by North Korea, but rather what might happen to the weapons during the chaos that would erupt if the regime crumbles.

"Over the past 10 years we Templer says. **"If the country collapses, then in the vortex created by the lack of command and control and restraint on these weapons, some general may have seen different parts of the state beginning to operate with a greater level of freedom," decide to sell them to a middleman, to someone in China, to an arms dealer with enough money."**

And it wouldn't take a change in the power structure for the North Korean government to begin selling such weapons to terrorist groups. Ironically, North Korea's WMD threat may be sharpest when the weapons move beyond the control of Kim Jong Il, the world figure who has come, perhaps more than any other, to symbolize the dangers of WMD proliferation (Popular Mechanics, 2009).

Title: N Korea Said To Have 13 Types Of Biological Weapons.
Date: October 5, 2009
Source: Free Library

Abstract: North Korea is thought to have 13 types of viruses and germs which can be used in biological weapons, as well as up to 5,000 tons of chemical weapons, South Korea s defence ministry said Monday.

In a report to parliament, the ministry said the communist North has one of the world s largest stockpiles

of chemical and biological weapons.

The list of diseases that could be caused by the biological weapons includes cholera, yellow fever, smallpox, eruptive typhus typhus, any of a group of infectious diseases caused by microorganisms classified between bacteria and viruses, known as rickettsias. Typhus diseases are characterized by high fever and an early onset of rash and headache. , typhoid fever and dysentery dysentery (dĭs`əntĕr'ē), inflammation of the intestine characterized by the frequent passage of feces, usually with blood and mucus. , it said. The ministry estimated its neighbour s stockpile of chemical weapons at between 2,500 to 5,000 tons.

The assertions that the North has chemical and biological weapons, in addition to its nuclear and conventional weaponry, are not new. But Monday s report gave more details of the alleged biological arsenal.

The International Crisis Group said in a report in June that PyongyangEoe1/4aos nuclear capabilities are the greatest threat, but it also has a large chemical weapons stockpile and a suspected biological weapons programme.

The chemical weapons could be deliverable by artillery or missile to cause massive civilian casualties in South Korea, the Brussels-based think-tank said.

The stockpile includes between 2,500-5,000 tons of mustard gas, phosgene phosgene (fŏs`jēn), colorless poison gas, first used during World War I by the Germans (1915). When dispersed in air, the gas has the odor of new-mowed hay. , blood agents, sarin sarin (zärēn`), volatile liquid used as a nerve gas. It boils at 147°C; but evaporates quickly at room temperature; its vapor is colorless and odorless. , tabun tabun (tä`bən), liquid chemical compound used as a nerve gas. It boils at 240°C; with some decomposition. The liquid is colorless to brownish; its vapors have a fruity odor similar to that of bitter almonds. and persistent nerve agents and can be delivered by long-range artillery, missiles, aircraft and naval vessels, it said.

The North and South have remained technically at war since their 1950-53 conflict ended only in an armistice and not a peace treaty. The South s 655,000-strong military, backed up by 28,500 US troops, faces off against the North s 1.2 million-member armed forces (Free Library, 2009).

Title: Army Questions Preparedness In Face Of N. Korean Bio-Threat
Date: February 4, 2010
Source: Bio Prep Watch

Abstract: Senior U.S. officials, noting North Korea's biological and chemical weapons as well as nuclear warheads and long range missiles, announced that U.S. ground forces may not, in the case of an emergency situation in North Korea, be able to arrive in South Korea in time.

"We could not get the Army units required for South Korea into South Korea on the time line required by the plan," Secretary of Defense Robert Gates told a hearing of the House Armed Services Committee. "That's not to say they wouldn't get there. It's just that they wouldn't get there as quickly because of the commitments that we have in Iraq and Afghanistan. And so certainly initially we would be especially dependent on the Navy and the Air Force."

If the proposed troop withdrawal in Iraq in 2011 were to occur, Michael Mullen, chairman of the Joint Chiefs of Staff has said, extra ground troops could arrive in South Korea in time.

If North Korea were to collapse, a report issued by the Council on Foreign Relations issued last year said, 460,00 troops, or approximately three times the number deployed in Iraq, would be needed to maintain stability in the country.

Locating, safeguarding, and disposing of materials and stockpiles of the North's estimated six to eight nuclear weapons, four thousand tons of chemical weapons, and any biological weapons, as well as its ballistic missile program, would be a high priority, especially for the United States," the report said.

North Korea is also believed to be in possession of ballistics missiles that would be capable of reaching western parts of the United States (Bio Prep Watch, 2010).

Title: N. Korea 'Plotting Biochemical Attack'
Date: August 13, 2010
Source: Chosun Ilbo

Abstract: North Korea is trying to launch a biochemical attack against the South prior to the G20 Summit in Seoul in November, a conservative activist claimed Thursday citing a North Korean source.

Choi Sung-yong, the head of Family Assembly Abducted to North Korea said the North is preparing to send 20 different deadly biochemical weapons attached to balloons and parachutes across the border. He said the campaign is led by Gen. Kim Kyok-sik, who commands the North's frontline fourth corps, at the orders of leader Kim Jong-il's heir apparent Jong-un.

Choi said the story came from "an active soldier in the North Korean Army." Kim Kyok-sik was chief of the General Staff of the People's Army before being demoted to his current post and is thought to have masterminded the torpedo attack on the South Korean Navy corvette Cheonan.

Choi also claimed a number of North Korean mines found south of the border after recent floods were deliberately floated down the Imjin River by Kim Kyok-sik's men at Kim Jong-un's orders.

"The source said the frontline fourth corps is collecting mines from all over North Korea, not only in Hwanghae Province where the fourth corps is located but from as far afield as North Hamgyong Province. It floated the mines down intentionally but blamed it on floods," Choi claimed.

Asked about the claim, a National Intelligence Service spokesman was noncommittal, saying, "It's possible to imagine a number of scenarios, but we can't draw any conclusions at the moment." The Joint Chiefs of Staff declined to comment. (Chosun Ilbo, 2010).

Title: North Korea Has Capability To Mass Produce Chemical Weapons, Expert Says
Date: October 14, 2010
Source: Bio Prep Watch

Abstract: Officials with the Korea Institute for Defense Analyses have said that they believe that North Korea has the ability to produce up to 12,000 tons of chemical weapons.

In a recent report, Korea Institute for Defense Analyses Kwon Yang-Joo said this capability could cause unprecedented civilian casualties in South Korea, AFP reports. Amidst concerns over North Korea's nuclear capabilities, Yang-Joo told AFP that the North Korea's chemical weapons stockpile is South Korea's number one security priority.

"The international community must show its strong will in seeking disarmament of North Korea's chemical weapons along with its denuclearization," Yang-Joo told AFP.

South Korea Defense Ministry officials estimate that North Korea possess approximately 2,500 to 5,000 tons of mustard gas, blood agents and nerve gas, according to the AFP report. Yang-Joo said North Korea could easily manufacture up to 12,000 tons of chemical weapons that could be deliverable by aircraft, missiles or artillery shells.

Yang-Joo estimated that 5,000 tons of chemical agents could contaminate 950 square miles, an area that is about four times the size of Seoul. He also said that if North Korea was to use all of its chemical stockpile at once, it would have the ability to produce upwards of 1.25 million chemical bombs, AFP reports (Bio Prep Watch, 2010).

Title: Concerns Raised About Potential North Korean Bio Attack
Date: November 12, 2010
Source: Bio Prep Watch

Abstract: British diplomats have recently announced some concern that North Korea may strike South Korea with biological weapons during the G20 summit in order to create an attention grabbing event.

Among possible scenarios, diplomatic sources revealed, are an incursion into South Korean waters, missile testing in South Korean airspace and even the use of biological weapons filled balloons against Seoul, according to the Telegraph.

“There has been some speculation that North Korea would try to disrupt the summit,” a diplomatic source revealed, according to the Telegraph. "They are in the midst of a succession. The leadership must want to demonstrate it's more than business as usual."

Last month, Kim Tae-Young, South Korea’s defense minister, warned that North Korea could potentially launch attacks he called provocative during the succession period.

U.S. Secretary of State Hillary Clinton voiced concerns ahead of the G20 meeting that U.S. President Barack Obama will attend. She reportedly went as far as to ask Chinese State Councilor Dai Bingguo to ensure that North Korea abstain from such displays, the Telegraph reports.

British officials said on November 10 that the U.K. position remains that it hopes to see the six party talks concerning North Korea’s nuclear program continue, as well as the firm pressure of international sanctions (Bio Prep Watch, 2010).

Title: South Korea Claims North Korea Possesses Mass Chemical, Biological Weapons
Date: December 31, 2010
Source: Bio Prep Watch

Abstract: In a recently published defense white paper, South Korea claimed that North Korea is in possession of and continues to develop chemical, biological and nuclear weapons.

According to the white paper, North Korea has 2,500 to 5,000 tons of various chemical weapons and has extracted approximately 40 kilograms of plutonium by reprocessing spent fuel rods from a 5 MW nuclear reactor it has run since the 1980s.

Additionally, according to the paper’s details as reported by English.Chosun.com, the North has increased the number of its special forces troops by 20,000 over the past two years, reaching a total of approximately 200,000, mostly deployed in a light infantry division under an Army Corps that is stationed near the frontline. A light infantry regiment has also been added to an Army division nearby.

The force of 200,000 is reportedly ready to carry out combined operations aimed at attacking major South Korean facilities, assassinating important people and infiltrating the South by using a network of underground tunnels.

A 2006 defense white paper estimated the North's special forces to number approximately 120,000. By 2008, that number had increased to 160,000, English.Chosun.com reports. Currently, they account for 17 percent of the total number of North Korea's 1.19 million soldiers (Bio Prep Watch, 2010).

Title: North Korean Anthrax Attack Could Kill 600,000
Date: October 27, 2011
Source: Bio Prep Watch

Abstract: An American defense expert recently warned that North Korea could kill between 20,000 and 600,000 South Koreans if it released anthrax over Seoul, depending on the dispersion method.

Bruce Bennett, a senior policy analyst at the RAND Corporation, said that approximately 40 percent of those infected in such an attack would die within 10 days. Bennet made the comments at an international symposium on North Korea's biochemical capabilities held at the Korean Military Academy, according to Donga.com.

A North Korean attack using an aerosolized form of anthrax would leave many with respiratory anthrax, the most difficult form of the illness to treat. Most of the affected would show symptoms of exposure by the third day and begin dying on the fourth day.

Bennett said that because North Korea would most likely use several means of dispersing anthrax spores, including missiles, aircraft and special forces equipped with specialized equipment, South Korea should take action now to bolster its detection capabilities.

Bennett suggested that aircraft that could potentially carry anthrax should be destroyed, if at all possible, over North Korean airspace because the virus could reach the ground even after the planes are intercepted. Bennett also encouraged South Korea to investigate domestic groups with connections to North Korea that would be capable of spreading chemical materials over a large area.

Overall, Bennett said that the use of biological weapons by North Korea would occur as a prelude to an attack, adding that it would change the nature of any conflict on the Korean Peninsula (Bio Prep Watch, 2011).

Title: Exercise Focuses On Potential N. Korea Biological, Chemical Attack
Date: November 10, 2011
Source: Stripes

Abstract: U.S. and South Korean military officials huddled in operations centers over the past two weeks going over, in great detail, how they would respond to a chemical or biological attack from North Korea.

While many details of the exercise are classified, 2nd Infantry Division officials said the computer-based Warpath III exercise, which was scheduled to end Thursday, gave 1,000 servicemembers from eight American and South Korean brigades experience in how the alliance would react with the "full spectrum" of its manpower and equipment in the event the North made good on threats it has made over the years.

"That threat is real," 2ID spokesman Lt. Col. Joe Scrocca said. "The regime in North Korea … they claim to have those weapons (and) they've threatened to use those weapons.

"I think it would be irresponsible not to take that threat seriously. If we don't practice, we will not be ready if they use those weapons. We're practicing for a real-world threat on the peninsula."

After getting an operations center update Tuesday from participants in the exercise, 2ID commander Maj. Gen. Edward C. Cardon said U.S. and South Korean officials should not be lulled into a false sense of

security by conciliatory gestures the North has made in recent months toward the alliance and the rest of the outside world.

“I’m in the security business, where you constantly get surprised,” he said. “So, the best thing you can do is be ready. All we can do is remain as ready as possible and show that we are capable.”

Earlier in the day, as he flew by helicopter between exercise bases of operation at Camp Casey and at a Korean army base near Gimpo, Cardon said it is “an unknown unknown” whether North Korea will continue to present itself as open to negotiations with the U.S. and the South, and to continue to try to distance itself from last year’s sinking of a South Korean warship and shelling of an island near the disputed maritime border between the two Koreas – events that left 50 people dead.

“Our job is to be ready for whatever comes,” the commander said. “We’re in the business of conducting operations with the least … loss of life.”

While North Korea’s developing nuclear weapons program has grabbed the lion’s share of headlines in recent years, those familiar with the North believe its chemical and biological capabilities would be key elements of any all-out attack on the South.

A 2007 Popular Mechanics investigative report stated that, according to defectors, South Korean intelligence agencies and other sources, North Korea has built “one of the world’s most extensive biochemical warfare programs.”

“The weaponry is thought to have the potential to decimate [South Korea] and the 28,000 U.S. troops stationed there,” the story said.

In 2009, The Associated Press reported that it is “widely believed the North has a chemical capability that it could unleash in the early stages of a land war to demoralize defending forces and deny the use of mobilization centers, storage areas and military bases.”

In September, the Yonhap News Agency reported that South Korean lawmaker Shin Hak-yong called for greater efforts to expand the South’s defense against potential biological warfare, saying that North Korea is prepared to spread 13 kinds of biological agents, including anthrax bacterium, the smallpox virus and cholera.

And last month, The Dong-A Ilbo newspaper reported that Bruce Bennett – a senior policy analyst at the U.S.-based RAND Corp. think tank – said as many as 240,000 people would die if North Korea managed to release 10 kilograms of anthrax over Seoul.

Speaking at an international symposium at the Korea Military Academy, Bennett reportedly said the North would use a variety of methods – including missiles, aircraft or special forces – to spread anthrax as the prelude to an attack on South Korea.

Cardon — who recently took over as 2ID commander after serving in Iraq — said the North’s chemical and biological capabilities “bring their own set of complexities” the U.S. military has not had to deal with in Afghanistan or Iraq.

“Our job is to be ready for whatever comes,” he said.

Commenting on the Warpath III exercise, Scrocca said, “We’re just about the only ones in the Army doing this full-spectrum-type stuff against all possible type threats. This is all computer-based … but we’re working on the strategies that would be used in a full spectrum of operations.

“If they were to come across the border, how would we (defend) against that?” he said. “We’re practicing the identification, detection and defense against chemical-biological weapons — How would we be able to detect (chemical-biological weapons)? What would happen once they are detected? How would we decontaminate soldiers and equipment if that happened?” (Stripes, 2011).

Title: North Korea’s Other Weapons Threat
Date: November 12, 2011
Source: Diplomat

Abstract: International attention is usually focused on North Korea’s nuclear weapons program. But Pyongyang’s growing chemical and biological weapons capabilities are worrying Seoul.

North Korea’s latent nuclear weapons program is rightfully the main point of concern for its neighbors and the international community. But far less publicized is Pyongyang’s ongoing efforts to build upon its capabilities to produce and maintain chemical and biological weapons (CBW).

North Korea’s expansion of these programs is no secret to intelligence agencies around the world, and there are a number of reports detailing sites across the country dedicated to the production of CBW. The question, though how, is has Pyongyang been able to circumvent the international CBW regime so easily?

On the question of chemical weapons, this problem is easier to understand – North Korea isn’t a state party to the Chemical Weapons Convention (CWC) and has never been subject to inspections of its chemical industry facilities or sites believed associated with its CW program. Regardless, there’s little debate about the existence of the North’s CW program, with intelligence assessments from Russia, Britain, the United States and South Korea all indicating that Pyongyang continues to produce CW stocks.

Much less clear is the scope of the CW program and its level of advancement. Most assessments concur that the North has produced all of the main chemical agents such as nerve (including VX gas), blood, blister and choking agents. There’s less certainty regarding the amount of chemical agents stockpiled by the regime, although estimates range from 1,000 to 5,000 tons. However, even if the North’s program is at the low end of estimates, its capacity is bolstered by the fact that its military has a variety of sophisticated delivery vehicles for CW attacks including missiles, artillery and airborne bombs.

While Pyongyang publicly denies the need for transparency on its CW program, its production of biological weapons is muddied and concealed by weak international non-proliferation standards. Unlike the Organization for the Prohibition of Chemical Weapons (OPCW), which has robust verification standards, the Biological Weapons Convention (BWC) is plagued by the failure of its members to agree on a universal verification mechanism that would adequately ensure that all state parties are held to account for their treaty commitments.

States at the BWC have been engaged in talks to come to an agreement on a suitable verification arm, but these efforts were cut short after the United States withdrew its support back in 2001. At the time, George W. Bush’s administration insisted that such a mechanism would require considerable financial capital with little pay off in security terms. The Pentagon also stressed that it was concerned about diverting precious resources on combating BW to a multilateral organization that would in turn take away funds from its successful biodefense programs. But perhaps the largest hurdle is to overcome U.S. and other members’ concerns that a strict verification regime may impose heavy restrictions on the biotech industry (Diplomat, 2011).

Title: Greece Seized Anti-Chemical Weapons Suits From North Korea In 2009
Date: November 17, 2011
Source: Bio Prep Watch

Abstract: Greek authorities seized almost 14,000 anti-chemical weapons suits from a North Korean ship potentially headed for Syria but did not disclose the finding for close to two years, diplomats said on Wednesday.

The seizure was reported to the U.N. Security Council, which discussed monitoring nuclear sanctions against the isolated North. The Greek operation was carried out in November 2009 but was only reported to the United Nations in September, a diplomat told AFP on condition of anonymity. The diplomat also confirmed the number of suits to protect against chemical weapons that were involved, AFP reports.

"It seems the shipment was headed for Latakia in Syria," a second diplomat said, according to AFP. "There is increasing concern because more and more of the violations before several sanctions committees seem to involve Syria."

Syria has already been connected to breaches of an arms embargo against Iran.

Both diplomats spoke on condition of anonymity as the report by Jose Filipe Moraes Cabral, the chairman of the North Korea sanctions committee and Portugal's U.N. Ambassador, was given behind closed doors. The U.N. Security Council ordered tough sanctions against North Korea after the country staged nuclear weapons tests in 2006 and 2009.

The North pulled out of nuclear talks with South Korea, Russia, Japan, China and the United States in 2009 and efforts to kick start negotiations are struggling. The United States and its allies are saying that North Korea is not serious about disarmament.

"(There are) strong concerns in council about the ongoing proliferation efforts," a German diplomat said, according to AFP (Bio Prep Watch, 2011).

Title: North Korea Remains Chemical Attack Threat
Date: December 20, 2011
Source: Bio Prep Watch

Abstract: The next North Korean leader will take over an impoverished country that supports a large military armed with massive amounts of chemical weaponry and a small nuclear arsenal.

The Korean military is thought to have an annual budget of between $4 to $7 billion. The country's population is thought to be approximately 24 million people, 1.2 million of whom are currently serving in its armed forces, according to France24.com.

U.S. and allied military planners believe that South Korea would ultimately win in a conventional war, but fear Pyongyang would seek to inflict mass numbers of casualties and cause panic by using its chemical and biological arsenal.

South Korean defense estimates are imprecise, but the general consensus is that the Korean People's Army is in possession 2,500 to 5,000 tons of chemical weapons, including mustard, phosgene, blood agents, sarin, tabun and V-agents. The chemical agents could be delivered by long-range artillery, multiple rocket launchers, ballistic missiles, aircraft or naval vessels.

Experts are unsure of the extent of Pyongyang's biological weapons development program, but believe they have stockpiles of botulinum toxin and anthrax.

North Korea has not signed the Chemical Weapons Convention but is a signatory to the Biological and Toxin Weapons Convention and the Geneva Protocol, which prohibits the use of chemical or biological weapons in war. Pyongyang denies having programs to create such weapons, according to CrisisGroup.org (Bio Prep Watch, 2011).

Title: North Korea's Chemical and Biological Weapons (CBW) Programmes
Date: 2012
Source: IISS

Abstract: Deciphering the chemical and biological weapons capabilities of any country is a challenge. Chemical weapons (CW) programmes are difficult to trace because many of the facilities potentially involved in military activities are dual-use, with legitimate peaceful purposes, and are relatively easy to conceal. With biological weapons (BW), this is even more the case. With regard to North Korea, assessments are especially difficult due to the fact that – in comparison to other countries suspected of pursuing chemical and biological weapons – the country has remained less accessible in terms of economic and political contacts. Since North Korea is not a party to the Chemical Weapons Convention (CWC), there have never been any official declarations and international inspections of its chemical infrastructure, much less suspect facilities that might be associated with a chemical weapons programme. Also, although North Korea is officially a party to the Biological Weapons Convention (BWC), the Convention lacks a strong verification and inspection mechanism. Another major hindrance to comprehensive insight on North Korea's presumed chemical and biological weapons programmes is that its research and industrial facilities in these areas are relatively isolated from the outside world, so much so that even basic questions of science and infrastructure are uncertain.

In these circumstances, an analysis of North Korea's possible chemical and biological weapons programmes has to rely on public information provided by governments, defectors, and secondary source publications. Such an analysis, made using sources that by their very nature are not comprehensive, will contain many gaps and uncertainties. There are very few details on these suspect programmes that can be specified with confidence. Nonetheless, an analysis based on a variety of sources, particularly official US, Russian and South Korean statements and reports, concludes that North Korea probably has developed chemical weapons to be part of its deployed military capabilities (although there is little authoritative information on the type and amount of agent or delivery means). It is also probable that North Korea has a biological weapons programme at least at the research and development stage. North Korea has dual-use facilities that could be used to produce biological agents as well as a munitions industry that could be used to weaponise such agents. However, there is not enough information to determine whether Pyongyang has progressed beyond the research and development stage for a biological weapons programme and actually possesses stocks of biological weapons.

Chemical Weapons Programme

Since the early 1990s, official US, Russian and South Korean government publications have all described North Korea as having an active chemical weapons (CW) programme that has gone beyond research and development and includes the actual production and stockpiling of chemical weapons.2 There is considerable uncertainty, however, over the composition of that stockpile. Given its large – though ageing – chemical industry, North Korea is generally thought to be capable of producing all of the traditional chemical warfare agents (nerve, blister, blood and choking), although it may require imports of some specific precursors to produce nerve agents which are relatively more difficult to fabricate than the first generation blister, blood and choking agents. However, the exact size of the North Korean chemical weapons stockpile remains unknown. Recent South Korean government reports estimate a range of between 2,500–5,000 tonnes, but it is unclear whether these estimates concern the weight of chemical agent or the overall munitions stockpile and even whether they include biological agents. In any event, these figures are highly speculative. There is little authoritative information on the types of chemical munitions that have been stockpiled, but North Korea is capable of using a variety of delivery systems to disseminate chemical agents, including artillery, multiple rocket launchers, mortars, aerial bombs, and missiles, as well as Special Forces. The role of chemical weapons in North Korea's military planning is

unknown, but it may be based partially on old Soviet doctrine. US and South Korean forces operate on the assumption that North Korea would use chemical weapons against both military and civilian targets as part of either offensive operations or in retaliation for an attack on North Korea.

Origins and Development

In 1954, the North Korean army reportedly established regular chemical and biological defence units, which were most likely modelled on Soviet nuclear, biological, and chemical (NBC) units. According to some press accounts, North Korea's offensive chemical weapons programme also began at this time, relying primarily on assistance from the Soviet Union, but the reliability of these reports cannot be determined. In any event, in the late 1950s, North Korea began to develop an extensive chemical industry. The First Five Year Plan (1957–61) placed great emphasis on developing a robust organic and inorganic chemical industry, building on facilities constructed during the Japanese occupation. At the end of 1961, Kim Il Sung issued a 'Declaration of Chemicalisation'. This called for greater efforts to develop various chemical production facilities to support different sectors of the North Korean economy. According to the South Korean Ministry of National Defense, the 1961 declaration reflected North Korean recognition of the importance of chemical warfare. As a result of its large chemical infrastructure, North Korea can produce a number of dual-use chemicals, such as compounds of phosphate, ammonium, fluoride, chloride and sulphur, that could be diverted from civilian chemical uses to support a chemical weapons programme.

By the late 1960s, according to the US Department of Defense, North Korea was believed to have begun experiments with the production of offensive chemical agents. In May 1979, the US Defense Intelligence Agency reported that North Korea possessed only a defensive chemical weapons capability, although it noted that development of offensive chemical weapons would be the next logical step. Several press reports from the 1980s continued this speculation. The first publicly available official report, to the effect that North Korea had produced chemical weapons agents, was published in January 1987. This publication, by the South Korean Ministry of National Defense, reported that North Korea possessed up to 250 tonnes of chemical weapons – including mustard and nerve agents – designed for delivery by artillery shells.

According to official and secondary reporting, North Korea's chemical weapons arsenal expanded in the early 1990s. However, it is difficult to determine the extent to which such statements reflected actual developments on the ground, or whether they resulted from outside factors affecting public reports of North Korea's programme. Political factors have had an impact. For instance, in 1992, as negotiations for the Chemical Weapons Convention (CWC) were drawing to a close, Seoul sought to publicise the extent of North Korea's chemical weapons programme in a bid to pressure Pyongyang to sign the CWC. In October 1992,

for example, Seoul reported that North Korea had 1,000 tonnes of chemical agent held in six storage facilities, a four-fold increase over the 1987 assessment of 250 tonnes of agent.10 Pyongyang denied these claims, and countered that the US was storing chemical weapons in South Korea. On 14 January 1993, South Korea signed the CWC when it was opened for signature, and later declared a small stock of chemical weapons, which are being destroyed in accordance with the Convention. North Korea, on the other hand, issued a formal statement on 13 January 1993 denying that it possessed a chemical weapons programme, but it refused to join the CWC.

A second factor, in the mid-1990s, that influenced the public reporting of North Korea's chemical weapons capabilities was the appearance of several prominent defectors, who publicised purported details about North Korea's chemical weapons arsenal, along with related research, production and storage facilities. The most influential of these was Sergeant Yi Chung Kuk, who worked in the Nuclear-Chemical Defence Bureau of the Korean People's Army (KPA) and defected in March 1994. He did so, he said, in order to warn South Korea about the dangers posed by North Korea's chemical weapons programme. Sergeant Yi provided first-hand information on the organisation and equipment of North Korea's chemical defence units, which he was directly involved in, but he also reported secondhand information on offensive

chemical weapons activities and facilities. Another key defector was Colonel Choi Ju Hwal, who also worked in the KPA and defected in 1995. Colonel Choi said that he did not have direct knowledge of North Korea's chemical weapons programme, though he claimed to have obtained information from other officials in the Ministry of Defence. Much of Colonel Choi's testimony is identical to information from other defectors, press accounts, and official South Korean government documents, and it is difficult to determine how much is original and how much is derivative. Finally, Hwang Chang Yop, the Secretary of North Korea's Workers Party, defected in August 1996 and said that he had heard from other senior North Korean officials that North Korea had an arsenal of high-grade chemical weapons capable of 'scorching' South Korea and Japan. Mr Hwang did not claim any direct knowledge of chemical weapons production or deployment. Most of the information provided by these North Korean defectors cannot be independently verified, and the usual caveats about information from defectors applies. Nonetheless, their accounts were widely reported in the South Korean media and may have influenced official assessments by Seoul.

Arguably, Pyongyang had a strong incentive to enhance its chemical weapons programme in the mid-1990s, to compensate for the limits on its nuclear capabilities imposed by the October 1994 Agreed Framework. In addition, the financial limits on modernising its conventional forces may have given Pyongyang more reason to build up its CW capabilities. This speculation cannot be confirmed by direct evidence, but Seoul began to report a greater North Korean chemical weapons capability in the mid-1990s. In 1995, for example, the South Korean Foreign Ministry, the National Unification Board and South Korean military sources reported that North Korea had a stockpile of 1,000–5,000 tonnes of chemical and biological agents, including blister agents, nerve agents, choking agent, blood agent, and tear gas, which could be delivered by artillery, multiple rocket launchers, FROG rockets, and Scud missiles. The most recent South Korean Ministry of National Defense report on North Korea's CBW capabilities, from 2001, lists but does not identify by name four research, eight production, and seven storage sites for chemical weapons, and estimates the size of the Pyongyang's stockpile at between 2,500–5,000 tonnes. There is some uncertainty as to whether the various South Korean estimates are for agent or munitions tonnes, and whether they include biological as well as chemical agents.

Official US sources agree on the existence of a North Korean chemical weapons programme, including the stockpiling of agents that could be delivered by a variety of weapons, but Washington has tended to report fewer details than Seoul. In general, US analysts tend to be cautious about the reliability of human information on North Korea's CW programme, and it is extremely difficult to quantify issues concerning potential production rates and possible stockpiles because North Korean chemical facilities are not subject to international inspections, and satellite intelligence has little value in distinguishing between chemical production for military or civilian purposes. A 2001 US Department of Defense report identifies nerve, blister, blood, choking and tear gases as among the agents the North Koreans can produce and assesses that North Korea possesses a 'sizeable stockpile' of these agents, without estimating a specific quantity of agent. According to the US, there may be limits on the North's production capacity. For example, the senior US military official in Seoul, General Schwartz, has testified that the North is capable of independently producing components only for first generation (i.e. World War I-type) chemical agents (e.g. phosgene and mustard). Imports of some precursors may be necessary for the production of more advanced nerve agents. Official US sources agree with South Korean reports that North Korea has weaponised chemical weapons agents for deliver by artillery, missiles, and aircraft, as well as unconventional means, but US public reports generally do not discuss suspect or possible research, production, and storage sites associated with chemical weapons.

North Korean defectors and various secondary sources have provided detailed information about facilities purportedly involved in research, production, and storage of chemical precursors, agents and munitions.22 According to these sources, North Korea's chemical weapons stockpile includes first generation blister agents (lewisite and mustard), various nerve agents (sarin, soman, tabun, and V-agents), and blood agents (hydrogen cyanide and cyanogen chloride). Chemical weapons research is said to take place at various universities and at a number of institutes under the aegis of the Second Natural Science Academy. Chemical weapons production facilities are reported to include the Kanggye Chemical Factory and Factory No. 108 in Chagang Province, the Sakchu Chemical Factory in North

Pyongan Province, the Ilyong Branch of the Sunchon Vinalon Factory in South Pyongan Province and Factory No. 297 in Pyongwon, South Pyongan Province.

In addition, a number of civilian chemical facilities have been implicated in chemical weapons production, such as the Manpo Chemical Factory and Aoji-ri Chemical Complex. Defectors and press stories also report that chemical agent storage sites are located in the cities of Masan-dong, Samsan-dong, and Sariwon, and in the greater Pyongyang area. These facilities are reportedly comprised of storage tanks housed in warehouses and buildings above ground, partially buried structures, and underground tunnels. It is alleged that chemical weapons agents are transferred to facilities at Sakchu or Kanggye for loading into munitions, which include 80mm artillery shells, 240mm rockets, aerial bombs, and aerial spray tanks. Following final assembly and filling, chemical munitions are reportedly stored at the Maram Materials Corporation and the Chiha-ri Chemical Corporation, located in Masan-dong, Pyongyang, and Anbyon, Kangwon Province, respectively. Most of this information cannot be independently confirmed.

Potential Military uses for Chemical Weapons

Assuming that North Korea maintains a stockpile, chemical weapons agents and munitions could play a role in complementing Pyongyang's conventional military power in offensive or defensive operations. In theory, North Korean forces could use chemical weapons against US and South Korean forces to reduce these forces' combat effectiveness, deny the use of mobilisation centres, storage areas, and military bases, and hinder the arrival of reinforcements from overseas. Non-persistent chemical agents could be used to help break through defensive lines or to hinder an allied counterattack. Persistent chemical agents could be used against fixed targets, including command and control centres, logistics hubs, and airbases. North Korean forces appear to be prepared for operations in a contaminated environment. Chemical defence battalions are reportedly integrated into larger ground force units, and many troops are reportedly equipped with chemical protection equipment, including masks, suits, detectors and decontamination systems. North Korean troops are also said to participate in chemical exercises in an attempt to develop mission capability under chemical warfare conditions.

Of course, these defensive measures could reflect North Korean expectations that their forces may be subjected to a chemical attacks. Nonetheless, US and South Korean military commanders assume that North Korean offensive military plans include the use of chemical agents delivered by a variety of traditional means, such as ballistic missiles, artillery rockets and shells, mortars, and aerial bombs and sprays, against both military and civilian targets. Delivery by Special Forces is also a possibility. Aside from their potential role in offensive operations, chemical weapons presumably contribute to North Korea's deterrent posture, especially since North Korea's conventional capabilities have eroded relative to US and South Korean forces. Although Pyongyang officially denies that it possesses chemical weapons, the widespread belief that North Korea has a substantial chemical weapons arsenal – noted in official US and South Korean government reports – only serves to reinforce the view in the US, South Korea and Japan that a conflict on the Korean Peninsula would result in the use of chemical weapons against civilian and military targets.

Biological Weapons Programme

There is less public information on North Korea's biological weapons programme than on its chemical weapons programme. Official US, Russian and South Korean reports agree that North Korea has conducted biological weapons research, but there is considerable uncertainty as to whether Pyongyang possesses biological weapons and, if so, the types of agents involved. **While official South Korean sources claim that North Korea has weaponised one or two biological agents, official US and Russian sources characterise North Korea as 'capable' of producing a variety of agents, including anthrax, cholera and plague without judging that North Korea has actually produced biological weapons.** Given the dearth of information, it is impossible to make a firm judgement either way. Various defectors and press reports give details of biological weapons research, testing and production, but such information cannot be confirmed. There is no authoritative information on the potential role of biological weapons in North Korean military strategy, beyond speculation that biological weapons may be relatively

less significant than chemical weapons, which have more utility as a battlefield weapon, and nuclear weapons, which are a more capable mass destruction weapon.

Virtually nothing is known about the history of North Korea's biological weapons programme. Official US sources state that North Korea has pursued a biological warfare capability since the 1960s. During this time, according to press reports, a laboratory was established under the authority of the Academy of National Defence and 10–13 different pathogens were investigated, including anthrax, cholera, bubonic plague, smallpox and yellow fever, some of which reportedly were imported from culture collections in Japan. According to another secondary source, construction of an underground biological weapons research and development facility was completed in the 1970s. This facility was located in Onjong-ri, South Pyongan Province and conducted research, development, and testing of biological weapons agents on small laboratory animals.

A 1998 White Paper released by the South Korean Ministry of National Defense, reported that, 'by 1980, [North Korea] had succeeded in its experiments in bacteria and virus cultivation to produce biological weapons, and by the late 1980s had completed live experiments with such weapons.' This is generally consistent with a 1993 report by the Russian intelligence service on proliferation, which stated that North Korea was performing 'applied military-biological research' with anthrax, cholera, bubonic plague and smallpox at a number of institutes and universities and testing biological weapons on North Korean islands. South Korean press and other unofficial sources go even further, claiming that, in the early 1980s, North Korea began actual production of biological agents and obtained a turnkey plant for agar (growth media) from East Germany in 1984 to further the biological weapons programme. In contrast, a 1997 US Department of Defense report judged that North Korea's biological weapons programme was probably still at the level of research and development.

Whatever the status of its biological weapons efforts, North Korea has developed a number of dualuse biotechnology facilities that could be used to research biological weapons agents and produce militarily significant quantities of biological agents. But this infrastructure is not highly developed and there is no definitive evidence that it is being used for this purpose. North Korea joined the BWC on 13 March 1987 (followed by South Korea on 25 June 1987), but the convention has no provisions for mandatory declarations or inspections of civilian or suspect military biological facilities.

The most recent official US and South Korean reports agree that North Korea has a biological weapons programme, although only Seoul reports that it has advanced beyond the research and development stage. In 2001, for example, a South Korean defence White Paper described the North Korean threat as including 'chemical and biological weapons such as anthrax of which North Korea is believed to hold a stockpile of 2,500–5,000 tons.' The report does not address the issue of delivery systems, other than to note that North Korean Special Forces could launch attacks with biological weapons. Another South Korean Ministry of National Defense report from 2001 claims that North Korea possesses three research and six production facilities to support its biological weapons programme and has weaponised one or two types of biological agents. In contrast, the most recent public US government report, from 2001, says that 'North Korea is believed to possess a munitions-production infrastructure that would allow it to weaponize biological warfare agents, and may have biological weapons available for use'. According to press accounts, the US intelligence community has assessed with 'medium' confidence that North Korea possesses stocks of smallpox virus, but the evidence is not definitive.

Most of the detailed information about North Korea's biological weapons programme has come from defectors and other secondary sources of unknown reliability. According to Choi Ju Hwal, the Germ Research Institute in the General Logistic Bureau of the Armed Forces Ministry is responsible for developing biological weapons. Yi Chung Kuk, meanwhile, claims that biological weapons research and development is carried out at the Microbiological Institute and that there are other facilities in North Korea for producing and storing biological weapons. Yi Sun Ok, who was an inmate at a North Korean prison camp, claims she witnessed biological weapons experiments in mid-1980s, which resulted in the deaths of some 50 inmates. However, none of these reports can be confirmed.

A number of secondary sources provide additional details on facilities and suspected agents said to be involved in North Korea's biological weapons programme. According to one report, research on anthrax, bubonic plague, smallpox, yellow fever, cholera and other pathogens is carried out at the National Defence Research Institute and Medical Academy (NDRIMA). Another report says that North Korea's inventory of biological agents includes anthrax, botulism, cholera, haemorrhagic fever (Korean strain), bubonic plague, smallpox, tuberculosis, typhoid, typhus, and yellow fever. Another claims that 13 types of biological weapons agents are produced at the Workers Party's Central Biology Research Institute, the Preventive Military Medical Unit, and the February 25th Plant in Chongju, North Pyongan Province. But these reports also cannot be confirmed. To date there is no reliable information available to confirm whether North Korea has engaged in the development of genetically modified biological agents.

In conclusion, there is not enough information to reach a firm judgement on the progress of, or possible effectiveness of, North Korea's biological weapons programme. This is understandable, given North Korean secrecy and the inherent difficulties of detecting and assessing biological weapons programmes, compared to nuclear or even chemical weapons activities. US, South Korean, and Russian official sources agree that North Korea has conducted research on a variety of biological agents, but only Seoul reports that North Korea has actually produced stocks of one or two types of biological weapons. The basis for this assessment is unspecified. Given its biotechnical infrastructure, North Korea is capable of producing significant amounts of common biological agents, such as anthrax, and delivering these agents through a variety of conventional and unconventional means, but it is not known how important Pyongyang views the development and deployment of a biological weapons capability. In any event, the possibility that North Korea may have biological weapons contributes to deterrence.

Conclusion

The available evidence suggests that North Korea probably possesses both a chemical and biological weapons programme, although they may differ in terms of scope and state of advancement. The chemical weapons programme probably involves some chemical weapons production and stockpiling, although the amount and types of agents that have been produced, the number and types of munitions that have been stockpiled, and the location of key research, production, and storage facilities cannot be assessed with high confidence. North Korea is thought to be capable of producing a variety of traditional blister, blood, choking and nerve agents, although there may be limits on what it can produce in its ageing chemical industry. Meanwhile, given its munitions industry, North Korea is thought capable of producing a variety of delivery systems for chemical weapons, including artillery, multiple rocket launchers, mortars, aerial bombs, and missiles. **The extent to which Pyongyang has chosen to deploy these capabilities is unknown, but US and South Korean forces prudently assume that North Korea possesses chemical weapons and is prepared to use them against military and civilian targets in offensive operations or in retaliation for an attack on North Korea**. By comparison, less is known about North Korea's presumed biological weapons programme. While there is general agreement that North Korea has conducted research and development on biological agents, there is not enough information to conclude whether it has progressed to the level of agent production and weaponisation, although North Korea is most likely technically capable of both.

Whatever the actual status of North Korea's chemical and biological capabilities, the perception that it has, or likely has, chemical and biological weapons contributes to Pyongyang's interest in creating uncertainties in Washington, Seoul and Tokyo and raises the stakes to deter or intimidate potential enemies. From Pyongyang's perspective, chemical and biological weapons could have utility both on the battlefield and at the strategic level. US and South Korean military commands have to operate on the assumption that North Korea maintains a large stockpile of chemical and possibly biological munitions integrated with its conventional forces and deployed for use on the battlefield. This complicates allied military planning for defence against any North Korean attack or for conducting offensive operations against the North. Some measures have been taken to strengthen allied troops' CBW defences, but it is difficult to accurately assess their effectiveness without knowing the size, composition, or delivery means of North Korea's presumed chemical weapons arsenal. **At the strategic level, the potential delivery of large quantities of chemical or biological agents to nearby targets (such as Seoul) and smaller**

quantities to more distant targets (such as Tokyo) could cause significant civilian casualties, depending on the amount and type of agent, the delivery means, the extent of civilian defence measures, and many other factors. In any event, the plausible threat that North Korea might use chemical or biological weapons, if the survival of the regime was at stake, contributes to deterrence and discourages Seoul and Tokyo from pursuing policies that could increase the risk of conflict and drive Pyongyang to take desperate measures (IISS, 2012).

Title: U.N. To Consider North Korea's Attempts To Export Chemical Weapons Reagents
Date: January 6, 2012
Source: Bio Prep Watch

Abstract: The United Nations will look into allegations that North Korea attempted to export ampules of reagents for chemical weapons to Syria in 2009.

The investigation will be a rare probe into the reclusive communist country's arm trade related to chemical weapons. The case may bring into focus a close relationship between North Korea and Syria in the production and development of weapons of mass destruction, the Yomiuri Shimbun reports.

Greek authorities seized a container from a Liberia-registered freighter heading toward Syria in November 2009. In the container they found wooden boxes stuffed with multiple types of ampules believed to be made of glass, each allegedly containing powdered or liquid reagents. Reagents are used to identify chemical substances that become airborne after the use of chemical weapons. They can be used in during a chemical weapons attack or in the defense against them.

Greek authorities also seized approximately 14,000 anti-chemical weapons suits from the vessel. The Greek government reported the seizures of the ampules and suits in September as a violation of the U.N. Security Council's Sanctions Committee resolution banning North Korea from exporting arms-related materials, according to the Yomiuri Shimbun.

According to estimates by South Korea's National Defense Ministry, North Korea has 2,500 to 4,000 tons of chemicals weapons, including sarin and mustard gases. Diplomatic sources said that the attempted export of chemical weapons reagents may have been conducted through China. It is unclear whether or not China has strictly inspected North Korea's cargo shipments (Bio Prep Watch, 2012).

Title: North Korea Vows To Launch 'Sacred War' Over US-South Naval Exercises
Date: February 25, 2012
Source: Telegraph

Abstract: The North's National Defence Commission (NDC) described the exercise as "unpardonable war hysteria" and said its army and people would "foil" the US and South Korean moves with "a sacred war of our own style".

The threat is the latest instance of Pyongyang taking a hostile tone towards Seoul since Kim Jong-un, the youngest son of the late leader Kim Jong-il, took over following the death of his father in December.

Last week the North vowed "merciless retaliatory strikes" if any shells landed in waters claimed by Pyongyang during a live-fire artillery exercise near the disputed Yellow Sea border.

But in the event it took no military action in response to the drill.

The United States and South Korea are to mount two major annual joint military exercises, one in the coming week and the other in March.

Key Resolve, a computerised command post exercise, will start on Monday and continue until March 9. Separately, the joint air, ground and naval field training exercise Foal Eagle will be held from March 1 to April 30.

"Key Resolve and Foal Eagle are unpardonable war hysteria kicked up by the hooligans to desecrate our mourning period and an unpardonable infringement upon our sovereignty and dignity," the NDC said in a statement.

Kim Jong-il died of a heart attack on December 17.

"Our army and people will foil the moves of the group of traitors to the nation and warmongers at home and abroad for a new war with a sacred war of our own style," the NDC said, indicating it will stage a counter exercise.

"War manoeuvres ... are, in essence, a silent declaration of a war. The declaration of the war is bound to be accompanied by a corresponding physical retaliation," it said.

"Now that a war has been declared against us, the army and people are firmly determined to counter it with a sacred war of our own style and protect the security of the nation and the peace of the country," the NDC said (Telegraph, 2012).

Title: N. Korea Calls Criticism Of Its Nuclear Program 'Declaration Of War'
Date: March 23, 2012
Source: Russia Today

Abstract: Right ahead of the Nuclear Security Summit in Seoul, North Korea announced that it will consider a statement about its nuclear program a direct "declaration of war". This comes as the USA has condemned the country's planned rocket launch in April.

The US administration announced on Thursday that President Barack Obama considers the North Korean *"space experiment"*, involving the launching of a ballistic missile with a mounted satellite, a *"provocation"* and direct violation of the international agreements.

According to national security official Daniel Russel, Obama will discuss the issue with the Chinese and Russian leaders in the near future.

North Korea, officially the Democratic People's Republic of Korea, is gearing for the missile satellite launch scheduled for April 2012. The West condemns the move, saying that it comes in violation of the UN Security Council resolutions 1718 and 1874, prohibiting the development of ballistic missiles by the country, as well as the conducting of nuclear tests.

The Western states, as well as South Korea, fear that the launches could be part of Pyongyang's effort to build intercontinental missiles, while nuclear tests might be aimed at providing them with nuclear warheads.

Ex-MEP Glyn Ford however explained to RT that both sides of the conflict – the US and its allies South Korea and Japan on the one hand, and North Korea on the other – seem to be wrong.

"If you have the technology to launch a satellite – and this would be North Korea's third attempt to launch a satellite – it clearly shows that you are developing a potential, if you want long range intercontinental ballistic missiles," he said. *"But at the same time South Korea and Japan are both doing exactly the same thing. South Korea attempted to launch a satellite just after the last North Korean attempt and Japan has put satellites into orbit. So, there is a little bit of double standards floating around here".*

He added that North Korea, in fact, alleviates the risk to Japan as it is shifting the launch from the east coast to the west coast, so it will not fly over Japan.

The country's nuclear program and missile launches have long been a bone of contention for the country's relations with much of the world, leading to its increased isolation.

Back in 2009, North Korea exited the six-party nuclear talks after the UN had condemned its first ballistic launch. The country carried out two successful nuclear tests back in 2006 and 2009, which the West condemned.

On Wednesday North Korean state-run Korean Central News Agency (KCNA) reported that the adoption of any statement against its nuclear program at the upcoming Nuclear Security Summit in Seoul would be an *"extreme insult".*

"Any provocative act would be considered a declaration of war against us and its consequences would serve as great obstacles to talks on the denuclearization of the Korean Peninsula," said the agency.

It is expected that the Seoul conference will pay some attention to the North Korean nuclear program. South Korean president Lee Myung-bak said that the meeting might play a *"big role in expanding the international community's support for the denuclearization of the North."*

In its latest report, the KCNA said that Lee Myung-bak and his *"group of traitors"* are trying to provoke *"nuclear war".* It added that in order to resolve the tense situation in the region, it is necessary to talk denuclearization of the whole peninsula, instead of speaking of the *"non-existent"* North's nuclear issue.

The Nuclear Security Summit in Seoul, due on March 26-27, will gather heads of states and representatives of 58 countries and international organizations. US leader Barack Obama and Chinese president Hu Jintao are expected at the meeting (Russia Today, 2012).