Introduction

Chemical materials are components of everything in life, from elements on the periodic table, to narcotics, chemical weapons and nuclear weapons, and environmentally destructive substances. With increased technology, people, states, and non-state actors (such as al-Qaeda and ISIS) with the resources and funding can increasingly create drugs or chemical and nuclear weapons, if given access to the chemical ingredients. More than ever, the illicit brokering of chemical materials threatens the peace and security of the international community.

Definition of Key Terms

Chemical Materials

Chemicals are compounds or substances. Chemical materials are simply chemicals that can be used in the manufacturing of other items. These chemicals can include from basic ethanol to uranium.

Chemical Weapons

The Chemical Weapons Convention defines chemical weapons as any toxic chemical or its precursor (a substance used to create that chemical) that can cause harm and death.

Illicit Brokering

Illicit means illegal, not allowed by law, or involving activities that are morally wrong. Brokering indicates selling or trading in something. Illicit brokering denotes illegal trade.

Nuclear Weapons

Nuclear weapons are devices intended to release large amounts of energy by nuclear fission (breaking apart an atom's nucleus) or nuclear fusion (combining two atoms' nuclei).
Precursor Chemicals

Precursor chemicals are chemicals (including in different forms, such as salts or liquids) that can be or are used in the preparation of an addictive drug.

General Overview

History and responses of illicit brokering of chemical materials

History

The modern history of illicit brokering of chemical materials concerning narcotics dates back to US President Nixon’s 1970s War on Drugs, with nations abolishing numerous narcotic drugs (including the US and Mexico). Black markets developed in response to these laws, with dealers often manufacturing drugs cheaply. Home cooking with precursor chemicals spearheaded the illicit brokering of chemical materials.

Furthermore, the accessibility and abuse of chemical material licenses for buying and trading remains a major issue, demonstrated when two American doctors were arrested for illegally selling chemical materials. Much illicit brokering of chemical materials occurs due to the financial recompense provided by trade.

Even more alarming problems arose in 1993, when the UN International Atomic Agency Illicit Trafficking Database (ITDB) received numerous reported incidents of stolen nuclear fissile materials; uranium and plutonium. In 2014, Iran reported that Sunni insurgents stole nuclear materials intended for scientific research from Mosul University.

International response and legislation

Numerous nations have responded to the illicit brokering of chemical materials through international cooperation, implementing laws nationally to prevent illicit brokering and cooperating across nations in large-scale seizures. The UN spearheads several initiatives, with the UN Office on Drugs and Crime (UNODC) launching an initiative in Latin America and the Caribbean against illegal trade of drugs, titled PRELAC.

Nations have further implemented international legislation. The Montreal Protocol deals with the illicit trading of ozone-depleting substances, allowing international crackdowns. The 1988 UN Convention on Narcotic Drugs and Psychoactive Substances monitors the illicit trade of drugs and addictive chemical substances, laying a framework for future cooperation.
Key Issues

Chemical and nuclear weapons

One of the main issues in the illicit brokering of chemical materials concerns the capability of proliferating chemicals used in the making of chemical and nuclear weapons.

The Chemical Weapons Convention defines chemical weapons as any toxic chemical or its precursor (a substance used to create that chemical) that can cause harm or death. Cases of used chemical weapons include white phosphorous weapons in the Gaza conflict, chlorine gas in the World Wars, and mustard gas by Iraq in the 1980s. Chemical weapons are made from common laboratory chemicals and hence can be sold illegally through license misuse.

Nuclear weapons are built using enriched uranium and/or plutonium, depending on the design. Uranium and plutonium are, technically considered, chemicals and are constantly at risk of illegal trade. The UN’s agency for monitoring theft and illicit trafficking of nuclear material recorded 150 incidents in 2006, with over 1,080 incidents recorded from 1993 to 2006. One major concern for nation-states remains the risk of nuclear fissile material falling into terrorist hands.

Caption #1: White phosphorus weapons (chemical weapons) launched by Israel, bombing a UN-run school in Gaza in 2009

Environmental crimes and consumer pressure

Environmentally unfriendly chemicals concern “environmentally sensitive” substances, including toxic chemicals, hazardous wastes, and ozone-depleting substances (ODS). An estimated 22-31 billion USD was made in one year by crime syndicates for illegally trading ODS and toxic chemicals. One of the major ODS is the chemical R-12, or chlorofluorocarbon, used by millions of people as a coolant for older models of cars. Developed nations banned R-12 in 1996 through signing the Montreal Protocol. In response, a black market arose for R-12, with the price of the chemical jumping from $4 a gallon to $30 a gallon. Illicit brokering of R-12 continues due to the amount of consumers around the world who use R-12.
Narcotics: Precursor chemicals and drug cartels

Millions of people across the globe are using precursor chemicals to manufacture drugs, including amphetamines and heroin. Acetic anhydride demonstrates the illicit brokering of precursor chemicals. A major component of heroin, dealers use acetic anhydride to cook heroin. In 2011, numerous countries continued the crackdown on the trading and selling of acetic anhydride. However, drug cartels continue to smuggle and illicitly trade acetic anhydride. In that same year, around 26 tons of acetic anhydride were seized by the US as part of a joint US-Mexico seizure. To begin remedying the situation, member nations need to tighten national laws on selling of precursor chemicals.

Accessibility to chemicals

One major issue concerns human accessibility to chemicals. Many dangerous chemicals are accessible to scientists in labs and can be bought with the proper license. There are numerous cases of doctors misusing licenses to illicitly sell precursor chemicals. The advent of the Internet only facilitates illicit chemical material brokering through deep web black markets. Nation-states should tighten standard operating procedures (SOPs) in labs concerning chemical usage and security.
Timeline of Events

This timeline details events concerning the illicit brokering of chemical materials, from narcotic drugs to fissile materials.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description of event</th>
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<tr>
<td>1975</td>
<td>After Colombian authorities seize 600 kg of cocaine, drug cartels retaliate by killing 40 people in a weekend.</td>
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<tr>
<td>1980</td>
<td>Mexican drug runners begin supplying ephedrine, a key precursor chemical for amphetamines, to the US.</td>
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<td>2006</td>
<td>UN reports 150 cases of stolen nuclear fissile materials. The total count of incidents from 1993 to 2006 amounts to around 1,080 incidents.</td>
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<tr>
<td>2013</td>
<td>Two American doctors arrested for abusing doctor privileges and illegally selling precursor chemicals on Silk Road, a black market website.</td>
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<tr>
<td>2014</td>
<td>Myanmar produces 762 tons of poppy, presumably turned into opium.</td>
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UN Involvement, Relevant Resolutions, Treaties and Events

The UN actively fights the illicit trade of chemicals, with multiple conventions concerning narcotic drugs and psychotropic substances. Security Council resolution 1817 has also been put forth dealing with precursor chemicals. The Chemical Weapons Convention deals with misuse and regulation of chemicals.

- **1988 UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 20 December 1988**
- **Security Council Resolution 1817 on Preventing Illicit Trade in Precursor Chemicals, 11 June 2008, (SC/RES/1817)*
Bibliography


