

Codebook for 2020 ChemLEXIS State-Level Data
As of January 7, 2020

Variable 001

Variable Name: State Name

Variable Description: UN Member State Names

Variable Values and Labels: e.g., Afghanistan Zimbabwe

Source: <https://unstats.un.org/unsd/methodology/m49/>

Special Coding Rules: N/A

Variable 002

Variable Name: Region Name

Variable Description: Region Name

Variable Values and Labels: N/A

Source(s): Determined by coders at The Henry L. Stimson Center.

Special Coding Rules: N/A

Variable 003

Variable Name: UN State Code

Variable Description: UN Member State M49 ISO codes

Variable Values and Labels: 004-894

Source: <https://unstats.un.org/unsd/methodology/m49/>

Special Coding Rules: N/A

Variable 004

Variable Name: Signature Date to Chemical Weapons Convention

Variable Description: (Month/Day/Year)

Variable Values and Labels: N/A

Source: Arms Control Association (<https://www.armscontrol.org/factsheets/cwcsig>) and OPCW (<https://www.opcw.org/about-us/member-states>)

Special Coding Rules: N/A

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Variable 005

Variable Name: Ratification Date to Chemical Weapons Convention

Variable Description: (Month/Day/Year)

Variable Values and Labels: N/A

Source: Arms Control Association (<https://www.armscontrol.org/factsheets/cwcsig>) and OPCW (<https://www.opcw.org/about-us/member-states>)

Special Coding Rules: N/A

Variable 006

Variable Name: Chemical Weapons Convention National Regulatory Authority

Variable Description: The governmental agency that monitors national implementation of the Chemical Weapons Convention.

Variable Values and Labels: N/A

Source:

https://www.opcw.org/sites/default/files/documents/2019/08/Contact%20Information%20-%20OPCW%20National%20Authorities_1.pdf

Special Coding Rules: N/A

Variable 007

Variable Name: Link to Chemical Weapons Convention National Regulatory Authority

Variable Description: N/A

Variable Values and Labels: N/A

Source:

https://www.opcw.org/sites/default/files/documents/2019/08/Contact%20Information%20-%20OPCW%20National%20Authorities_1.pdf

Special Coding Rules: N/A

Variable 008

Variable Name: Number of Declared Schedule 2 Facilities

Variable Description: Facilities that are nationally declared to the OPCW due to their production, processing or consumption of CWC Schedule 2 chemicals in quantities exceeding specified declaration thresholds as outlined by the OPCW.

Variable Values and Labels: 0-999,999,999

Source: Annex 4 of https://www.opcw.org/sites/default/files/documents/CSP/C-21/en/c2104_e.pdf

Special Coding Rules: N/A

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Variable 009

Variable Name: Number of Inspectable Schedule 2 Facilities

Variable Description: Facilities subject to routine on-site inspections by international inspectors from the OPCW that produce, process or consume Schedule 2 chemicals in quantities exceeding specified inspection thresholds.

Variable Values and Labels: 0-999,999,999

Source: Annex 4 of https://www.opcw.org/sites/default/files/documents/CSP/C-21/en/c2104_e.pdf

Special Coding Rules: N/A

Variable 010

Variable Name: Number of Declared Schedule 3 Facilities

Variable Description: Facilities that are nationally declared to the OPCW due to their production, processing or consumption of CWC Schedule 3 chemicals in quantities exceeding specified declaration thresholds as outlined by the OPCW.

Variable Values and Labels: 0-999,999,999

Source: Annex 5 of https://www.opcw.org/sites/default/files/documents/CSP/C-21/en/c2104_e.pdf

Special Coding Rules: N/A

Variable 011

Variable Name: Number of Inspectable Schedule 3 Facilities

Variable Description: Facilities subject to routine on-site inspections by international inspectors from the OPCW that produce, process or consume Schedule 3 chemicals in quantities exceeding specified inspection thresholds.

Variable Values and Labels: 0-999,999,999

Source: Annex 5 of https://www.opcw.org/sites/default/files/documents/CSP/C-21/en/c2104_e.pdf

Special Coding Rules: N/A

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Variable 012

Variable Name: Number of Other Declared Facilities

Variable Description: Other declared facilities are defined by the OPCW as all plant sites that:
1) Produced by synthesis during the previous calendar year more than 200 tons of unscheduled discrete organic chemicals; or 2) Comprise one or more plants which produced by synthesis during the previous calendar year more than 30 tons of an unscheduled discrete organic chemical containing the elements phosphorus, sulfur or fluorine.

Variable Values and Labels: 0-999,999,999

Source: Annex 6 of https://www.opcw.org/sites/default/files/documents/CSP/C-21/en/c2104_e.pdf

Special Coding Rules: N/A

Variable 013

Variable Name: Number of Other Inspectable Facilities

Variable Description: Facilities subject to routine on-site inspections by international inspectors from the OPCW that: 1) Produce by synthesis during the previous calendar year more than 200 tons of unscheduled discrete organic chemicals; or 2) Comprise one or more plants which produced by synthesis during the previous calendar year more than 30 tons of an unscheduled discrete organic chemical containing the elements phosphorus, sulfur or fluorine.

Variable Values and Labels: 0-999,999,999

Source: Annex 6 of https://www.opcw.org/sites/default/files/documents/CSP/C-21/en/c2104_e.pdf

Special Coding Rules: N/A

Variable 014

Variable Name: Has Relevant Chemical Security Measures to Secure Chemical Weapons-Related Materials and Facilities?

Variable Description: Does the State have at least one measure that creates requirements to secure toxic chemicals, other chemicals of proliferation concern, and/or related facilities, technology, and equipment by stakeholders (e.g. are authorized holders required to take steps to prevent unauthorized access to sources)?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

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Variable 015

Variable Name: Defines Criminal Offences and Violations

Variable Description: Does the State have at least once measure that defines as offences or violations those criminal or intentional unauthorized acts involving or direct at toxic chemicals, other chemicals of proliferation concern, and/or related facilities, technology, and equipment?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 016

Variable Name: Penalty Provision – Imprisonment

Variable Description: Does the State have at least one measure that includes imprisonment as a penalty?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 017

Variable Name: Maximum Prison Sentence

Variable Description: The maximum prison sentence for any defined offense or violation in months, with a maximum of 600 months for life imprisonment.

Variable Values and Labels: 0-600, with no prison penalty option counted as 0

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: Life imprisonment = 600 months. Select the highest maximum prison sentence across all measures for that State.

Variable 018

Variable Name: Maximum Minimum Prison Sentence

Variable Description: The maximum for any minimum prison sentence for any defined offense or violation in months.

Variable Values and Labels: 0-600, with no minimum prison penalty counted as 0

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: Life imprisonment = 600 months. Select the highest minimum prison sentence across all measures for that State.

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Variable 019

Variable Name: Penalty Provision – Fines

Variable Description: Does the State have at least one measure that includes fines as a penalty?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 020

Variable Name: Maximum Monetary Penalty

Variable Description: The maximum monetary penalty for any defined offense or violation in national currency and/or US dollars (as converted in 2019).

Variable Values and Labels: 0-999,999,999, with no monetary penalty option counted as 0. 'Undefined' indicates that a State has a measure with fines, but the measure did not define what the monetary amount is.

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: Select the highest maximum monetary penalty across all measures for that State.

Variable 021

Variable Name: Maximum Minimum Monetary Penalty

Variable Description: The maximum for any minimum monetary penalty for any defined offense or violation in national currency and/or US dollars (as converted in 2019).

Variable Values and Labels: 0-999,999,999, with no monetary penalty option counted as 0. 'Undefined' indicates that a State has a measure with fines, but the measure not define what the monetary amount is.

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: Select the highest maximum minimum monetary penalty across all measures for that State.

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Variable 022

Variable Name: Defines Other Penalties

Variable Description: Does the State have at least one measure that includes penalties other than imprisonment or fines (e.g. search and seizure, suspension of license, etc.)?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 023

Variable Name: Registration System

Variable Description: Does the State have at least one measure that requires facilities or users to register toxic chemicals, other chemicals of proliferation concern, and/or related facilities, technology, and equipment?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 024

Variable Name: Authorization or Licensing System

Variable Description: Does the State have at least one measure that establishes or maintains a system for authorizing activities, e.g., issuing licenses for toxic chemicals, other chemicals of proliferation concern, and/or related facilities, technology, and equipment?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 025

Variable Name: Inspector Authority or System

Variable Description: Does the State have at least one measure that establishes or maintains a system for inspecting users, activities, stockpiles, or facilities?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

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Variable 026

Variable Name: Requires Access Controls

Variable Description: Does the State have at least one measure that requires controls on access to toxic chemicals, other chemicals of proliferation concern, and/or related facilities, technology, and equipment?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 027

Variable Name: Requires Physical Security

Variable Description: Does the State have at least one measure that requires physical security or physical protection measures (e.g. gates)?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 028

Variable Name: Requires Security Guards

Variable Description: Does the State have at least one measure that requires use of security guards for facilities or activities?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 029

Variable Name: Requires Background Checks

Variable Description: Does the State have at least one measure that requires background checks for users or those accessing facilities or chemicals of proliferation concern?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

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Variable 030

Variable Name: National Registry of Chemicals of Concern

Variable Description: Does the State have at least one measure that establishes or refers to a national registry of chemicals of concern?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 031

Variable Name: National Registry of Registrations / Licenses

Variable Description: Does the State have at least one measure that establishes a national registry of user registrations or licenses?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 032

Variable Name: Refers to a List of Controlled Chemicals, Technologies, and/or Equipment of Concern

Variable Description: Does the State have at least one measure that establishes, includes, or references a list of controlled chemicals, technologies, and/or equipment of concern?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 033

Variable Name: Requires Supply Chain Verification

Variable Description: Does the State have at least one measure that requires some supply chain verification practices (e.g. end-user verification)?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

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Variable 034

Variable Name: Requires Proliferation-Resistant Chemistry

Variable Description: Does the State have at least one measure that requires some efforts to design or operate in ways that reduce the risk of proliferation (e.g. reducing the mixtures of chemicals of concern)? Similar to the concept of Green Chemistry.

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 035

Variable Name: Requires Incident Reporting

Variable Description: Does the State have at least one measure that requires reporting of incidents to authorities?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 036

Variable Name: Requires Threat Reporting

Variable Description: Does the State have at least one measure that requires reporting of threats to authorities?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 037

Variable Name: Requires Risk-Based Security System

Variable Description: Does the State have at least one measure that requires facilities or users to implement a risk-based security system or risk-based security plans?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

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Variable 038

Variable Name: Training for Stakeholders

Variable Description: Does the State have at least one measure that establishes or maintains a training program for key stakeholders (e.g. users, industry, other governmental ministries, etc.)?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 039

Variable Name: Awareness Raising for Stakeholders

Variable Description: Does the State have at least one measure that establishes or maintains awareness-raising activities for stakeholders (e.g. users, industry)?

Variable Values and Labels: 'Yes' or 'No'

Source(s): As indicated in the Chemical Facility and Source Security National Measures Database.

Special Coding Rules: N/A

Variable 040

Variable Name: Chemical Security State Index Score

Variable Description: A composite index of national chemical security indicators that ranges from 0 (no chemical security measures or security indicators) to 22 (has at least one chemical security measure and includes all 21 security indicators).

Variable Values and Labels: Ranges from 0 (no chemical security measure or chemical security indicators) to 22 (has a chemical security measure and includes all 21 chemical security indicators)

Source(s): Determined by coders at The Henry L. Stimson Center. Index scores are based upon the number of 'Yes' values indicated in the following variables:

014 Has Relevant Chemical Security Measures through 016 Penalty Provision:

Imprisonment (inclusive)

019 Penalty Provision: Fines

022 Defines Other Offenses through 039 Awareness Raising for Stakeholders (inclusive)

Special Coding Rules: N/A

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Additional Coding Rules

- Missing Data = ''

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