

Council of State and Territorial Epidemiologists

Position Statement Template: Standardized Surveillance for Diseases or Conditions

Please note: Only active members defined as persons engaged in the practice of epidemiology at the state, local, territorial or tribal public health level, may submit a CSTE position statement. An associate member can be a co-author of a position statement but not the submitting author.

Deadline for submission to 2018 business meeting:Ordinary Process- **March 15, 2018**Expedited Handling- **May 24, 2018**Presidential Review- **Contact Janet Hamilton, CSTE President**

For Ordinary Process and Expedited Handling, submit your electronic typewritten position statement to:

Email: positionstatements@cste.org

Authors of position statements utilizing this template should review CSTE position statements 07-EC-02 "CSTE official list of Nationally Notifiable Conditions" (www.cste.org/resource/resmgr/PS/07-EC-02.pdf) and 10-SI-02 "Modification of Criteria for Inclusion of Conditions on CSTE Nationally Notifiable Conditions List" (www.cste.org/resource/resmgr/PS/10-SI-02.pdf).

Authors seeking to update an existing standardized surveillance case definition should reference previous CSTE position statements for the condition and describe the proposed updates in Sections I (Statement of the Problem) and II (Background and Justification). This template must be completed in its entirety for both updated and new case definitions. Final position statements should be able to "stand alone" and contain all current information required to implement surveillance for the disease or condition.

Additional information:

- **NEW:** To recommend a disease/condition be added to the *Nationally Notifiable Condition List* or to update a disease/condition already on the *NNC List*, authors **MUST** complete the NNC Recommendation Statement.
- **NEW:** Authors **MUST** complete the Technical Supplement to accompany the position statement. See Technical Supplement for more information.
- Please note word counts in sections where required.
- [Position statement overview](#) and [submitting author responsibilities](#)
- [Position statement timeline](#)

At least one active member author of a position statement must be present at all Annual Conference voting sessions (in which the position statement is being voted on) including the Thursday Business Meeting.

For further information, contact the CSTE National Office at (770) 458-3811. Consideration of position statements received after the deadline is discretionary, cannot be assured, and must involve a time-sensitive or emerging public health issue. Non-typed or incomplete proposals will be returned.

All "permanent" content that should be retained within the position statement is in BLACK font. Please do not delete or modify any black font text. Instructions to the author are in BLUE font. All blue font text must be deleted prior to final submission of the position statement in addition to the instructions on the first page. This will assure that position statements are uniform in format and content.

Position Statements submitted for Presidential Review must be sent directly to Janet Hamilton, CSTE President.

Submission Date:

Committee: Choose a Committee. *(Drop down field provided – click Choose a Committee, then the down arrow)*

Title:

Check this box if this position statement is an update to an existing standardized surveillance case definition.

I. Statement of the Problem

Please limit text in this section to no more than 300 words. Supplemental information may be included in appendices if needed.

Word Count: ____/300

II. Background and Justification

Please limit text in this section to no more than 500 words. Supplemental information may be included in appendices if needed.

Word Count: ____/500

III. Statement of the desired action(s) to be taken

Authors complete the desired action(s) to be taken below. If adding supplementary desired action(s) to be taken, each action should be explicitly measurable and as specific and objective as possible to help the CSTE National Office track position statement implementation. Please provide a separate bullet for each supplementary desired action.

Note: If disease/condition should be added to the *Nationally Notifiable Conditions List*, is already on the *NNC List* and should be updated, or should be removed from the *NNC List*, a *Nationally Notifiable Conditions Recommendation Statement* must be completed.

CSTE recommends the following actions:

1. Utilize standard sources (e.g. reporting*) for case ascertainment for [disease/condition]. Surveillance for [disease/condition] should use the following recommended sources of data to the extent of coverage presented in Table III.

Table III. Recommended sources of data and extent of coverage for ascertainment of cases of [disease/condition]. *[Check all that apply.]*

Source of data for case ascertainment	Coverage	
	Population-wide	Sentinel sites
Clinician reporting		
Laboratory reporting		
Reporting by other entities (e.g., hospitals, veterinarians, pharmacies, poison centers), specify:		
Death certificates		
Hospital discharge or outpatient records		
Extracts from electronic medical records		
Telephone survey		
School-based survey		
Other, specify:		

2018 Template

*Reporting: process of a healthcare provider or other entity submitting a report (case information) of a condition under public health surveillance TO local or state public health. Note: notification is addressed in a *Nationally Notifiable Conditions Recommendation Statement* and is the process of a local or state public health authority submitting a report (case information) of a condition on the *Nationally Notifiable Conditions List* TO CDC.

- Utilize standardized criteria for case identification and classification (Sections VI and VII and Technical Supplement) for [disease/condition].

Note: this action does NOT add [disease/condition] to the *Nationally Notifiable Condition List*. If requested by CDC, jurisdictions (e.g., States and Territories) conducting surveillance according to these methods may voluntarily submit case information to CDC.

If necessary, describe the desired action(s) to be taken or add supplementary desired action(s) to be taken. Please be as specific, measurable, and objective as possible.

IV. Goals of Surveillance

Please limit text in this section to no more than 100 words.

Word Count: ____/100

V. Methods for Surveillance: Surveillance for [disease/condition] should use the recommended sources of data and the extent of coverage listed in Table III.

Describe the sources of data for case ascertainment listed above in Table III, as needed. For each data source, consider including the following types of information if it is known: sensitivity/completeness (provide empirical estimates of undercount, if available), PPV (provide empirical estimates of false positives, if available), timeliness, inclusion of unique cases (not found in other data sources), and information value (inclusion of facts about the route of exposure or other contributing factors which are less reliable in other case-ascertainment sources). If case-finding is based on utilizing multiple data sources, describe the trade-offs between them. Distinguish between reporting from sentinel sites and population-wide case identification, as appropriate.

Please limit text in this section to no more than 100 words. Supplemental information may be included in appendices if needed.

Word Count: ____/100

VI. Criteria for case ascertainment

If the method for surveillance described in the previous section includes case ascertainment by reports of individual cases from traditional partners (e.g., clinicians, labs, hospitals) to governmental public health agencies, then describe the reporting criteria which trigger the case reports to be sent or provided to public health. If case-finding is based on secondary analysis of administrative or clinical data (such as vital records, hospital or EMS databases), describe the method used to identify cases separately for each data source. This section should provide suggested criteria to be applied by health care providers (i.e., based on clinical judgment and clinical diagnosis) and laboratory staff.

A. Narrative: A description of suggested criteria for case ascertainment of a specific condition.

In this subsection, when case-finding is based on reporting, use narrative text to allow the criteria for reporting to be clearly understood by health care providers and institutional staff who bear responsibility for submitting case reports. As appropriate, describe in three separate labeled parts:

- Clinical presentation criteria
- Laboratory criteria
- Criteria for epidemiologic linkage

The suggested criteria for reporting should include specification of whether reporting is to be all-inclusive, or limited to reporting only when the condition is work-related; likewise, include specification of whether condition reporting is to be on-going and routine, or limited to reporting only when there are multiple cases indicative of an outbreak. If the method for surveillance includes case identification by reports of individual cases to public health agencies, then specify the suggested reporting timeframe: immediate reporting of cases versus standard reporting of cases; specify if a subset of cases of the condition are handled differently (see *CSTE List of Nationally Notifiable Conditions* for examples of immediate and standard categories in disease/condition subtypes <https://c.mcdn.com/sites/cste.site-ym.com/resource/resmgr/CSTENotifiableConditionListA.pdf>).

When case-finding is based on secondary analysis of administrative or clinical data, use narrative text to allow the criteria for case-finding to be clearly understood by the data analysts. Examples are: "A person whose healthcare record contains a diagnosis of [[condition]]" or "A person whose death certificate lists [[condition]] as a cause of death or a significant condition contributing to death."

B. Disease-specific data elements to be included in the initial report

Disease-specific data elements are expected to be included in all reports of individual cases to governmental public health agencies for all reportable conditions, regardless of whether the report is submitted by telephone, by use of a standard paper-based form, or electronically. Disease-specific data elements are in addition to the common data elements that are to be reported for all individual case reports (see CSTE position statement 09-SI-01 "Common Core Data Elements for Case Reporting and Laboratory Result Reporting" <http://c.yumcdn.com/sites/www.cste.org/resource/resmgr/PS/09-SI-01.pdf>). Public health authorities do not expect that an initial report will contain all the information necessary for case investigation and case classification. For many conditions, the process of case investigation requires obtaining further case information from a health care provider or directly from the affected person. Disease-specific data elements that are included when case information is sent from health agencies to CDC ("notification") generally differ from that obtained in the initial report. The focus here is on the disease-specific data elements to be included in the initial report. In this subsection, list these disease-specific data elements. (Do not list the common data elements, which are expected to be included for all conditions in all reports of individual cases.)

Where case finding is based on secondary analysis of administrative data, include list of data elements expected to be extracted from source data repositories for each record.

VII. Case Definition for Case Classification**A. Narrative: Description of criteria to determine how a case should be classified.**

Describe the criteria to be used in the case definition in the separately labeled sections below. Stratify as appropriate, providing criteria for: complete clinical presentation vs. a "clinically compatible" case; laboratory confirmed vs. supportive laboratory results; epidemiologic linkage to a laboratory-confirmed case vs. epidemiologic linkage to any other case.

Clinical Criteria**Laboratory Criteria***Confirmatory laboratory evidence:*

Specified laboratory results that are consistent with the diagnosis and are part of the confirmed case classification. These are specified in the laboratory criteria for case classification section of each case definition.

Presumptive laboratory evidence:

Specified laboratory results that are consistent with the diagnosis and are part of the probable case classification. These are specified in the laboratory criteria for case classification section of each case definition.

Supportive laboratory evidence:

Specified laboratory results that are consistent with the diagnosis and are part of the suspect case classification. These are specified in the laboratory criteria for case classification section of each case definition.

If any type of laboratory evidence is not applicable, state explicitly.

Epidemiologic Linkage**Case Classifications**

Confirmed:

Probable:

Suspect:

B. Criteria to distinguish a new case of this disease or condition from reports or notifications which should not be enumerated as a new case for surveillance Consider defining and developing criteria (such as time between individual reports) to distinguish a new case from duplicates, recurrence, persistent state, carrier state, acute versus chronic state, recrudescence, and relapse. (See the Appendix for examples of the types of information which could be used for criteria.)

Optional criteria to include only if needed:

- Exposure
- Endemicity
- Comments

VIII. Period of Surveillance

Indicate whether surveillance is expected to be on-going or limited to a specific time period.

IX. Data sharing/release and print criteria

Complete the below selection of case statuses that should be included in CDC Print Criteria. As appropriate, further describe:

- Expectations for sharing of case data (dataflow/notification from state/territorial health agency to CDC) and limitations on data sharing (e.g., states and territories will send CDC data for selected cases based on case classification; states and territories will send core/generic data or supplemental/extended data)
- Limitations on data re-release by CDC (e.g., only fully de-identified case data will be released by CDC to the general public; other releases by CDC require signed data sharing agreements using a format pre-approved by the state/territorial health agency) [refer to *CDC-CSTE Intergovernmental Data Release Guidelines Working Group (DRGWG) Report: CDC-ATSDR Data Release Guidelines and Procedures for Re-release of State-Provided Data* (available at <http://www.cste2.org/webpdfs/drqwgreport.pdf>) as necessary]
Restrictions on the printing of counts of case data (e.g., CDC publication criteria will exclude selected cases from final printed counts based on case classification; provisional case report data will not be used by CDC until verification procedures are complete).

CSTE recommends the following case statuses be included in the CDC Print Criteria: (Check all that apply)

- Confirmed
- Probable
- Suspect
- Unknown

X. Revision History

If you are updating a previously passed position statement (e.g., if you are updating a case definition passed prior to 2016), please provide a short summary in the table below of the substantive changes between the most recently passed position statement and your proposed position statement. Do not list changes to the 'Statement of the Problem' or 'Background and Justification' sections. Revisions listed here should highlight the major changes to the case definition itself. For further information on what to include in this section, contact the CSTE National Office.

E.g., If adding a condition to the Nationally Notifiable Condition List via NNC Recommendation Request, specify that here.

If a certain lab test is now routinely used to identify cases, specify that here.

Any updates to Table VI and/or Table VII in the Technical Supplement should be specified here. As the Technical Supplement is due at a later date, the revision history may be updated after position statement submission.

List the position statement ID of the statement you are updating in 'Position Statement ID' column. Specify the section of the statement (e.g., Statement of the Desired action(s) to be taken, Table VI-B, etc.) you are updating in 'Section of Document' column. Briefly describe the revision and why you are revising that section of the document in 'Revision Description' column. Example table is shown below.

Position Statement ID	Section of Document	Revision Description
11-ID-01	Statement of the desired action(s) to be taken	ADDED XYZ condition to the NNC list
11-ID-01	Table VII-B - Confirmed	EDITED lab evidence to include XYZ test
11-ID-01	Table VII-B - Confirmed	DELETED ABC lab test (not in use)

XI. References

Where appropriate, include references to prior CSTE position statements.

XII. Coordination

Subject Matter Expert (SME) Consultants: List names and contact information for any SME consultants (e.g., CDC staff) who advised authors in the development of this position statement. If a SME consultant is listed upon position statement submission to the CSTE National Office, that SME consultant will be allowed entry to voting sessions at the CSTE Annual Conference.

(1)

SME Full Name

Title

Agency

Telephone Number

Email Address

(2)

SME Full Name

Title

Agency

Telephone Number

Email Address

(3)

SME Full Name

Title

Agency

Telephone Number

Email Address

Agencies for Response List only one name per agency, preferably an individual in a senior management position; complete contact information must be provided for acceptance to review.

(1)

Agency

Contact Full Name

Title

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

(2)

Agency

Contact Full Name

Title

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

(3)

Agency

Contact Full Name

Title

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

**For additional Agencies for Response, please provide a separate attachment with complete contact information.*

Agencies for Information: Complete contact information must be provided for acceptance to review.

(1)

Agency

Contact Full Name

Title

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

(2)

Agency

Contact Full Name

Title

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

(3)

Agency

Contact Full Name

Title

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

**For additional Agencies for Information, please provide a separate attachment with complete contact information.*

XIII. Author Information**Submitting Author:** (Must be an [Active CSTE Member](#) and complete contact information provided for acceptance to review.)

(1)

Contact Full Name

Title

Agency

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

Presenting Author: (Must be an [Active CSTE Member](#) in attendance at 2018 CSTE Annual Conference.) Check this box if presenting author is the same as submitting author.

(1)

Contact Full Name

Title

Agency

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

Co-Author: (Complete contact information must be provided for acceptance to review.)(1) Active Member Associate Member

Contact Full Name

Title

Agency

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

(2) Active Member Associate Member

Contact Full Name

Title

Agency

Address Line 1

Address Line 2

City, State and Zip

Telephone Number

Email Address

**For additional Authors, please provide a separate attachment with complete contact information.*

Appendix. Examples of types of information that could be used for criteria to distinguish a new case from duplicates, recurrence, persistent state, carrier state, acute versus chronic state, recrudescence, and relapse.

(a) time periods between repeated lab results for the same pathogen or environmental hazard --Note: It may be useful to define a hierarchy of dates to consider for the starting point for the repeated measures, since some dates may not be available to surveillance staff;

(b) sites of infection;

(c) exposure and travel history as it relates to dates of illness onset, diagnosis, lab tests, or hospitalization; and

(d) whether the condition was successfully treated.

CSTE National Office Staff can provide examples of criteria used by health jurisdictions and CDC programs.

Council of State and Territorial Epidemiologists Nationally Notifiable Conditions (NNC) Recommendation Statement

This recommendation statement must accompany a Standardized Surveillance for Diseases or Conditions Position Statement to recommend adding a disease/condition to the *Nationally Notifiable Conditions List* or updating a disease/condition on the *NNC List*. Please complete all fields below. The accompanying position statement will be reviewed and voted upon by appropriate Steering Committee and Council, and if approved, the Steering Committee and Council will consider and vote on this NNC Recommendation Request.

NOTE: If this recommendation statement is not needed, please delete from position statement for submission.

Position Statement Title: [Title should exactly match position statement title.]

Disease/Condition: [Name of disease/condition]

Please mark the most appropriate checkbox(es) below:

- 1. This statement recommends the addition of a disease/condition to the *Nationally Notifiable Conditions List*.
- 2. This statement updates a disease/condition already on the *NNC List*.
 - a. No change to the CDC notification timeframe is recommended.
 - b. No new subtypes or additional disease/condition categories are added to the accompanying position statement.
- 3. This statement removes a disease/condition from the *NNC List*.

By submitting this NNC request, this statement recommends the following:

1. Utilize standardized criteria for case identification and classification (based on Sections VI and VII and Technical Supplement of accompanying position statement) for [disease/condition] and add [disease/condition] to the *Nationally Notifiable Condition List*
[Select timeframe below for submission of CDC notification. Specify subsets of cases if applicable (e.g., suspected intentional release, clusters, or outbreaks).]
 - Immediately notifiable, extremely urgent (within 4 hours)
 - Immediately notifiable, urgent (within 24 hours)
 - Routinely notifiable
 - No longer notifiable
2. CSTE recommends that all States and Territories enact laws (statute or rule/regulation as appropriate) to make this disease or condition reportable in their jurisdiction. Jurisdictions (e.g. States and Territories) conducting surveillance (according to these methods) should submit case notifications* to CDC.
3. Expectations for Message Mapping Guide (MMG) development for a newly notifiable condition: NNDSS is transitioning to HL7-based messages for case notifications; the specifications for these messages are presented in MMGs. When CSTE recommends that a new condition be made nationally notifiable, CDC must obtain OMB PRA approval prior to accepting case notifications for the new condition. Under anticipated timelines, notification using the Generic V2 MMG would support transmission of the basic demographic and epidemiologic information common to all cases and could begin with the new MMWR year following the CSTE annual conference. Input from CDC programs and CSTE would prioritize development of a disease-specific MMG for the new condition among other conditions waiting for MMGs.

*Notification: process of a local or state public health authority submitting a report (case information) of a condition on the *Nationally Notifiable Conditions List* TO CDC.

4. CDC should publish data on [[disease/condition](#)] as appropriate (see Section IX of corresponding position statement).
5. CSTE recommends that all jurisdictions (e.g. States or Territories) with legal authority to conduct public health surveillance follow the recommended methods as outlined here and in the accompanying standardized surveillance position statement.

*Notification: process of a local or state public health authority submitting a report (case information) of a condition on the *Nationally Notifiable Conditions List* TO CDC.

Council of State and Territorial Epidemiologists Technical Supplement

This technical supplement is designed to accompany a Standardized Surveillance for Diseases or Conditions Position Statement. In order for the submission of a Standardized Surveillance for Diseases or Conditions Position Statement to be considered complete, authors are **required** to submit this technical supplement. Please reference Sections VI and VII in the accompanying position statement to complete the tables below. This technical supplement will be shared with and reviewed by membership but will NOT be voted on by the Council.

Please contact the CSTE National Office (770-458-3811 or positionstatements@cste.org) for assistance in table completion. One-on-one support is available.

DEADLINE FOR COMPLETION: 7 weeks before Annual Business Meeting, **April 26, 2018**

Table VI. Table of criteria to determine whether a case should be reported to public health authorities.

[This table is used to indicate the suggested criteria appropriate to guide development of computerized algorithms for electronic case-reporting processes. Conceptually this information needs to be listed discretely and in a manner that is machine readable. Criteria listed in tables should match the criteria described in the Section VI.A. Narrative in the accompanying position statement. Recommended format for Table VI is provided below. Where case-finding is based on secondary analysis of administrative or clinical data, use a separate column for each specified data source.]

Criterion	Reporting Disease or Condition Subtype	Reporting Disease or Condition Subtype	Reporting Disease or Condition Subtype
<i>Clinical Evidence</i>			
<i>Laboratory Evidence</i>			
<i>Epidemiological Evidence</i>			

2018 Template

Notes:

Each alternative disease or condition subtype or scenario is listed in a separate column. Each criterion (symptom, sign, lab result, immunization status, occupation, travel history, etc.) is listed in a separate row. Meeting the criteria listed under any single column of this table is sufficient to identify a case for reporting. [Change the generic "Disease or condition subtype" language to the appropriate term, which can be a clinical distinction (e.g., cutaneous anthrax, inhalational anthrax), or an agent (e.g., a type of arbovirus), or a route of exposure (e.g., foodborne botulism, wound botulism). *Delete unnecessary columns. Use letter codes provided – NO ADDITIONAL LETTER CODES ALLOWED. Where the action of ordering a laboratory test meets a criterion for reporting, indicate by use of asterisk.*]

S = This criterion alone is SUFFICIENT to report a case. (*Note: columns with "S" criteria should not contain any "N" or "O" criteria.*)

N = All "N" criteria in the same column are NECESSARY to report a case. (*Note: an "N" criterion should be accompanied by at least one additional "N" or at least two "O" criteria in a single column.*)

O = At least one of these "O" (ONE OR MORE) criteria in **each category** (categories=clinical evidence, laboratory evidence, and epidemiological evidence) **in the same column**—in conjunction with all "N" criteria in the same column—is required to report a case. (*Note: These "O" criteria are alternatives, which means that a single column will have either no "O" criteria or multiple "O" criteria; no column should have only one "O."*)

* A requisition or order for any of the "S" laboratory tests is sufficient to meet the reporting criteria.

Table VII. Classification Table: Criteria for defining a case of [disease/condition].

Criteria listed in Table VII should match the criteria described in Sections VII.A. and VII.B. in accompanying position statement. Recommended format for Table VII is provided below. Where appropriate, such as where case finding may be based on both reporting and secondary analysis of administrative data, list case classifications separately for each data source specified for case identification. Conceptually this information needs to be listed discretely and in a manner that is machine readable.

As appropriate, list criteria for:

- **Suspected Cases:** cases where clinical features were compatible with the disease or condition, but either further investigation is required or investigation of the case did not provide supporting evidence for the disease or condition.
- **Probable Cases:** cases where alternative etiologies were investigated and excluded, and/or where substantial supportive information for the disease or condition was found.
- **Confirmed Cases:** cases with the highest level of certainty.
- **Criteria to distinguish a new case:** from Section VII.B. “Criteria to distinguish a new case of this disease or condition from reports or notifications which should not be enumerated as a new case for surveillance,” which should be considered in determining whether to count this as a new case. This section is not applicable if not relevant to the condition.

Criterion	Suspected	Probable	Confirmed
<i>Clinical Evidence</i>			
<i>Laboratory evidence</i>			
<i>Epidemiologic evidence</i>			
<i>Criteria to distinguish a new case:</i>			
[Example: Not counted as a new case if occurred within 30 days of initial case]	N	N	N

2018 Template

Notes:

Each alternative disease or condition subtype or scenario is listed in a separate column. Each criterion (symptom, sign, lab result, immunization status, occupation, travel history, etc.) is listed in a separate row. Meeting the criteria listed under any single column of this table is sufficient to classify a case. [Use letter codes provided – **NO ADDITIONAL LETTER CODES ALLOWED.**]

S = This criterion alone is SUFFICIENT to classify a case. (Note: columns with “S” criteria should not contain any “N” or “O” criteria.)

N = All “N” criteria in the same column are NECESSARY to classify a case. A number following an “N” indicates that this criterion is only required for a specific disease/condition subtype (see below). If the absence of a criterion (i.e., criterion NOT present) is required for the case to meet the classification criteria, list the absence of criterion as a necessary component. (Note: an “N” criterion should be accompanied by at least one additional “N” or at least two “O” criteria in a single column.)

O = At least one of these “O” (ONE OR MORE) criteria in **each category** (categories=clinical evidence, laboratory evidence, and epidemiologic evidence) **in the same column**—in conjunction with all “N” criteria in the same column—is required to classify a case. (Note: These “O” criteria are alternatives, which means that a single column will have either no “O” criteria or multiple “O” criteria; no column should have only one “O.”) A number following an “O” indicates that this criterion is only required for a specific disease/condition subtype. [Use the following numbers to indicate different disease/condition subtypes (e.g., cutaneous anthrax vs. inhalational anthrax; type of arbovirus; foodborne botulism vs. wound botulism); delete if not needed.]

- 1 =
- 2 =
- 3 =
- 4 =