

Indiana’s Long-Term Care Dashboard

Indiana will create a public dashboard relating to COVID-19 and Long-term care facilities. For this work the word “facilities” means both comprehensive care facilities (nursing homes) and residential care facilities (assisted living) and includes both licensed and unlicensed. Data will include both resident and staff data, time frames of outbreaks, recovery data, and facility location as outlined below. The public dashboard will contain information pertaining to cases and deaths with positive-COVID PCR tests (no serology tests) in alignment with the CDC’s guidance.

Dashboard elements

Analysis-level	Time Frame	Metrics
State	Over time (<i>since March 1st</i>)	<ul style="list-style-type: none"> Confirmed COVID-19 cases in residents Confirmed COVID-19 cases in staff COVID-19 deaths in residents COVID-19 deaths in staff COVID-19 presumed recovered in residents
	Aggregated (<i>since March 1st</i>)	<ul style="list-style-type: none"> Demographics of residents with COVID case and deaths Demographics of staff with COVID case and death LTC job description of staff with COVID case
District	Over time (<i>since March 1st</i>)	<ul style="list-style-type: none"> Confirmed COVID-19 cases in residents Confirmed COVID-19 cases in staff COVID-19 deaths in residents COVID-19 deaths in staff COVID-19 presumed recovered in residents
	Aggregated (<i>since March 1st</i>)	<ul style="list-style-type: none"> Demographics of residents with COVID case and deaths Demographics of staff with COVID case and death LTC job description of staff with COVID case
Facility	Aggregated (<i>since March 1st</i>)	<ul style="list-style-type: none"> Confirmed COVID-19 cases in residents Confirmed COVID-19 cases in staff COVID-19 deaths in residents COVID-19 deaths in staff COVID-19 presumed recovered in residents

Main Tasks

In order for the State to fulfill a complete analysis of the above metrics, all licensed and unlicensed facilities are **mandated** by the Health Commissioner to complete the following tasks for all cases and deaths with positive-COVID PCR tests regardless of type of exposure (in alignment with CDC guidance):

1. Submission of historical suspected and COVID-19 positive case file including residents and staff members with positive COVID-19 PCR test results since March 1st in alignment with the attached data dictionary and templated submission file (.csv) by July 14th at 6

PM. Please submit all LTC historical files to the following link (with the form titled “LTC Historical COVID-19 Reporting”): <https://redcap.isdh.in.gov/surveys/?s=P894LLKEWL>.

- a. Following submission of the historical file of cases, all newly recorded cases should be recorded in the current REDCap Project (implemented on April 10th; titled as “ISDH COVID-19 LHD Investigations”) until the transition occurs to the Case-level Information Module on July 14th (titled as “Long Term Care COVID-19 Reporting”)
2. Submission of COVID-19 positive cases and deaths to a new REDCap Project (<https://redcap.isdh.in.gov/surveys/?s=TJPDYTRHT9>) beginning on July 14th within 24 hours of identification of a positive (confirmed) COVID-19 case and death, including the same fields captured in the attached data dictionary¹. This REDCap Project is titled “Long Term Care COVID-19 Reporting” and will replace the “ISDH COVID-19 LHD Investigations” REDCap project.
3. Submission of NHSN data in one of two ways:
 - a. NHSN Module: For NHSN members (primarily skilled nursing facilities²), please record submission in your NHSN LTC COVID-19 Module that submits directly to NHSN and CMS.
 - b. REDCap-based Facility-level Module: For non-NHSN member (primarily assisted living facilities), please record submissions in the REDCap URL that will be sent to you daily (with the form titled “Long Term Care COVID-19 NHSN Module Reporting”). This REDCap project contains many of the same fields present in the NHSN module with the exception of a few changes to adjust for underlying differences between skilled nursing and assisted living facilities.
4. Submission of a response within one week to a lab and electronic health record (EHR) system vendor survey to the following URL:
<https://redcap.isdh.in.gov/surveys/?s=4AEE7WLXAX>

¹ Refer to Appendix 1 for list of potential REDCap Case-level Transition Module Fields

² For NHSN members that are both a skilled nursing facility with an assisted living wing, please submit to the NHSN module. For non-NHSN members with both facilities at one site, please submit to the REDCap form.

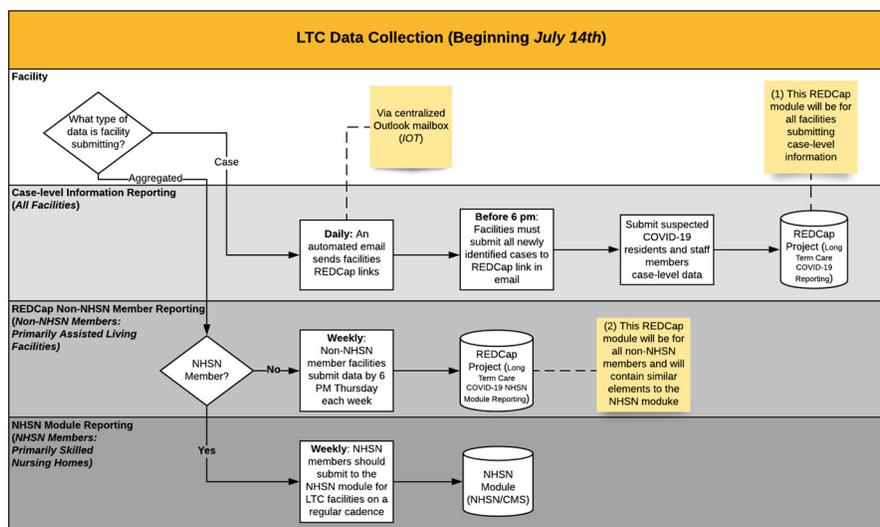


Figure 1: Data Collection Beginning July 14 (larger version found in Appendix 7)

Historical File

Description

The Historical File submissions from each LTC facility will help establish a baseline for COVID-19 cases case and COVID-19 related death data for LTC residents and staff members. This case-level data will allow the state to produce dashboards with LTC facility data for public consumption within the next 4-6 weeks.

Key Guidance

For submission, the historical file should only contain cases validated through a positive PCR test for both facility residents and staff members. Regardless of type of exposure, whether the patient was admitted with COVID -19 or the patient contracted COVID-19 while in the facility, all positive COVID-19 PCR cases must be submitted to the REDCap [link](#) with the form titled "LTC Historical COVID-19 Reporting." All data must go back to March 1st and all fields mentioned in Appendix 1 are necessary and required. ISDH mandates submission from both licensed and unlicensed facilities to come in by July 14th.

Frequently Asked Questions (FAQ)

1. Why should facilities submit social security number along with the additional personally identifiable information (PII)?

For all COVID-19 cases and deaths, ISDH is requiring PII to be reported through the secure REDCap system, including first name, last name, date of birth, race, gender, and last 4 digits of the social security number. Patient and staff PII will be used to perform record linkage between multiple information systems to confirm case reports meet the case definition of COVID-19. Complete reporting of PII is critical to ensuring high quality record linkage and accurate surveillance data on Indiana's public long-term care dashboard. Providing sufficient PII to the State for linkage of long-term care data with other datasets supporting surveillance efforts, such as contact tracing.

2. What security protocols will be utilized to support the privacy and security of PII submitted to the State?

REDCap is a secure web application for building and managing online surveys and databases. While REDCap can be used to collect virtually any type of data in any environment, it is specifically geared to support online and offline data capture for research studies and operations and is compliant with 21 CFR Part 11, FISMA, HIPAA, and GDPR regulations. The product provides full user authentication (log-on/password), customizable user rights restrictions, real-time data validation, centralized & secure data storage, data de-identification options, and a full audit trail for tracking data manipulation and export procedures.

3. What if staff member works in multiple facilities?

Because all facilities related to the individual will submit this data, the State will be able to understand what individuals worked at multiple facilities. This will enhance the State's ability to provide targeted interventions when considered mitigation strategies for facilities with increasing cases.

4. Previous guidance indicated submission of the full social security number (SSN), however this one is only requesting the last 4 digits. Is that an update?

Yes, previous guidance indicated submission of the full SSN; although, through feedback with facilities we have updated guidance for submission of the last four-digits of the patient's SSN. This reduces our ability to link individuals for proper validation and verification of patient's identity in relation to a positive COVID-19 PCR test, but receiving at least the last four digits in the patient's SSN will allow our data teams reliability in connecting and linking patient records.

5. My facility has not recorded any cases in either staff members or residents. Do we need to submit anything?

Yes, please submit a blank line list with your contact information into the REDCap form for the historical LTC file.

Case-level Information Module

Description

The Case-level Information Module is a REDCap-based [form](#) where LTC facilities shall submit individual-level information on COVID-19 positive cases and suspected COVID-19 positive cases. Facilities must enter this data around the case within 24 hours of identifying the case. The comprehensive list of fields in the Case-level Information Module are located in *Appendix 1*. This REDCap form will replace the "ISDH COVID-19 LHD Investigations" REDCap project for LTC case reporting.

Key Guidance

All types of LTC facilities (licensed & unlicensed; skilled nursing & assisted living) should submit cases within 24 hours of identifying a confirmed COVID-19 positive patient identification beginning on July 14th. Facilities should record this data within the REDCap form, which will be emailed to facilities on a daily basis.

Frequently Asked Questions

1. After submitting my facility’s historical file, where do I submit cases until July 14th?

After submitting the facility historical file and prior to July 14th, facilities shall continue reporting case-level information for COVID-19 positive (indicated by a positive COVID-19 PCR test) residents and staff members in the same REDCap form they have used since April 10th for submission of cases within 24 hours of identification.

2. We have a staff member and/or resident who is showing signs and experiencing symptoms of COVID-19. Do I submit their case to the REDCap form?

Yes, please submit all relevant case information for presumptive or suspected COVID-19 cases to the Case-level Information Module (titled “Long Term Care COVID-19 Reporting”) beginning July 14th. We will take that data and match with any lab results available through the State’s NEDDS (NBS) system.

Until July 14th, please continuing submitting cases into the ISDH COVID-19 LHD Investigations REDCap form (facilities have reported cases here since April 10th) for any cases identified after your facility has submitted the LTC historical file.

Aggregated (NHSN-based) Reporting

Description

Effective May 8, 2020, CMS requires the submission of data related to:

- “Suspected and confirmed COVID-19 infections among residents and staff, including residents previously treated for COVID
- Total deaths and COVID-19 deaths among residents and staff
- Personal protective equipment (PPE) and hand hygiene supplies in the facility
- Ventilator capacity and supplies in the facility
- Residents beds and census
- Access to COVID-19 testing while the resident is in the facility
- Staffing shortages
- Other information specified by the Secretary”³

³ <https://www.cdc.gov/nhsn/pdfs/covid19/lctf/cms-covid19-req-508.pdf>

Facilities must submit the CMS-specified fields to NHSN once a week and it is strongly recommended facilities submit data at a specific time and day during each reporting week (every Thursday at 6 pm, for example).

Key Guidance

Facilities should submit by one of two options based off their NHSN member status, outlined below:

1. NHSN's Reporting Module
 - a. **Who:** NHSN-members (primarily, skilled nursing facilities⁴)
 - b. It is recommended that NHSN member facilities report through the NHSN module at a consistent time and day during each reporting week
2. REDCap Facility-level Reporting Module
 - a. **Who:** Non-NHSN members (primarily, assisted living facilities)
 - b. It is required that non-NHSN member facilities submitting here do so once a week
 - c. It is recommended that facilities submit weekly by 6 PM on Thursday

Frequently Asked Questions

1. What is an NHSN member?

Nursing homes, skilled nursing facilities and assisted living facilities, collectively known as long-term care facilities, provide a variety of services to people who are unable to manage independently in the community. CMS is only collecting nursing home data (i.e., skilled nursing facility and/or nursing facility) data and are not requiring assisted living or developmental disability facility types. For the latter, the State will provide a similar form for submission of aggregated data.

2. I have an NHSN member facility with both a skilled nursing facility and assisted living facility. Where do I submit my aggregated data?

As an NHSN member facility, you should submit aggregated data into the NHSN module. This information will be pulled regularly by the state for evaluation and analysis.

3. I have a non-NHSN member facility with both a skilled nursing facility and assisted living facility. Where do I submit my aggregated data?

As a non-NHSN member facility, you should submit aggregated data through the REDCap form for aggregated reporting. This information will be pulled regularly by the state for evaluation and analysis.

⁴ For NHSN members that are both a skilled nursing facility with an assisted living wing, please submit to the NHSN module. For non-NHSN members with both facilities at one site, please submit to the REDCap form.

4. I am a non-NHSN member currently submitting through the NHSN module. Where should I submit my aggregated data?

If you are currently submitting data through the NHSN module, you may continue doing so. The State is able to consolidate that data with the other facility records based on the facility's profile assignment to the Indiana state group in the NHSN module.

5. I operate an independent living facility. Do I now need to submit data to the State?

Only facilities required to submit a Housing with Services form to the Division of Aging are required to submit as mandated by this document. Facilities that are truly independent and require no care services are not required to submit to the State.

Lab & Electronic Health Record (EHR) Vendor Survey

Description

To inform current coordination effort between labs, facilities, and the State and to help plan for long-term health interoperability between LTC EHR system, the State plans to send out a Lab & EHR Vendor survey. This short-survey will contain questions regarding how many and which labs a facility submits COVID-19 tests to or receives results from, and what EHR vendor they currently work with (if any).

Further Guidance

Please respond to the Lab & EHR Vendor survey

(<https://redcap.isdh.in.gov/surveys/?s=4AEE7WLXAX>) no later than July 22nd, 2020 by 6 PM.

APPENDIX 1: LTC Historical File Submission Reporting Elements

Field	Field Description	Field Values
pt_fname	First name of the patient	Free text
pt_lastname	Last name of the patient	Free text
pt_dob	Date of Birth of the patient	MM/DD/YYYY
pt_ssn	Last 4 digits of Social Security Number of patient	Integer, 4 (####, for example) *correction from early guidance saying “10” digits
pt_sex	Patient gender	<ul style="list-style-type: none"> • F, Female • M, Male • U, Unknown
pt_race	Patient race	<ul style="list-style-type: none"> • 2106-3, White • 2054-5, Black or African American • 2028-9, Asian • 1002-5, American Indian or Alaskan Native • 2076-8, Native Hawaiian or Other Pacific Islander • 2131-1, Other • UNK, Unknown
pt_race_oth	If race is selected as other, please specify:	Free Text; leave blank for null value
pt_ethnicity	Patient ethnicity	<ul style="list-style-type: none"> • 2135-2, Hispanic or Latino • 2186-5, Not Hispanic or Latino • UNK, Unknown
fac_name	Facility name	Free Text
case_type	Was the patient a resident or staff member of the facility?	<ul style="list-style-type: none"> • 1, Resident • 2, Staff
staff_type	What role does the staff member currently have?	<ul style="list-style-type: none"> • 1, Case Manager • 2, Certified Nursing Assistant (CNA) • 3, Licensed Practical Nurse (LPN) • 4, Management or Administrator • 5, Medical Technician • 6, Memory Care Coordinator • 7, Occupational Therapist • 8, Patient Care Assistant • 9, Pharmacist

		<ul style="list-style-type: none"> • 10, Phlebotomist • 11, Physical Therapist • 12, Physician • 13, Program Coordinator • 14, Registered Nurse • 15, Service Staff (ex. Housekeeping, Cafeteria) • 16, Social Worker • 17, Other
staff_other	If other, please specify the staff's role	Free text; leave blank for null value
deceased	Did the patient die from COVID-19?	<ul style="list-style-type: none"> • 1, Yes • 0, No
pt_death	Patient date of death	MM/DD/YYYY
specimen_colldt	Specimen collection date of PCR tests	MM/DD/YYYY
test_type	Type of laboratory test (select "1, (COVID-19) SARS coronavirus 2 RNA" as the only option)	<ul style="list-style-type: none"> • 1, (COVID-19) SARS coronavirus 2 RNA

APPENDIX 2: Case-level Information Reporting Elements

Field	Field Description	Field Values	Required?
record_id	Record ID	Text—generated during submission	Y
report_date	Date of Report	MM/DD/YYYY—generated during submission	Y
condition	Reportable Disease/Health Condition	“11065, Coronavirus Disease 2019 (COVID-19)”—generated during submission	
facility_cd	Facility Name	Drop down will autocomplete during submission	Y
fac_address	Facility Street Address	Free text	Y
fac_city	Facility City	Free text	Y
fac_zip	Facility Zip Code	##### or #####-####	Y
facility_county	Facility County	Select from drop down	Y
fac_state	Facility State	Select from drop down	Y
pt_fname	Patient’s First Name	text	Y
pt_lname	Patient’s Last Name	text	Y
case_type	Is the patient a resident or staff member?	<ul style="list-style-type: none"> • 1, Resident • 2, Staff 	Y
staff_type	What role does the staff member play?	<ul style="list-style-type: none"> • 1, Case Manager • 2, Certified Nursing Assistant (CNA) • 3, Licensed Practical Nurse (LPN) • 4, Management or Administrator • 5, Medical Technician • 6, Memory Care Coordinator • 7, Occupational Therapist • 8, Patient Care Assistant • 9, Pharmacist • 10, Phlebotomist • 11, Physical Therapist • 12, Physician • 13, Program Coordinator • 14, Registered Nurse • 15, Service Staff • 16, Social Worker • 99, Other 	Y
staff_other	Please specify staff role:	Text—Will only appear if “99, Other” is selected for field “staff_type”	Y
pt_address	Patient’s Street Address of Residence	Text—Will only appear if “2, Staff” selected for field “case_type”	Y
pt_city	Patient’s City of Residence	Text—Will only appear if “2, Staff” selected for field “case_type”	

pt_zip	Patient's Zip Code of Residence	Text—Will only appear if “2, Staff” selected for field “case_type”	
pt_county	Patient's County of Residence	Dropdown of counties	
pt_state	Patient's State of Residence	Drop down of state options	Y
pt_dob	Patient's Date of Birth	MM-DD-YYYY	Y
pt_age	Patient's Age (in years)	Calculated field based on Patient's Date of Birth at submission of record	Y
pt_sex	Patient's Gender	<ul style="list-style-type: none"> • F, Female • M, Male • U, Unknown 	Y
pt_race	Patient's Race	<ul style="list-style-type: none"> • 2106-3, White • 2054-5, Black or African American • 2028-9, Asian • 1002-5, American Indian or Alaskan Native • 2076-8, Native Hawaiian or Other Pacific Islander • 2131-2, Other • UNK, Unknown 	Y
pt_race_oth	If patient's race is other, please specify	Text—only shown if “2131-2, Other” is selected for “pt_race”	Y
pt_ethnicity	Patient's Ethnicity	<ul style="list-style-type: none"> • 2135-2, Hispanic or Latino • 2186-5, Not Hispanic or Latino • UNK, Unknown 	Y
pt_ssn	Last for digits of patient's Social Security Number	Text, #####	Y
dt_onset	Date of Onset	MM-DD-YYYY	Y
labresults_yn	Are laboratory results available for the patient?	<ul style="list-style-type: none"> • 1, Yes • 0, No 	Y
lab_name	Performing Lab Name	Text—only shown if “1, Yes” is selected for field “labresults_yn”	Y
lab_accessionnum	Performing Lab's Accession Number	Text—only shown if “1, Yes” is selected for field “labresults_yn”	Y
specimen_colldt	Specimen Collection Date	MM-DD-YYYY—only shown if “1, Yes” is selected for field “labresults_yn”	Y
dt_labresults	Laboratory Result Date	MM-DD-YYYY—only shown if “1, Yes” is selected for field “labresults_yn”	Y
test_type	Type of Laboratory Test	<ul style="list-style-type: none"> • 1, (COVID-19) SARS coronavirus 2 RNA • 2, (COVID-19) SARS coronavirus 2 Antibody • 3, (COVID-19) SARS coronavirus 2 Antigen Only shown if “1, Yes” is selected for field “labresults_yn”	Y

lab_results	Tests Results	<ul style="list-style-type: none"> • 3, Positive • 2, Negative • 1, Equivocal • 4, Test not done Only shown if “1, Yes” is selected for field “labresults_yn”	Y
upload1	Please upload a copy of the patient’s laboratory results, if available:	file, uploaded— only shown if “1, Yes” is selected for field “labresults_yn”	N
deceased	Did the case die of COVID-19?	<ul style="list-style-type: none"> • 1, Yes • 0, No 	Y
pt_death	Date of Death	MM-DD-YYYY	Y
comments	Comments	Notes—Please do not use ampersands (& symbol) or carriage returns (i.e., pressing the enter button to start a new paragraph) when entering into this field	N
long_term_care_covid19_case_report_form_complete	Complete	<ul style="list-style-type: none"> • 0, Incomplete • 1, Unverified • 2, Complete 	Y

APPENDIX 3: NHSN Module Reporting Elements

Field	Field Description
NHSN Facility ID #	The NHSN-assigned facility ID will be auto-entered by the computer.
Federal Provider Number	The CMS Certification Number (CCN) for the provider. Auto-generated based on information provided during membership enrollment.
Provider Name	The provider's name. Auto-generated based on information provided during membership enrollment.
Date of record	Select the date on the calendar for which the responses are being reported in the NHSN LTCF COVID-19 Module
Facility Type	Auto-generated based on information provided during membership enrollment. <ul style="list-style-type: none"> LTC-ASSIST: Assisted Living Residence LTC-DEVDIS: Long-term Care Facility for the developmentally disabled LTC-SKILLNURS: Skilled Nursing Facility (both skilled nursing facilities and nursing homes)
Date Created	Auto-generated when record is saved
Admissions	Residents admitted or readmitted who were previously diagnosed with COVID-19
Confirmed	Residents with a new laboratory positive COVID-19 test result (PCR-only)
Suspected	Residents with new suspected COVID-19 <i>Note: Suspected</i> is defined as a resident who is being managed as though he/she has COVID-19 because of signs and symptoms suggestive of COVID-19 as described by the CDC's guidance but does not have a laboratory positive COVID-19 tests result.
Total Deaths	Residents who have died in the facility or another location
COVID-19 Deaths	Residents with suspected or laboratory positive COVID-19 test result who dies in the facility or another location
All Beds	Enter the total number of resident beds in the facility
Current Census	Total number of beds that are currently occupied
Does your facility have access to COVID-19 testing while the resident is in the facility?	This field contains options: <ul style="list-style-type: none"> YES NO
If "Yes," what laboratory type are the specimens sent for testing?	Please select one or more of the following options: <ul style="list-style-type: none"> State health department lab Private lab (hospital, corporation, academic institution) Other
Confirmed Staff	Staff and facility personnel with new laboratory positive COVID-19 lab results
Suspected Staff	Staff and facility personnel with new suspected COVID-19 who are being managed as though they have it
COVID-19 Staff Deaths	Staff and facility personnel with new suspected or laboratory positive COVID-19 lab results who dies
Nursing Staff Shortage	Does your organization have a shortage of staff and/or other personnel? (registered nurse, licensed practical nurse, vocational nurse) <ul style="list-style-type: none"> YES NO
Clinical Staff Shortage	Does your organization have a shortage of staff and/or other personnel? (physician, physician assistant, advanced practice nurse)

	<ul style="list-style-type: none"> • YES • NO
Aide Staff Shortage	<p>Does your organization have a shortage of staff and/or other personnel? (certified nursing assistant, nurse aide, medication aide, medication technician)</p> <ul style="list-style-type: none"> • YES • NO
Other Staff or Facility Personnel Shortage	<p>Does your organization have a shortage of staff and/or other personnel? (regardless of clinical responsibility or resident contact not included in the above stated categories)</p> <ul style="list-style-type: none"> • YES • NO
N95 Masks: Current Supply	<p>Do you currently have any supply?</p> <ul style="list-style-type: none"> • YES • NO
N95 Masks: One-week	<p>Do you have enough for one week?</p> <ul style="list-style-type: none"> • YES • NO
Surgical Masks: Current Supply	<p>Do you currently have any supply?</p> <ul style="list-style-type: none"> • YES • NO
Surgical Masks: One-week	<p>Do you have enough for one week?</p> <ul style="list-style-type: none"> • YES • NO
Eye Protection: Current supply	<p>Do you currently have any supply?</p> <ul style="list-style-type: none"> • YES • NO
Eye Protection: One-week	<p>Do you have enough for one week?</p> <ul style="list-style-type: none"> • YES • NO
Gowns: Current Supply	<p>Do you currently have any supply?</p> <ul style="list-style-type: none"> • YES • NO
Gowns: One-week	<p>Do you have enough for one week?</p> <ul style="list-style-type: none"> • YES • NO
Gloves: Current Supply	<p>Do you currently have any supply?</p> <ul style="list-style-type: none"> • YES • NO
Gloves: One-week	<p>Do you have enough for one week?</p> <ul style="list-style-type: none"> • YES • NO
Alcohol-based Hand Sanitizer: Current Supply	<p>Do you currently have any supply?</p> <ul style="list-style-type: none"> • YES • NO
Alcohol-based Hand Sanitizer: One-week	<p>Do you have enough for one week?</p> <ul style="list-style-type: none"> • YES • NO

Do you have ventilator dependent unit(s) and/or beds in your facility?	<p><u>On the date of the response</u>, does your facility have ventilator dependent unit(s) and/or beds in your facility?</p> <ul style="list-style-type: none"> • YES • NO
Total number available in the facility	<p><u>On the date of the response</u>, enter the total number of mechanical ventilators available in your facility. Include ventilators that are in use and not in use.</p>
Total number of mechanical ventilators in use for residents who have suspected or laboratory positive COVID-19	<p><u>On the date of the response</u>, enter the total number of mechanical ventilators in use by residents with suspected or laboratory positive COVID-19.</p>
Ventilators: Do you currently have any supply?	<p><u>On the date of the response</u>, does your facility have any ventilator supplies available for use?</p> <ul style="list-style-type: none"> • YES • NO
Ventilators: Do you currently enough for one week?	<p><u>On the date of the response</u>, do you have enough ventilator supplies for ONE week (for example, 7 days)?</p> <ul style="list-style-type: none"> • YES • NO

APPENDIX 4: REDCap Non-NHSN Member COVID-19 Aggregate Reporting Elements

Field	Field Description	Data Type
record_id	Identifier auto-generated upon submission of a record to the REDCap system.	Free text
facility_name	Facility Name. Auto-generated through URL sent to each facility.	Free text
collectiondate	Date for which patient counts are reported. Please select the current date of submission of REDCap form	MM-DD-YYYY
numresadmc19	Residents admitted or readmitted who were previously diagnosed with COVID-19 from another facility	Integer
numresconfc19	Residents with NEW laboratory positive COVID-19	Integer
numressuspc19	Residents with new suspected COVID-19	Integer
numresdied	Residents who have died in the facility or another location	Integer
numresdied19	Residents with suspected or laboratory positive COVID-19 who have died in the facility or another location	Integer
numltcbeds	Number of beds in the facility <i>Note: Only required during the first survey, unless number changes</i>	Integer
numltcfbedsocc	Total number of beds that are currently occupied	Integer
numresconf_warning	INSTRUCTION: Please check your confirmed COVID-19 number. This number cannot be greater than your current census count.	N/A
numressuspect_warning	INSTRUCTION: Please check your suspect COVID-19 number. This number cannot be greater than your current census count.	N/A
numbedsocc_warning	INSTRUCTION: Please check your current census number. This number cannot be greater than the count of all beds in the facility	N/A
c19testing	Does your facility have access to COVID-19 testing while the resident is in the facility?	<ul style="list-style-type: none"> • Y, Yes • N, No
c19testingstatehlab	Does your facility have access to the state health department lab?	<ul style="list-style-type: none"> • Y, Yes • N, No
c19testingprivatelab	Does your facility have access to a private lab (hospital, corporation, academic institution)?	<ul style="list-style-type: none"> • Y, Yes • N, No
c19testingotherlab	Does your facility have access to any other laboratory type?	<ul style="list-style-type: none"> • Y, Yes • N, No

labtype_warning	Please select/indicate at least 1 laboratory type you have access to	N/A
numstaffconfc19	Staff and facility personnel currently with lab-confirmed COVID-19	Integer
numstaffsuspc19	Staff and facility personnel currently with suspected COVID-19 who are being managed as though they have it	Integer

APPENDIX 5: LTC Lab and Electronic Health Reporting (EHR) Vendor Survey

Field	Field Description	Field Values
record_id	Record ID	Free text
facility_name	Facility Name	Free text
fac_city	Facility City	Free text
fac_zip	Facility Zip	Zip Code, Integer (##### or #####-####)
ehr_yn	Do you currently utilize an Electronic Health or Medical Record (EHR/EMR) system?	<ul style="list-style-type: none"> • Y, Yes • N, No
ehr_vendor	Who is your EHR/EMR vendor?	<ul style="list-style-type: none"> • 1, Matrix Care • 2, Contract with another facility/organization
ehr_vendor_oth	What is the name of your EHR/EMR vendor?	Free text
lab_yn	Do you currently perform laboratory directly within your facility or do you contract with another facility/organization for laboratory testing?	<ul style="list-style-type: none"> • 1, Directly within facility • Contract with another facility/organization
labnumber	How many labs do you currently contract with?	<ul style="list-style-type: none"> • 1, 1 • 2, 2 • 3, 3 or more
lab_name1	Laboratory Name	Select from dropdown
lab_name_oth1	Laboratory Name	Free text Only shown if '00' selected for lab_name1
lab_city1	Laboratory #1 City	Free text
lab_zip1	Laboratory #1 Zip Code	Zip Code, Integer (##### or #####-####)
lab_name2	Laboratory Name	Select from dropdown
lab_name_oth2	Laboratory Name	Free text Only shown if '00' selected for lab_name1
lab_city2	Laboratory #2 City	Free text
lab_zip2	Laboratory #2 Zip Code	Zip Code, Integer (##### or #####-####)
lab_name3	Laboratory Name	Select from dropdown
lab_name_oth3	Laboratory Name	Free text Only shown if '00' selected for lab_name1

lab_city3	Laboratory #3 City	Free text
lab_zip3	Laboratory #3 Zip Code	Zip Code, Integer (##### or #####-####)
submitter_fname	Submitter First Name	Free text
submitter_lname	Submitter Last Name	Free text
submitter_email	Submitter Email Address	Email

APPENDIX 6: REDCap System Privacy & Security Brief

REDCap is a secure web application for building and managing online surveys and databases. While REDCap can be used to collect virtually any type of data in any environment, it is specifically geared to support online and offline data capture for research studies and operations and is compliant with 21 CFR Part 11, FISMA, HIPAA, and GDPR regulations. The product provides full user authentication (log-on/password), customizable user rights restrictions, real-time data validation, centralized & secure data storage, data de-identification options, and a full audit trail for tracking data manipulation and export procedures.

REDCap is hosted in the State of Indiana Data Center in a highly secure physical environment. REDCap servers are guarded by multiple firewall and intrusion detection systems. All electronic connections to the REDCap environment are encrypted. The REDCap production system is comprised of a web server front-end and a MySQL database server back-end. The web server resides in a protected zone that still allows users to be able to access REDCap UI from devices connected to the Internet. The MySQL server back-end also resides in a protected subnet that is guarded by state-maintained firewalls. The data stored in the REDCap MySQL database server can be accessed through the Redcap UI from the web server by the end users logging into <https://redcap.isdh.in.gov> and opening the REDCap project(s) that they have been granted access to by the owners of the projects. Secure Username and password; policies are enforced by the system. REDCap authenticates access based on these usernames and passwords to validate the identity of end-users that log in to the system.

REDCap contains an auto-logout setting, which is customizable, and will automatically log a user out of the system if they have not had any activity (e.g. typing, moving the mouse) on their current web page for the set amount of time. This prevents someone else from accessing their account and their project data if they leave a workstation without properly logging out or closing their browser window. There exist some customizable settings that govern login activity, such as being able to manually set the number of failed login attempts before a user is locked out of the system for a specified amount of time. Also available is a user suspension status, which can be set for any given user. Suspending a user allows them to remain a user in the system but denying them access to the system. SSL is required on the web server in order to maintain secure communication with the end-user, so the web server must be set up with an SSL certificate. Only system administrators are authorized to access the back-end database server directly.

REDCap employs various methods to protect against malicious users who may attempt to identify and exploit any security vulnerabilities in the system. All incoming data gets intentionally filtered, sanitized, and escaped. This includes all data submitted in an HTTP Post request and all query string data found in every URL while accessing REDCap, among other modes through which user-defined data gets submitted in the application. Server environment variables that are vulnerable to forgery by users are also checked and sanitized. All user-submitted data is properly filtered for any possibly harmful markup tags (e.g. <script>) and is then escaped before ever being displayed on a web page within the application. SQL queries sent to the database server from REDCap are all properly escaped before being sent. If any values used in an SQL query originated from user-defined values, they would have already been

sanitized beforehand as well, as described above. User-defined data used within SQL queries also have their data type checked to prevent any mismatching of data types (e.g. making sure a number is really a number). These processes of sanitization, filtering, data type checking, and escaping all help to protect against methods of attack, such as Cross-Site Scripting (XSS) and SQL Injection. To specifically protect against Cross-Site Request Forgery (CSRF), which is another method of attack, REDCap utilizes a “nonce” (a secret, user-specific token) on every web form used in the application. The nonce is generated anew on each web page as the user navigates within REDCap during a session. In addition, REDCap has a feature to defend against denial of service attacks so that after it detects a high number of access attempts within a short period of time, the offending IP address will be blocked from accessing the site.

APPENDIX 7: LTC Reporting Processes

