



TEXAS
Health and Human
Services

Texas Department of State
Health Services

SHARP Expansion for Jurisdictional COVID Data *Snowflake Reference Guide*

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Introduction to Snowflake & User Guide



How to leverage Snowflake and this User Guide



1 A CLOUD-BASED DATA WAREHOUSE

Snowflake is a cloud-based data warehouse used to store Texas public health data including **COVID case data and COVID labs data**.

3 USING YOUR SNOWFLAKE READER ACCOUNT TO PULL COVID DATA

Snowflake uses the **SQL programming language to run queries**. You can run a query for all COVID data or narrow down the query (e.g., positive COVID cases during April 2021).

2 HOW YOU'LL ACCESS COVID DATA

You have been granted a **Snowflake reader account*** which will enable you to view and query COVID case and COVID labs data for your region or jurisdiction.

4 THIS USER GUIDE

This document shows you **how to log into** your Snowflake reader account for the first time, **set up your workspace**, and **run queries**. Check out the **'Additional Resources' section** for sample queries and a glossary of terms.

[*Additional Information on Snowflake Reader Accounts](#)

Getting Started: How to login for the first time to your Snowflake Reader Account



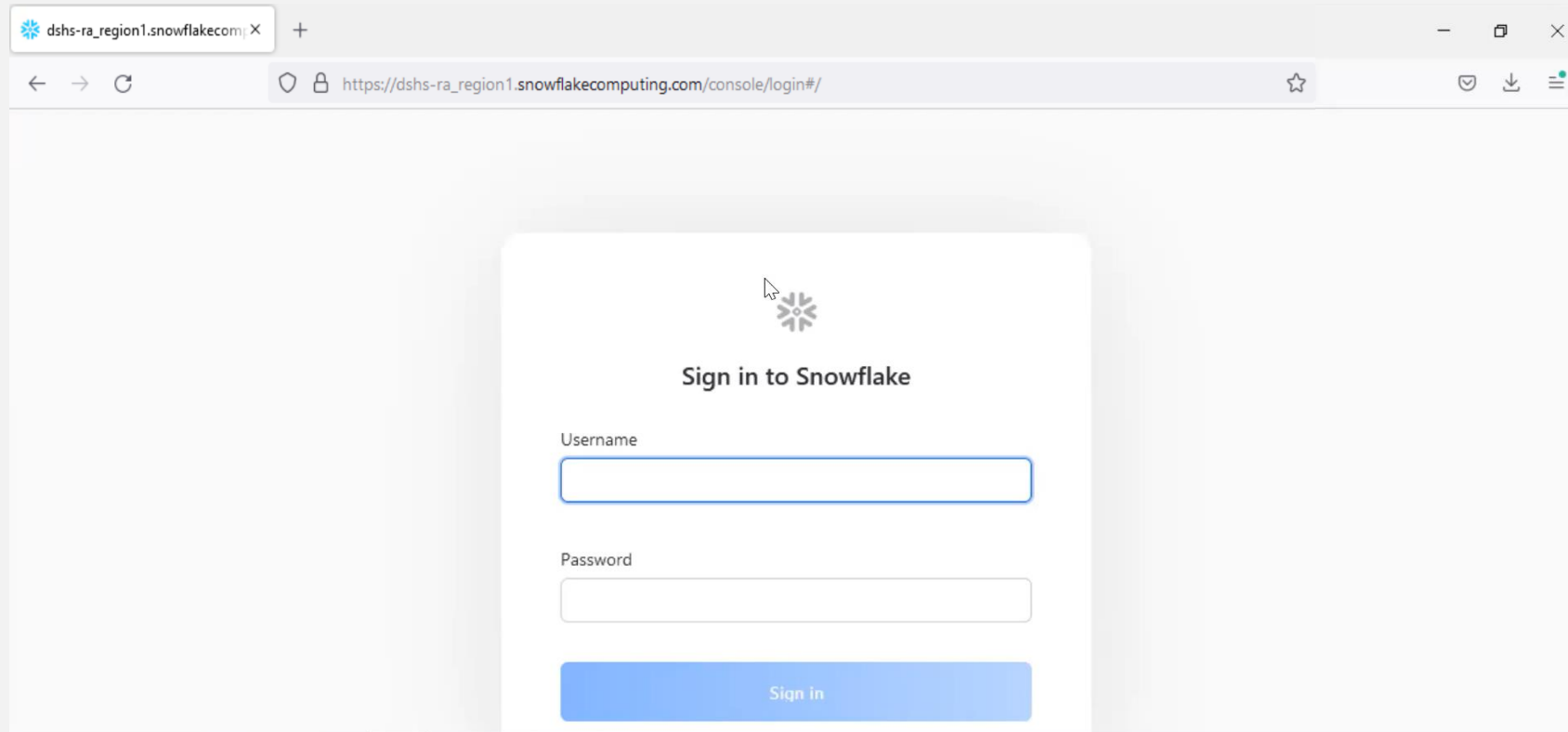


Pro tip!

Use the latest version of Microsoft Edge for the best experience.

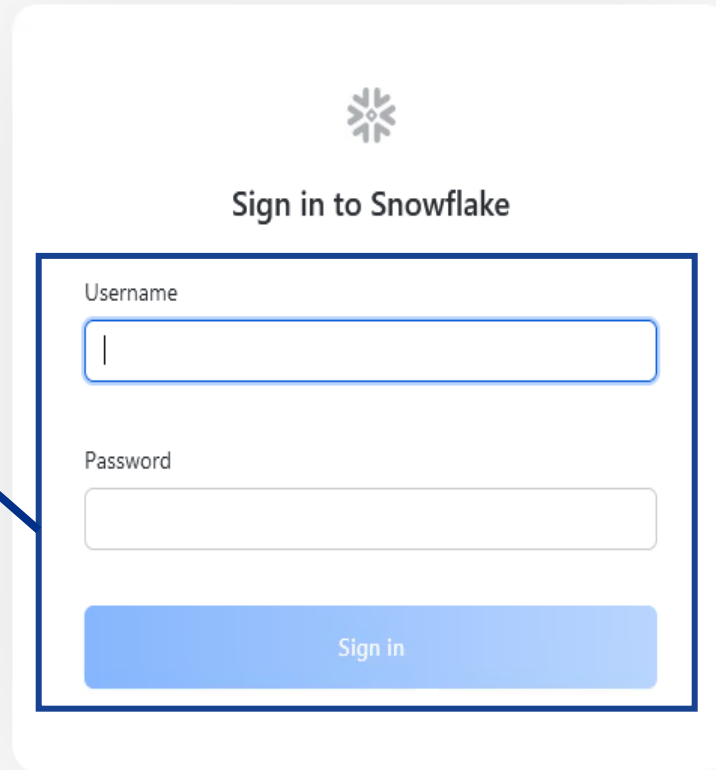
Step 1A: Navigate to Snowflake

Navigate to the **Snowflake URL listed in the welcome email from HHS staff** by either clicking on the link or copying and pasting the URL into an internet browser. (Click [here](#) for a list of support internet browsers)



Step 1B: Sign Into Snowflake

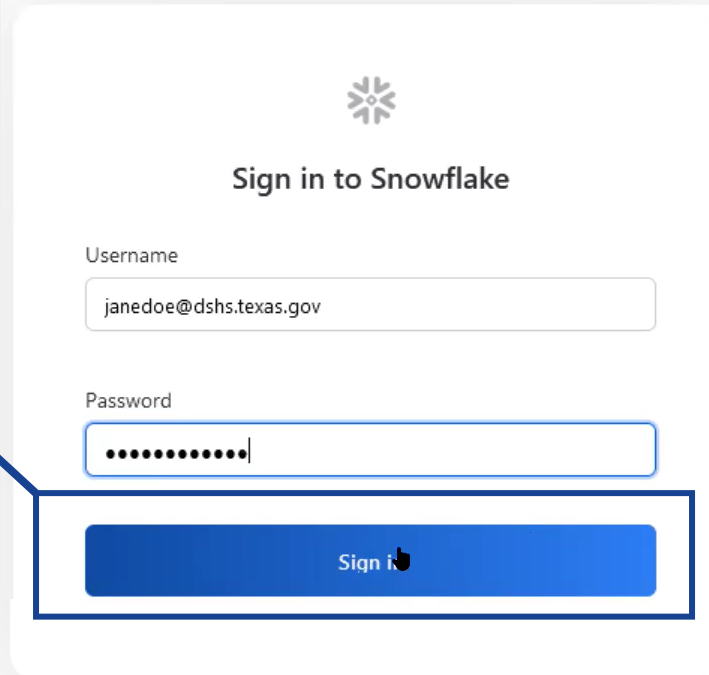
Once the Snowflake page has loaded, enter your **Username** and the **temporary password** you received in the Welcome Email from HHS staff.



The screenshot shows the Snowflake sign-in interface. At the top center is the Snowflake logo, a stylized snowflake icon. Below the logo is the text "Sign in to Snowflake". Underneath this is a form with two input fields: "Username" and "Password". The "Username" field contains a single vertical bar character "|". Below the "Password" field is a blue "Sign in" button. The entire form area is enclosed in a dark blue border.

Step 1C: Sign Into Snowflake

Click *Sign In*.



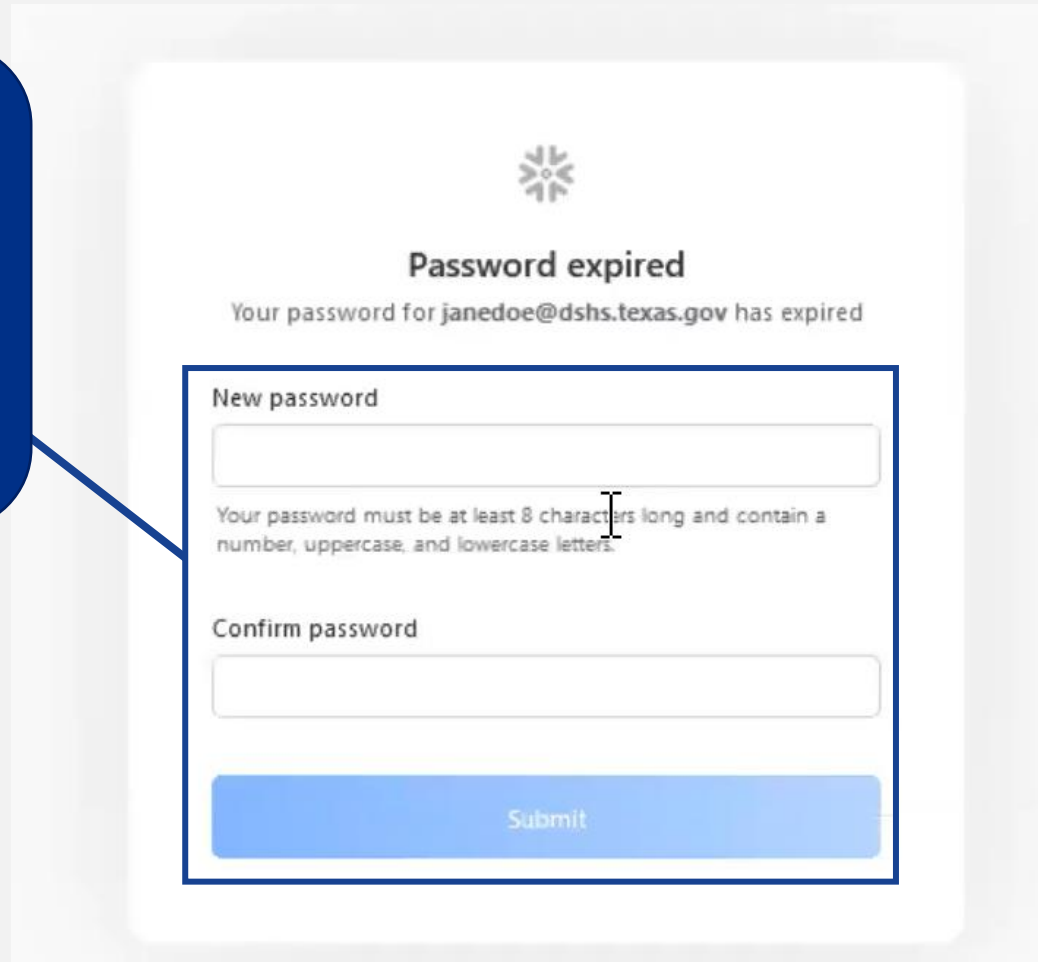
The screenshot shows the Snowflake sign-in interface. At the top center is the Snowflake logo, a stylized snowflake. Below it is the text "Sign in to Snowflake". There are two input fields: "Username" with the value "janedoe@dshs.texas.gov" and "Password" with masked characters ".....". At the bottom is a blue "Sign In" button, which is highlighted with a blue border and a mouse cursor pointing to it.

Step 1D: Change your password

Create a new password for your Snowflake account.

The new password must be 8 characters long and contain a number, uppercase and lowercase letters.

Click **Submit** to update your password.

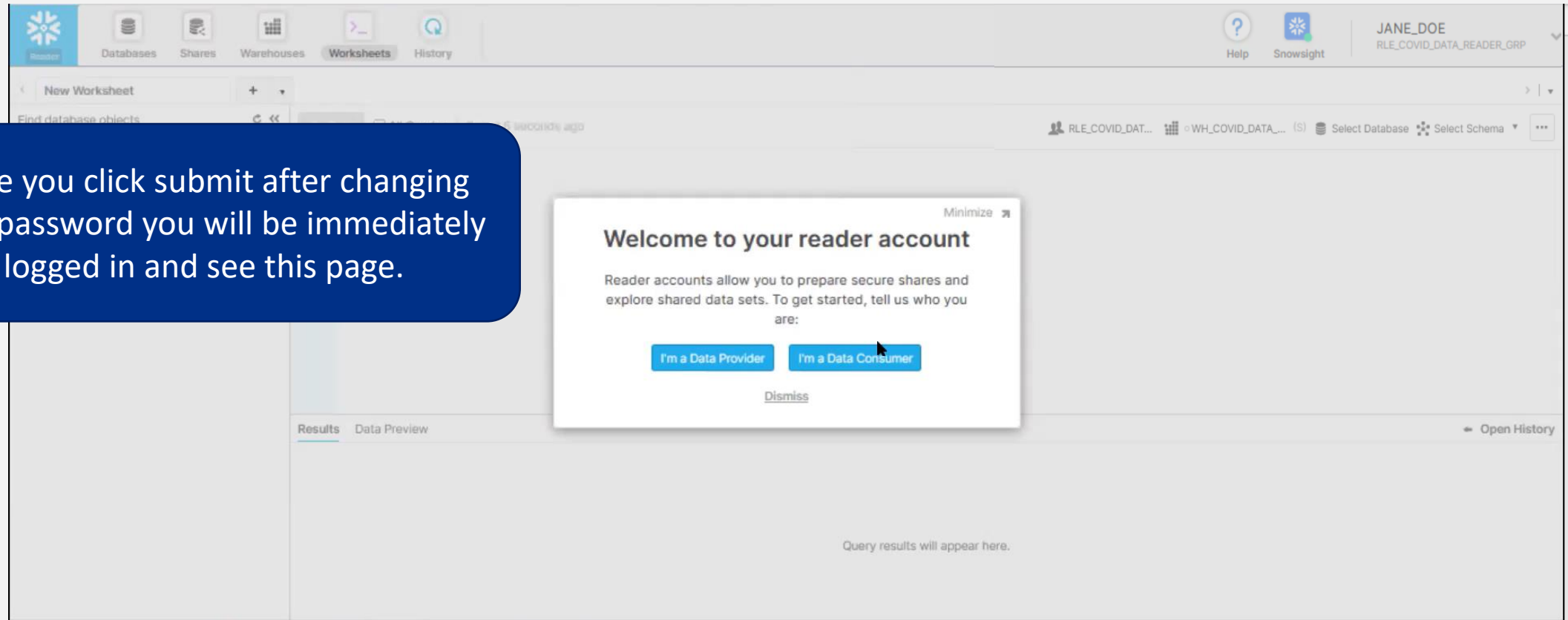


The screenshot shows a web interface for a password change. At the top, there is a snowflake logo and the text "Password expired". Below this, it says "Your password for janedoe@dshs.texas.gov has expired". The main form has two input fields: "New password" and "Confirm password". Below the "New password" field, there is a validation message: "Your password must be at least 8 characters long and contain a number, uppercase, and lowercase letters." At the bottom of the form is a blue "Submit" button. A blue callout box on the left points to the form area.

Note! Creating a new password is a one-time step when you log in for the first time.

Step 1E: First Time Log In

Once you click submit after changing your password you will be immediately logged in and see this page.

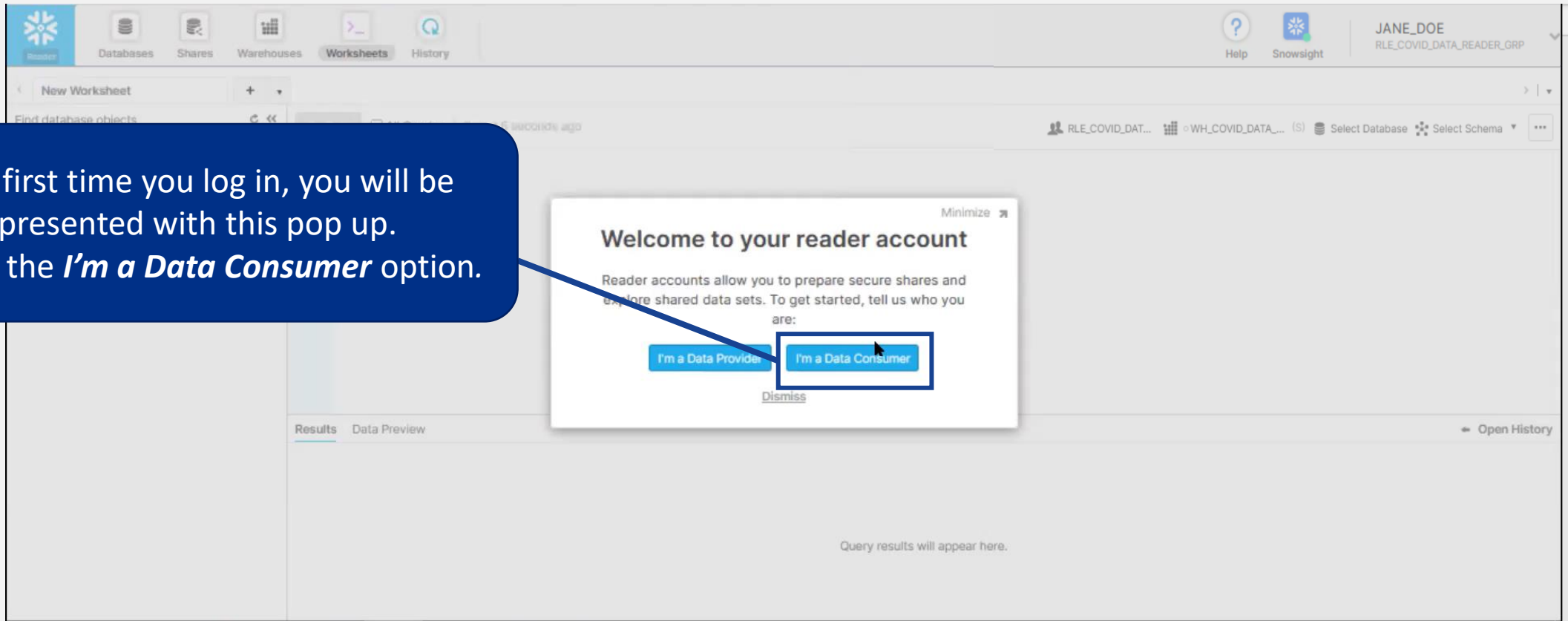


The Basics: Snowflake Layout & Navigation



Step 2A: First Time Log In Account Prompt

The first time you log in, you will be presented with this pop up. Select the *I'm a Data Consumer* option.

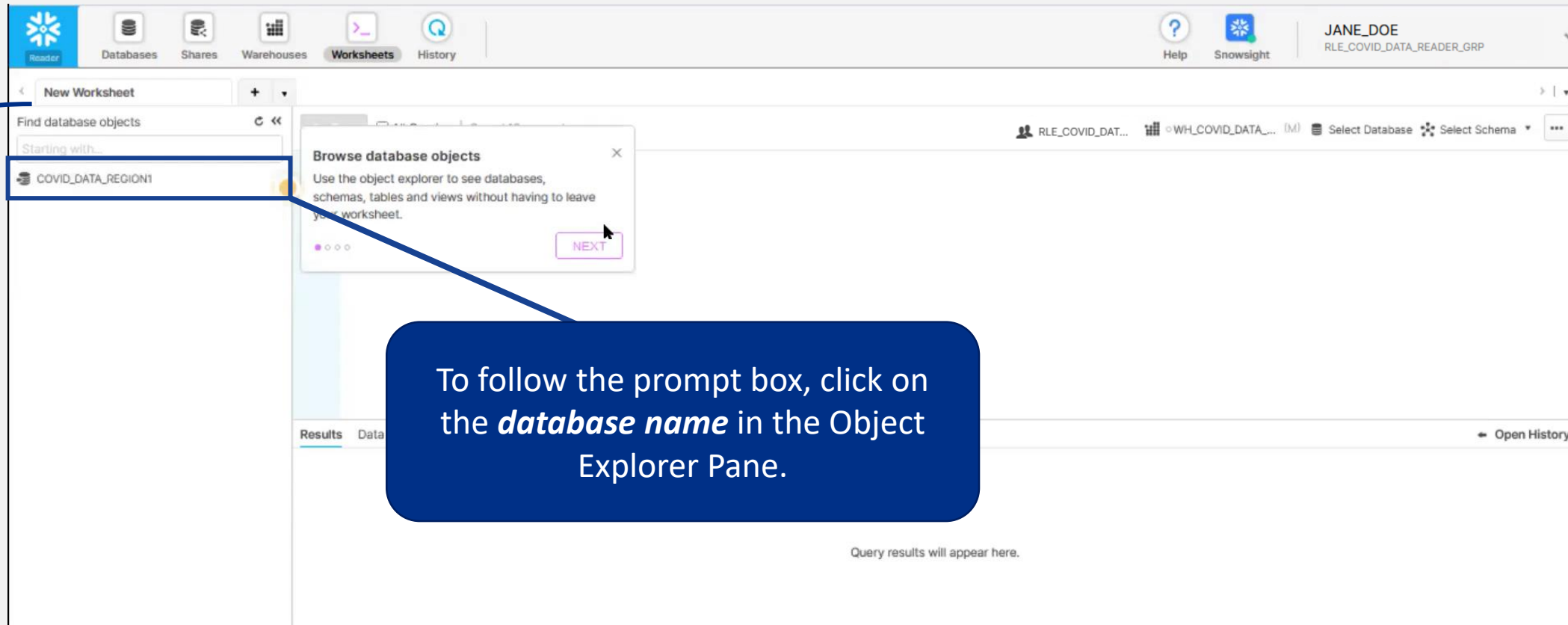


Step 2B: First Time Log In Navigation Tour

The screenshot displays the Snowflake web interface. At the top, there is a navigation bar with icons for Reader, Databases, Shares, Warehouses, Worksheets, and History. The user is logged in as JANE_DOE with the role RLE_COVID_DATA_READER_GRP. The main workspace shows a 'New Worksheet' tab and a search bar for database objects. A pop-up box titled 'Browse database objects' is overlaid on the interface, providing instructions on using the object explorer. A blue callout box points to the 'NEXT' button in the pop-up, with the text: 'For first-time log ins, there will be a pop-up box where Snowflake guides you through the web interface. Do not click **Next** yet!'.

Step 2C: Snowflake Reader Account Navigation

A Snowflake **database** is a collection of data stored in Snowflake.

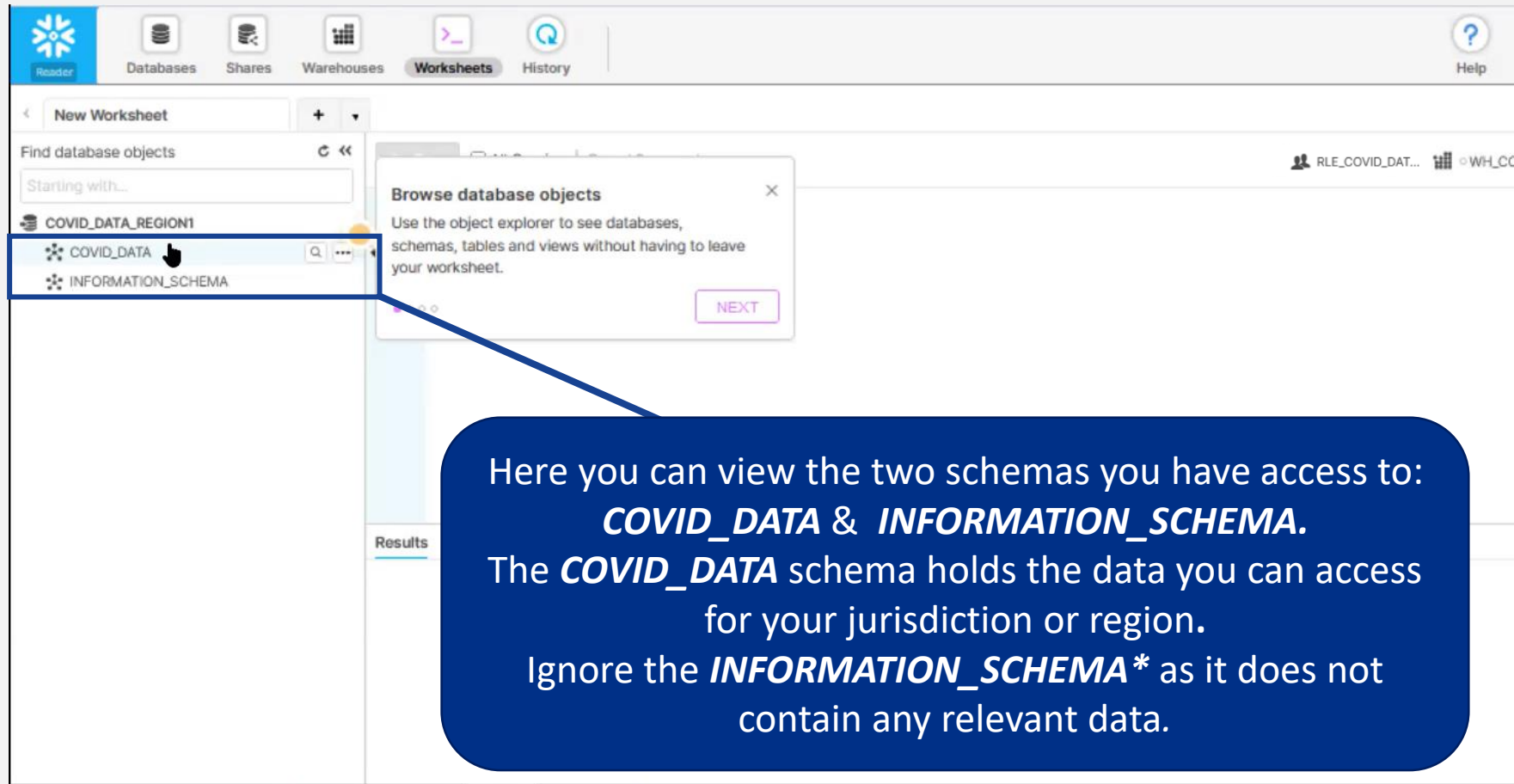


This is the Object Explorer Pane

To follow the prompt box, click on the *database name* in the Object Explorer Pane.

Step 2D: Snowflake Reader Account Navigation

A **schema** represents how data is stored in a database.



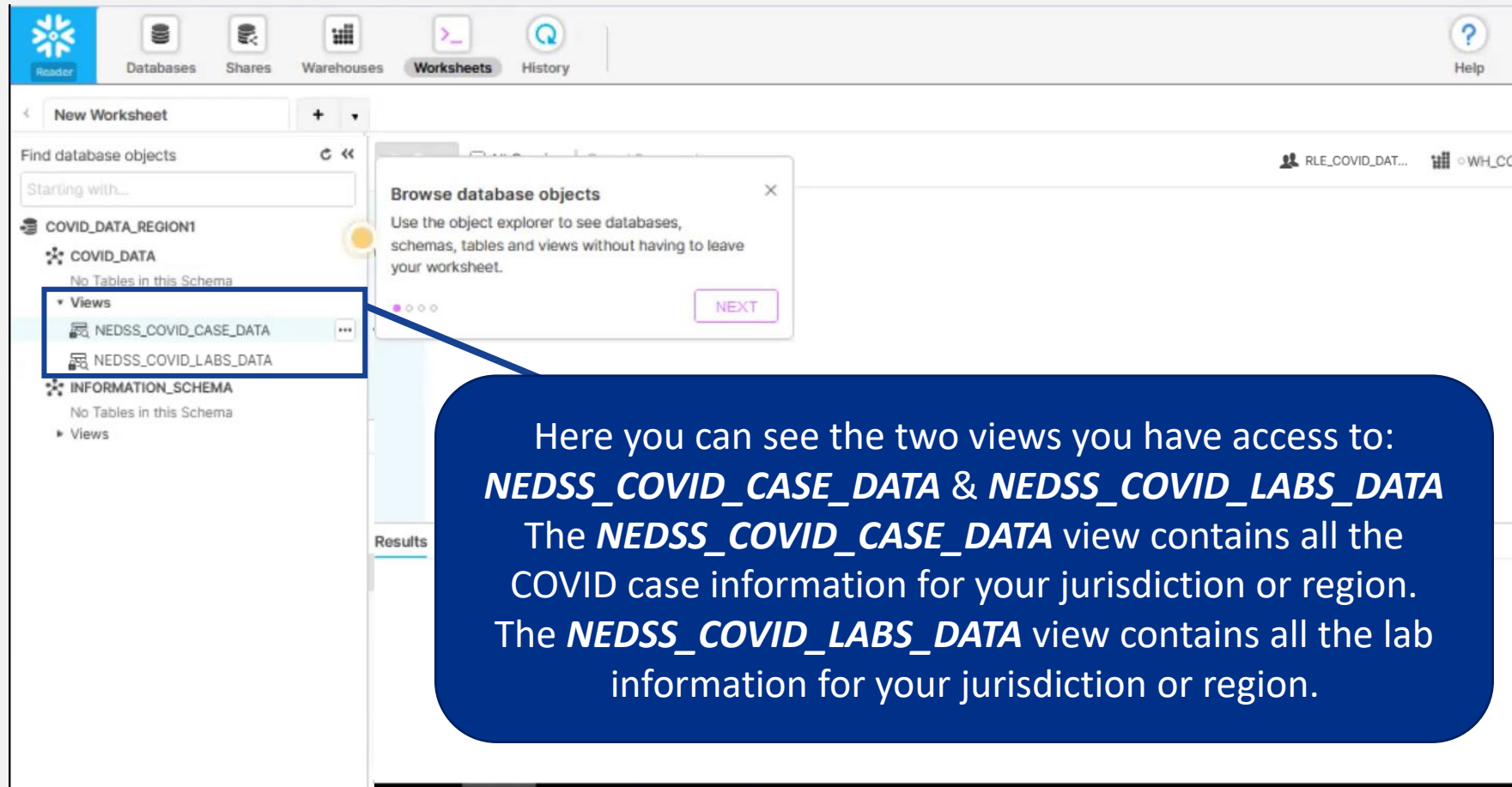
The screenshot shows the Snowflake Reader Account interface. At the top, there are navigation tabs for Reader, Databases, Shares, Warehouses, Worksheets, and History. Below the tabs, there is a 'New Worksheet' button and a search bar for 'Find database objects'. The search results show a tree structure with 'COVID_DATA_REGION1' expanded, revealing two schemas: 'COVID_DATA' and 'INFORMATION_SCHEMA'. A blue callout box points to these two schemas.

Here you can view the two schemas you have access to: **COVID_DATA & INFORMATION_SCHEMA**. The **COVID_DATA** schema holds the data you can access for your jurisdiction or region. Ignore the **INFORMATION_SCHEMA*** as it does not contain any relevant data.

[*Additional detail on INFORMATION SCHEMA](#)

Step 2E: Snowflake Reader Account Navigation

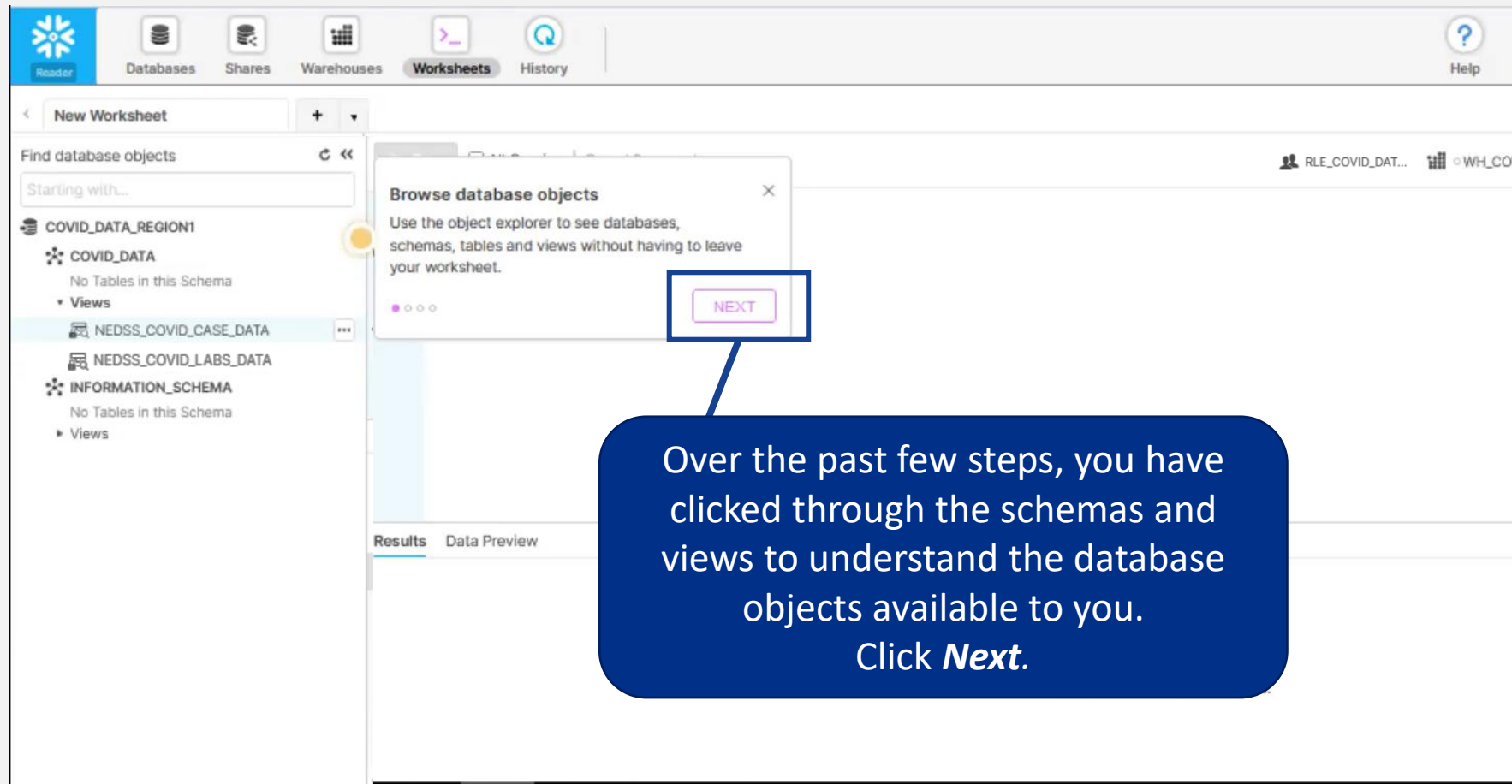
A **view** is a virtual table that contains data from one or more Snowflake tables.



The screenshot displays the Snowflake Reader Account interface. The top navigation bar includes icons for Reader, Databases, Shares, Warehouses, Worksheets, and History. The main content area shows a 'New Worksheet' view with a search bar and a list of database objects. The 'COVID_DATA_REGION1' schema is expanded, showing 'COVID_DATA' and 'INFORMATION_SCHEMA'. Under 'COVID_DATA', two views are listed: 'NEDSS_COVID_CASE_DATA' and 'NEDSS_COVID_LABS_DATA'. A callout box titled 'Browse database objects' is overlaid on the interface, providing instructions on how to use the object explorer. A blue callout box at the bottom right explains the content of the two views.

Here you can see the two views you have access to:
NEDSS_COVID_CASE_DATA & ***NEDSS_COVID_LABS_DATA***
The ***NEDSS_COVID_CASE_DATA*** view contains all the COVID case information for your jurisdiction or region.
The ***NEDSS_COVID_LABS_DATA*** view contains all the lab information for your jurisdiction or region.

Step 2F: Snowflake Reader Account Navigation



The screenshot displays the Snowflake Reader interface. At the top, there is a navigation bar with icons for Reader, Databases, Shares, Warehouses, Worksheets, and History. Below this, a 'New Worksheet' tab is active. On the left, a 'Find database objects' sidebar shows a tree view of the database structure. The tree includes 'COVID_DATA_REGION1', 'COVID_DATA' (with 'No Tables in this Schema' and a 'Views' folder containing 'NEDSS_COVID_CASE_DATA' and 'NEDSS_COVID_LABS_DATA'), and 'INFORMATION_SCHEMA' (with 'No Tables in this Schema' and a 'Views' folder). A tooltip titled 'Browse database objects' is overlaid on the interface, containing the text: 'Use the object explorer to see databases, schemas, tables and views without having to leave your worksheet.' Below the text is a 'NEXT' button. A blue callout box with white text points to the 'NEXT' button, stating: 'Over the past few steps, you have clicked through the schemas and views to understand the database objects available to you. Click *Next*.'

[*Additional detail on INFORMATION SCHEMA](#)

Step 2G: Viewing Data

This pop up describes the data preview feature of Snowflake. Follow the next few steps in this guide to preview your data.

View: COVID. **Preview your data**

Sample data from tables and views by selecting them from the object explorer.

Query results will appear here.

Step 2H: Viewing Data

Click on the **three dots** (aka **More Actions**) button at the end of the view name. Then select **Preview Data** from the drop down to show data.

Step 2I: Viewing Data

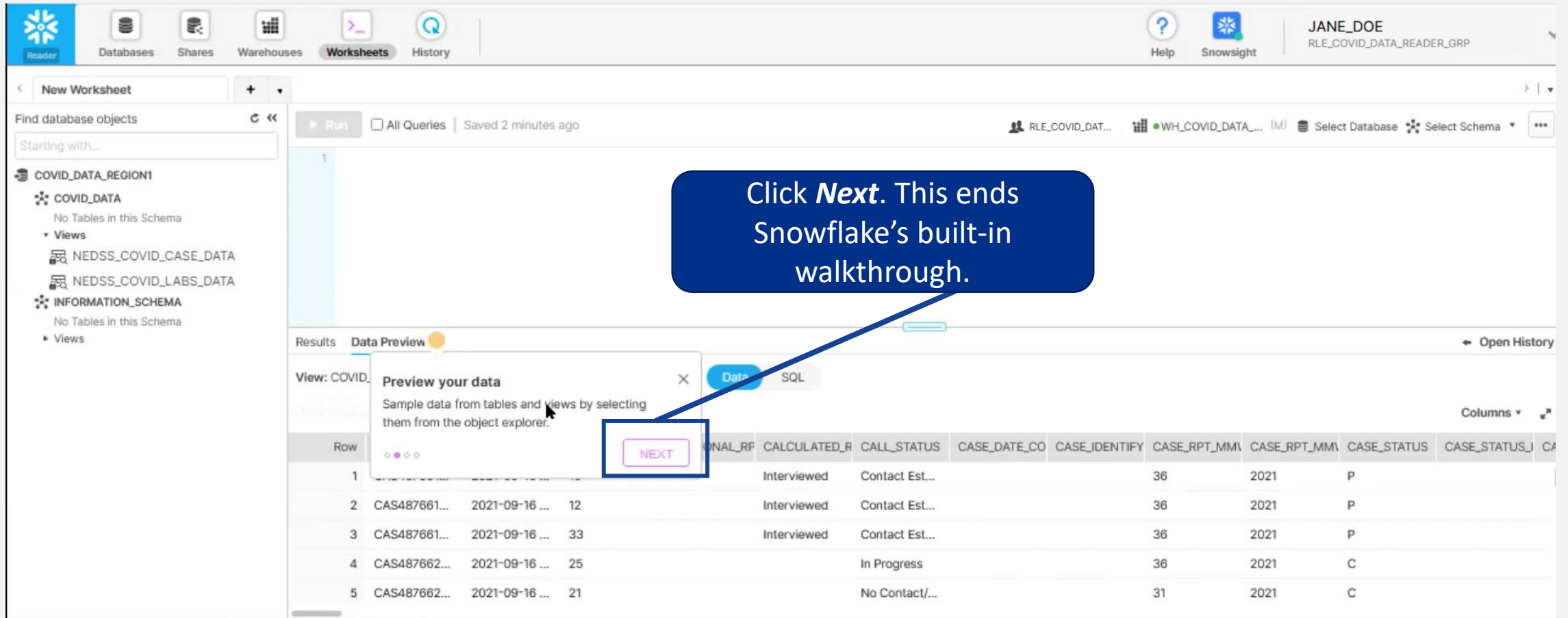
The screenshot shows the Snowflake web interface. At the top, there are navigation tabs for Reader, Databases, Shares, Warehouses, Worksheets, and History. The user is logged in as JANE_DOE with the role RLE_COVID_DATA_READER_GRP. On the left, the 'New Worksheet' sidebar shows a search for database objects, with a tree view expanded to 'COVID_DATA' and 'INFORMATION_SCHEMA'. The main workspace shows a 'Run' button and a 'Data Preview' pane. A blue callout box points to the 'Data Preview' pane with the text 'This is the Data Preview Pane'. Another blue callout box points to the 'Data Preview' pane with the text 'You can view the data in the Data Preview pane for the view you selected in the previous step.' The 'Data Preview' pane shows a table with 5 rows and columns including 'ONAL_RF', 'CALCULATED_R', 'CALL_STATUS', 'CASE_DATE_CO', 'CASE_IDENTIFY', 'CASE_RPT_MM', 'CASE_STATUS', and 'CASE_STATUS_I'. A 'NEXT' button is visible in the pane.

This is the Data Preview Pane

You can view the data in the Data Preview pane for the view you selected in the previous step.

Row	ONAL_RF	CALCULATED_R	CALL_STATUS	CASE_DATE_CO	CASE_IDENTIFY	CASE_RPT_MM	CASE_STATUS	CASE_STATUS_I	CAS
1			Interviewed	Contact Est...		36	2021	P	
2	CAS487661...	2021-09-16 ...	12		Interviewed	Contact Est...	36	2021	P
3	CAS487661...	2021-09-16 ...	33		Interviewed	Contact Est...	36	2021	P
4	CAS487662...	2021-09-16 ...	25			In Progress	36	2021	C
5	CAS487662...	2021-09-16 ...	21			No Contact/...	31	2021	C

Step 2J: Viewing Data



The screenshot shows the Snowflake web interface. On the left, the 'Object Explorer' shows a tree view with 'COVID_DATA_REGION1' expanded to show 'COVID_DATA' and 'INFORMATION_SCHEMA'. The main area displays a 'Data Preview' window for a query. The window title is 'View: COVID...' and it contains a table of data. A blue callout box with white text points to a 'NEXT' button in the bottom right corner of the data preview window. The callout text reads: 'Click *Next*. This ends Snowflake's built-in walkthrough.'

Row	PERSONAL_RP	CALCULATED_R	CALL_STATUS	CASE_DATE_CO	CASE_IDENTIFY	CASE_RPT_MM	CASE_RPT_MM	CASE_STATUS	CASE_STATUS_I	CA
1			Interviewed	Contact Est...		36	2021	P		
2	CAS487661...	2021-09-16 ...	12	Interviewed	Contact Est...	36	2021	P		
3	CAS487661...	2021-09-16 ...	33	Interviewed	Contact Est...	36	2021	P		
4	CAS487662...	2021-09-16 ...	25	In Progress		36	2021	C		
5	CAS487662...	2021-09-16 ...	21	No Contact/...		31	2021	C		

Overview: Snowflake User Interface

Once you have logged into the Snowflake Reader Account user interface*, using the top ribbon you can navigate through databases, worksheets, history, and additional Snowflake objects. However, conventional users will spend most of their time on the worksheet screen, where you can write queries and analyze data.

Tables and Views

- This list displays the database, schema, tables, and views on the left-hand side of the screen.
- All tables and views follow a naming convention that enables users to understand the scope of the data from the title.

The screenshot shows the Snowflake Worksheets interface. At the top, there is a ribbon with navigation icons for Databases, Shares, Warehouses, Worksheets, and History. Below the ribbon is a search bar and a 'Run' button. The main area contains a SQL editor with the following query:

```
1 SELECT LIC_NUM
2 FROM 'SHARP_CHS_DEV_DB'. 'CHS_HPRC_DATA', 'T_HPRC_LB_OPTOMETRIC'
```

Below the editor, the 'Results' panel shows the query execution details: 'Query ID', 'SQL', '701ms', and '4,946 rows'. A 'Filter result...' input field is present. The results are displayed in a table with the following data:

Row	LIC_NUM
1	2666
2	2583
3	2593
4	2758
5	2676
6	2775
7	2801

Snowflake Ribbon

- The Snowflake Ribbon consists of tabs for Databases, Shares, Warehouses, Worksheets, and History.
- Queries are written in the Worksheets tab.

SQL Editor

- Write queries in order to answer questions and retrieve your data.
- Queries are written in SQL Syntax.
- Query results will appear in the lower panel. This panel can be used to preview tables or bring up results from the query expressed above.

[*Complete overview can be found here](#)

Accessing Data: Queries and Examples





Pro tip!

Make sure the browser window is maximized to see the full database and schema ribbon!

Step 3A: Configure Database and Schema

The screenshot shows the Snowflake web interface. At the top, there's a toolbar with a 'Run' button, 'All Queries' checkbox, and 'Saved 2 minutes ago' text. On the right, there are tabs for 'RLE_COVID_DAT...', 'WH_COVID_DATA...', and 'Select Database'. A dropdown menu labeled 'Select Schema' is highlighted with a blue box and a blue arrow pointing to it. Below the toolbar, there's a 'Results' section with a 'Data Preview' tab selected. The view is set to 'COVID_DATA_REGION1.COVID_DATA.NEDSS_COVID_CASE_DATA'. There are two buttons: 'Data' (selected) and 'SQL'. Below this is a table with the following data:

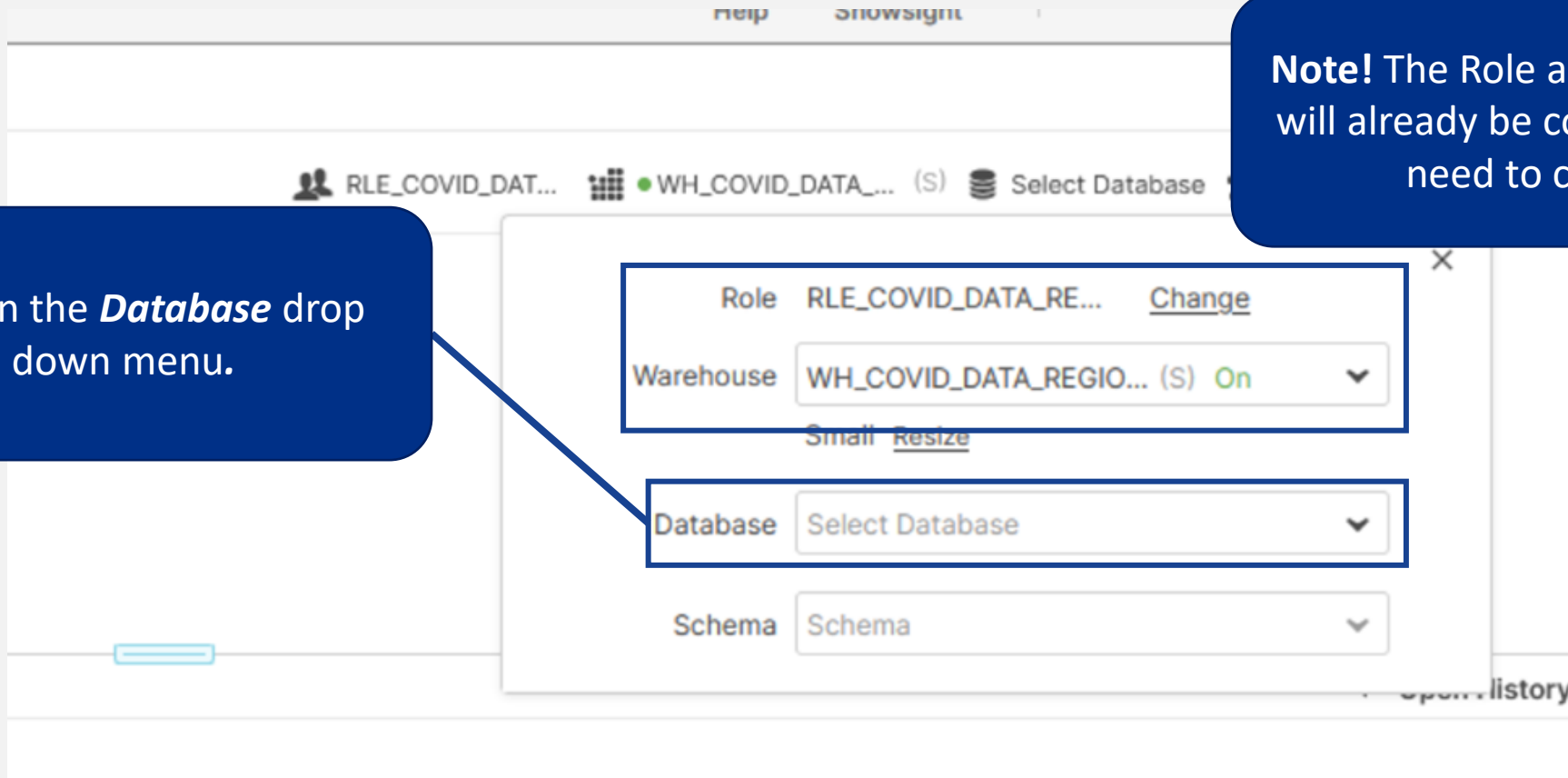
Row	INV_LOCAL_ID	ADD_TIME	AGE_ILLNESS_O	BINATIONAL_RP	CALCULATED_R	CALL_STATUS	CASE
1	CAS487661...	2021-09-16 ...	10		Interviewed	Contact Est...	
2	CAS487661...	2021-09-16 ...	12		Interviewed	Contact Est...	36 2021 P
3	CAS487661...	2021-09-16 ...	33		Interviewed	Contact Est...	36 2021 P
4	CAS487662...	2021-09-16 ...	25			In Progress	36 2021 C
5	CAS487662...	2021-09-16 ...	21			No Contact/...	31 2021 C

In order to query data in Snowflake you must first assign the correct database and schema. To do this click on **Select Schema**.

Step 3B: Configure Database and Schema

Click on the *Database* drop down menu.

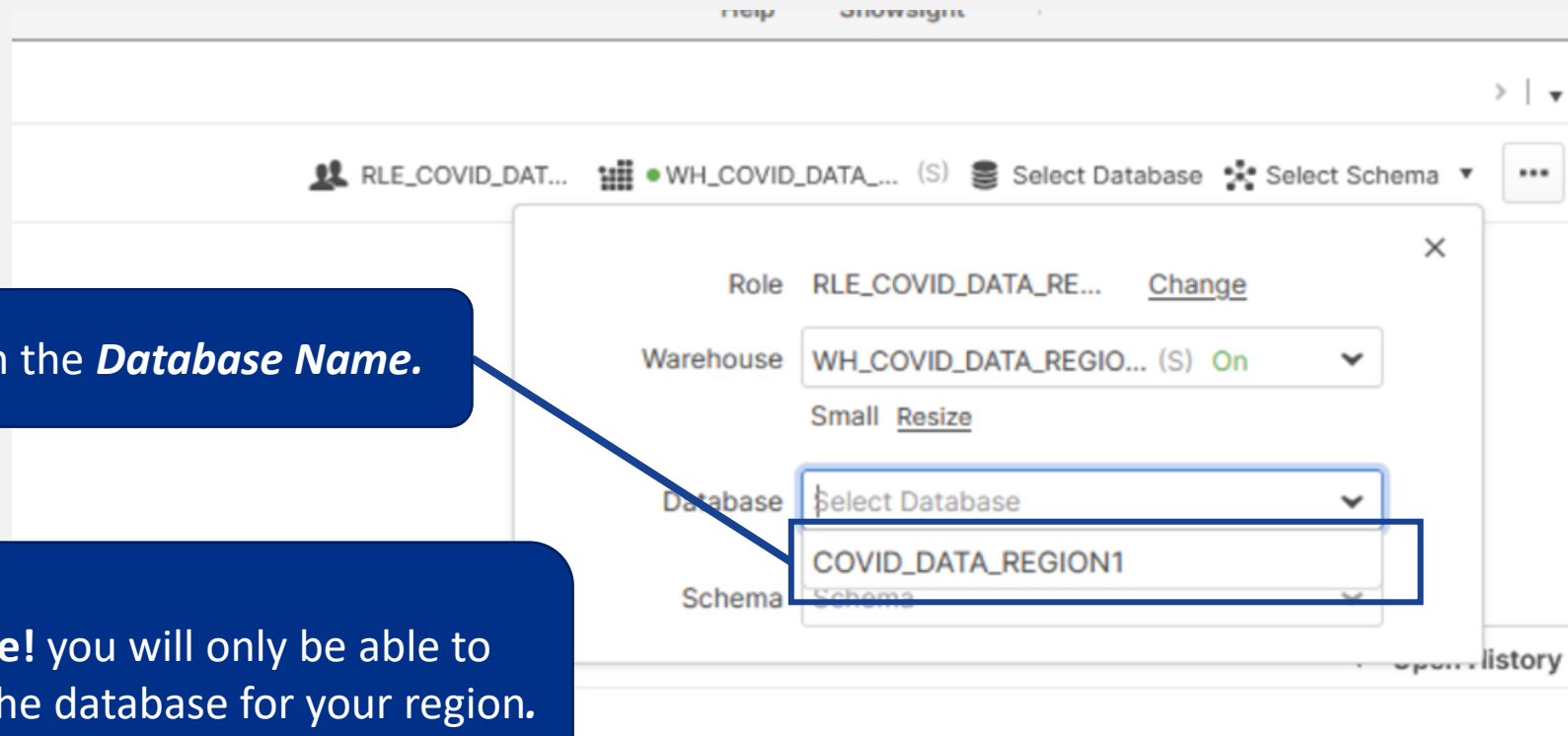
Note! The Role and Warehouse will already be configured – no need to change.



Step 3C: Configure Database and Schema

Click on the *Database Name*.

Note! you will only be able to view the database for your region.



Step 3D: Configure Database and Schema

Click on the *Schema* drop down menu.

The screenshot shows the Snowflake web interface. At the top, there are navigation tabs for 'role' and 'snowsight'. Below that, a breadcrumb trail shows 'RLE_COVID_DAT...' followed by 'WH_COVID_DATA...' (S) and 'COVID_DATA_REGI...'. A 'Select Schema' dropdown menu is visible. A configuration dialog is open, showing the following details:

- Role: RLE_COVID_DATA_RE... [Change](#)
- Warehouse: WH_COVID_DATA_REGIO... (S) On
- Small [Resize](#)
- Database: COVID_DATA_REGION1
- Schema: Schema

The 'Schema' dropdown menu is highlighted with a blue rectangular box. A blue callout box with a white border points to this dropdown menu, containing the text 'Click on the *Schema* drop down menu.'

Step 3E: Configure Database and Schema

Select on *COVID_DATA*.

The screenshot shows a Snowflake configuration dialog for a role named RLE_COVID_DATA_RE... The dialog includes fields for Warehouse (WH_COVID_DATA_REGIO... (S) On), Database (COVID_DATA_REGION1), and Schema. The Schema dropdown menu is open, showing 'COVID_DATA' as the selected option, with 'INFORMATION_SCHEMA' also visible. A blue callout box with a white border points to the 'COVID_DATA' option in the dropdown menu.

Step 3F: Configure Database and Schema

The screenshot shows the Snowflake configuration interface for a role named RLE_COVID_DATA_RE... The configuration is as follows:

Role	RLE_COVID_DATA_RE...	Change
Warehouse	WH_COVID_DATA_RE... (S) Suspended	Resume
Database	COVID_DATA_REGION1	
Schema	COVID_DATA	

A blue callout box with the text "Click on X to save." points to a small square button with an 'X' icon in the top right corner of the configuration panel.

Step 3G: Configure Database and Schema

The screenshot shows a data management interface with a table of COVID-19 case data. The table has columns for Row, INV_LOCAL_ID, ADD_TIME, AGE_ILLNESS_O, BINATIONAL_RF, CALCULATED_R, CALL_STATUS, CASE_DATE_CO, CASE_IDENTIFY, CASE_RPT_MM\, CASE_RPT_MM\, CASE_STATUS, and CASE_STATUS_I. The data is displayed in a 'Data Preview' view. A callout box points to the database and schema selection in the top right corner, indicating that the database and schema have been selected.

Verify the Database and Schema have been selected.

Row	INV_LOCAL_ID	ADD_TIME	AGE_ILLNESS_O	BINATIONAL_RF	CALCULATED_R	CALL_STATUS	CASE_DATE_CO	CASE_IDENTIFY	CASE_RPT_MM\	CASE_RPT_MM\	CASE_STATUS	CASE_STATUS_I
1	CAS487661...	2021-09-16 ...	10		Interviewed	Contact Est...			36	2021	P	
2	CAS487661...	2021-09-16 ...	12		Interviewed	Contact Est...			36	2021	P	
3	CAS487661...	2021-09-16 ...	33		Interviewed	Contact Est...			36	2021	P	
4	CAS487662...	2021-09-16 ...	25			In Progress			36	2021	C	
5	CAS487662...	2021-09-16 ...	21			No Contact/...			31	2021	C	

Step 3H: View all data with a Snowflake Query



Pro tip!

Check out the **Additional Resources** section of this guide for SQL basics and more sample queries.

The screenshot shows the Snowflake interface with a query editor and a results table. The query editor contains the following SQL command:

```
SELECT * FROM NEDSS_COVID_LABS_DATA;
```

The results table displays the following data:

Row	INV_LOCAL_ID	ADD_TIME	AGE_ILLNESS_O	BINATIONAL_RF	CALCULATED_R	CALL_STATUS	CASE_DATE_CO	CASE_IDENTIFY	CASE_RPT_MM\	CASE_RPT_MM\	CASE_STATUS	CASE_STATUS_I	CAS
1	CAS487661...	2021-09-16 ...	10		Interviewed	Contact Est...			36	2021	P		
2	CAS487661...	2021-09-16 ...	12		Interviewed	Contact Est...			36	2021	P		
3	CAS487661...	2021-09-16 ...	33		Interviewed	Contact Est...			36	2021	P		
4	CAS487662...	2021-09-16 ...	25			In Progress			36	2021	C		
5	CAS487662...	2021-09-16 ...	21			No Contact/...			31	2021	C		

To run a query, enter your SQL command here.
To show all records from **NEDSS_COVID_LABS_DATA** enter in the SQL editor:
SELECT * FROM NEDSS_COVID_LABS_DATA;

Step 3I: View all data with a Snowflake Query

The screenshot shows the Snowflake web interface. At the top, there are navigation tabs for Reader, Databases, Shares, Warehouses, Worksheets, and History. The user is logged in as JANE_DOE with the role RLE_COVID_DATA_READER_GRP. The main area is a worksheet titled 'New Worksheet' with a search bar for database objects. The SQL editor contains the query `SELECT * FROM NEDSS_COVID_LABS_DATA;`, which is highlighted in blue. A callout box points to this query with the text 'Highlight the SQL query you wish to run.' Below the query, the 'Results' tab is active, showing a table with 5 rows of data. The table has columns for Row, INV_L, CASE_DATE_CO, CASE_IDENTIFY, CASE_RPT_MM, CASE_RPT_MM, CASE_STATUS, CASE_STATUS_J, and CAS.

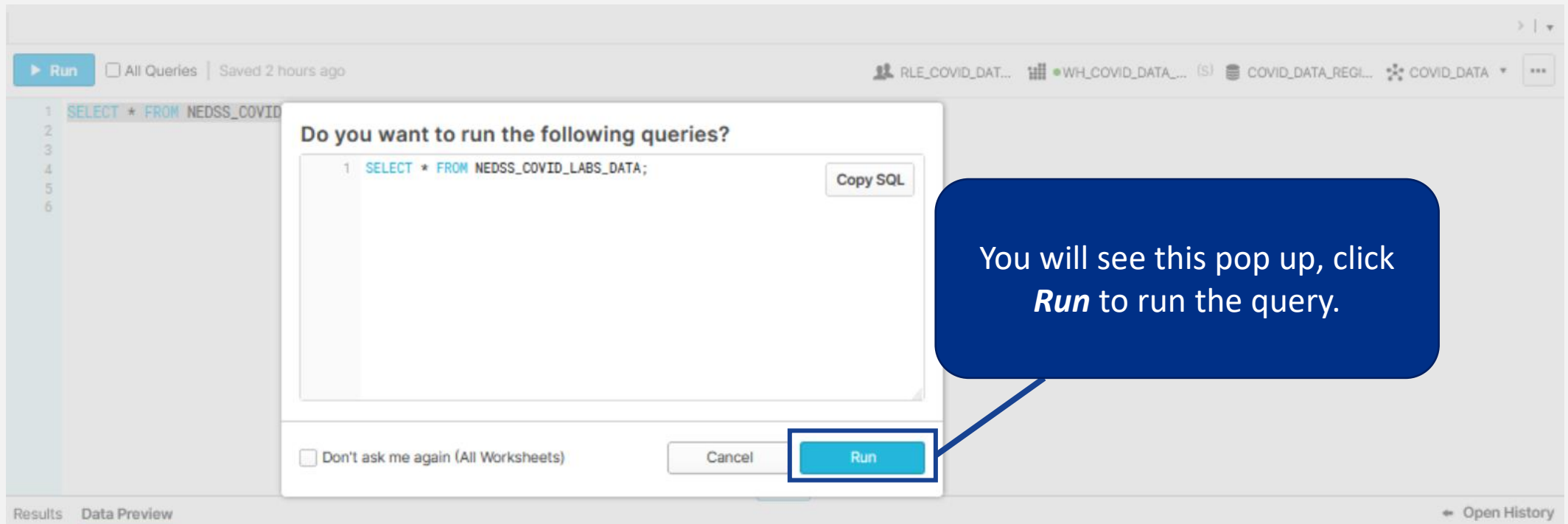
Row	INV_L	CASE_DATE_CO	CASE_IDENTIFY	CASE_RPT_MM	CASE_RPT_MM	CASE_STATUS	CASE_STATUS_J	CAS
1	CAS487661...	2021-09-16 ...	10	Interviewed	Contact Est...	36	2021	P
2	CAS487661...	2021-09-16 ...	12	Interviewed	Contact Est...	36	2021	P
3	CAS487661...	2021-09-16 ...	33	Interviewed	Contact Est...	36	2021	P
4	CAS487662...	2021-09-16 ...	25		In Progress	36	2021	C
5	CAS487662...	2021-09-16 ...	21		No Contact/...	31	2021	C

Step 3J: View all data with a Snowflake Query

With the SQL query still highlighted click **Run**.

		AGE_ILLNESS_O	BINATIONAL_RF	CALCULATED_R	CALL_STATUS	CASE_DATE_CO	CASE_IDENTIFY	CASE_RPT_MM	CASE_RPT_MM	CASE_STATUS	CASE_STATUS_J	CAS
1	CAS487661...	2021-09-16 ...	10	Interviewed	Contact Est...			36	2021	P		
2	CAS487661...	2021-09-16 ...	12	Interviewed	Contact Est...			36	2021	P		
3	CAS487661...	2021-09-16 ...	33	Interviewed	Contact Est...			36	2021	P		
4	CAS487662...	2021-09-16 ...	25		In Progress			36	2021	C		
5	CAS487662...	2021-09-16 ...	21		No Contact/...			31	2021	C		

Step 3K: View all data with a Snowflake Query



The screenshot shows the Snowflake web interface. At the top, there is a 'Run' button and a status bar indicating 'All Queries' and 'Saved 2 hours ago'. The main area displays a SQL query: `1 SELECT * FROM NEDSS_COVID`. A modal dialog box is open in the center, titled 'Do you want to run the following queries?'. It contains the same query: `1 SELECT * FROM NEDSS_COVID_LABS_DATA;`. The dialog has a 'Copy SQL' button and a 'Run' button. A blue callout box with a white border points to the 'Run' button, containing the text: 'You will see this pop up, click *Run* to run the query.' The 'Run' button is highlighted with a blue border. At the bottom of the dialog, there is a checkbox for 'Don't ask me again (All Worksheets)', a 'Cancel' button, and the 'Run' button. The background interface shows a 'Results' tab and a 'Data Preview' section.

Step 3L: View all data with a Snowflake Query

The screenshot displays the Snowflake web interface. At the top, the navigation bar includes 'Databases', 'Shares', 'Warehouses', 'Worksheets', and 'History'. The user is identified as 'JANE_DOE' with the role 'RLE_COVID_DATA_READER_GRP'. The main workspace is titled 'New Worksheet' and contains a query editor with the following SQL query:

```
1 SELECT * FROM NEDSS_COVID_LABS_DATA;
```

Below the query editor, the 'Results' pane is visible, showing a table with columns 'Query_ID' and 'SQL'. The pane currently displays 'Loading metrics...'. A callout box with a blue background and white text points to the results pane, stating: 'Verify the SQL query is running in the Results Pane. Most queries only take a few seconds to run.'

This is the
Results Pane

Step 3M: View all data with a Snowflake Query

Once the SQL query has finished processing, you will be able to view the data in the Results Pane.

Results Data Preview

Query ID SQL 8.9 s 1,405,762 rows (1,006,969 shown)

Row	EVENT_DT	LAB_LOCAL_ID	ORDERED_TEST	ORDERED_TEST	ORDERED_TEST	ELECTRONIC_IN	PROGRAM_ARE	JURISDICTION	PROGRAM_JUR	LAB_REPORT_D	LAB_RPT_RECEI	LAB_REVIEW_ST	JU
1	2020-12-29 ...	OBS540456...	94500-6	SARS coron...	LN	Y	COVID-19	48001	4890000020	NULL	2020-12-31 ...	PROCESSED	P

Step 3N: View all data with a Snowflake Query

The screenshot displays the Snowflake web interface. At the top, there are navigation tabs: Reader, Databases, Shares, Warehouses, Worksheets, and History. The 'Worksheets' tab is active. Below the navigation, there's a 'New Worksheet' section with a search bar for database objects. The main area shows a query editor with the following SQL code:

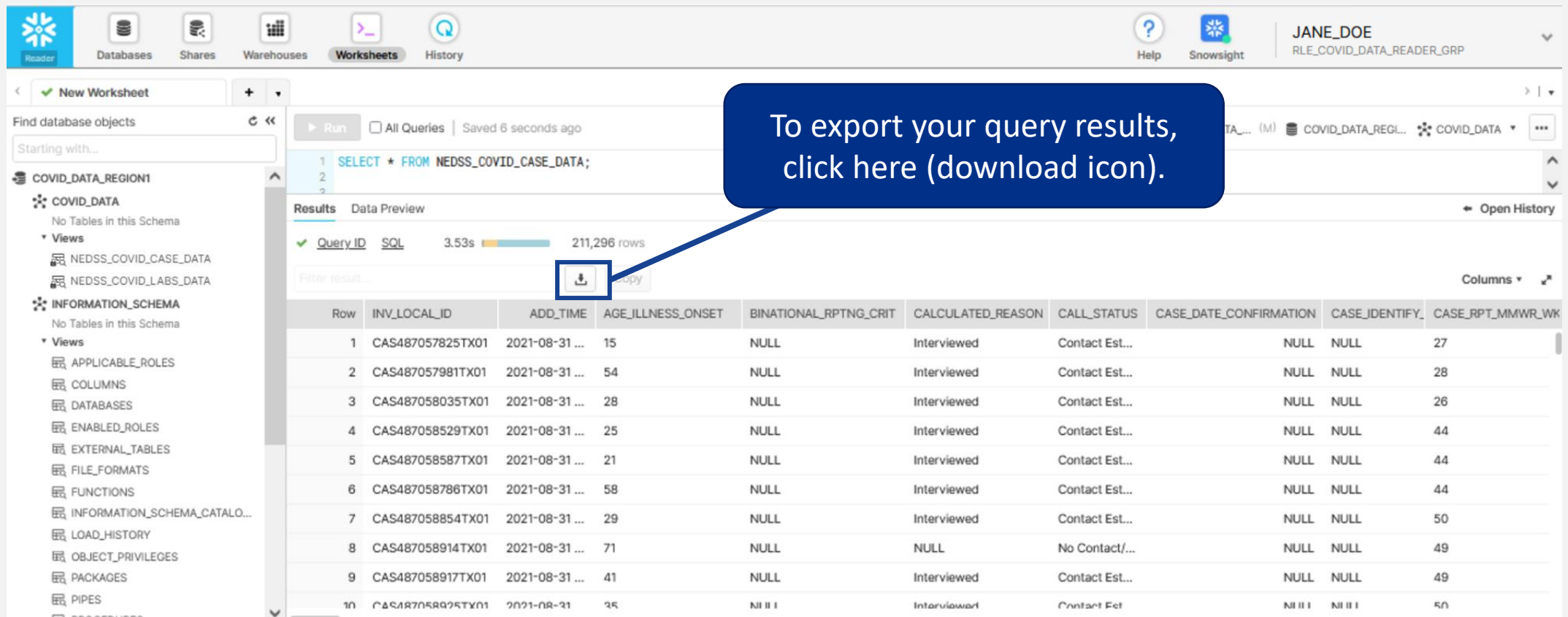
```
1 SELECT * FROM NEDSS_COVID_CASE_DATA;  
2  
3
```

The query has been executed, and the results are displayed in a table. The table has 10 rows and 10 columns. The columns are: Row, INV_LOCAL_ID, ADD_TIME, AGE_ILLNESS_ONSET, BINATIONAL_RPTNG_CRIT, CALCULATED_REASON, CALL_STATUS, CASE_DATE_CONFIRMATION, CASE_IDENTIFY_, and CASE_RPT_MMWR_WK. The first row of data is:

Row	INV_LOCAL_ID	ADD_TIME	AGE_ILLNESS_ONSET	BINATIONAL_RPTNG_CRIT	CALCULATED_REASON	CALL_STATUS	CASE_DATE_CONFIRMATION	CASE_IDENTIFY_	CASE_RPT_MMWR_WK
1	CAS487057825TX01	2021-08-31 ...	15	NULL	Interviewed	Contact Est...	NULL	NULL	27
2	CAS487057981TX01	2021-08-31 ...	54	NULL	Interviewed	Contact Est...	NULL	NULL	28
3	CAS487058035TX01	2021-08-31 ...	28	NULL	Interviewed	Contact Est...	NULL	NULL	26
4	CAS487058529TX01	2021-08-31 ...	25	NULL	Interviewed	Contact Est...	NULL	NULL	44
5	CAS487058587TX01	2021-08-31 ...	21	NULL	Interviewed	Contact Est...	NULL	NULL	44
6	CAS487058786TX01	2021-08-31 ...	58	NULL	Interviewed	Contact Est...	NULL	NULL	44
7	CAS487058854TX01	2021-08-31 ...	29	NULL	Interviewed	Contact Est...	NULL	NULL	50
8	CAS487058914TX01	2021-08-31 ...	71	NULL	NULL	No Contact/...	NULL	NULL	49
9	CAS487058917TX01	2021-08-31 ...	41	NULL	Interviewed	Contact Est...	NULL	NULL	49
10	CAS487058925TX01	2021-08-31 ...	25	NULL	Interviewed	Contact Est...	NULL	NULL	50

A blue callout box with white text points to the vertical scroll bar on the right side of the results table. The text in the callout box reads: "To be able to view more of the result, click here and drag up with your mouse."

Step 30: Export Data from a Snowflake Query



The screenshot displays the Snowflake web interface. At the top, the user is identified as JANE_DOE with the role RLE_COVID_DATA_READER_GRP. The main workspace shows a query editor with the following SQL statement:

```
1 SELECT * FROM NEDSS_COVID_CASE_DATA;
```

The query has been executed, resulting in a table with 211,296 rows. The table columns are: INV_LOCAL_ID, ADD_TIME, AGE_ILLNESS_ONSET, BINATIONAL_RPTNG_CRIT, CALCULATED_REASON, CALL_STATUS, CASE_DATE_CONFIRMATION, CASE_IDENTIFY, and CASE_RPT_MMWR_WK. A callout box points to the download icon (a downward arrow) located above the table, with the text: "To export your query results, click here (download icon)."

Row	INV_LOCAL_ID	ADD_TIME	AGE_ILLNESS_ONSET	BINATIONAL_RPTNG_CRIT	CALCULATED_REASON	CALL_STATUS	CASE_DATE_CONFIRMATION	CASE_IDENTIFY	CASE_RPT_MMWR_WK
1	CAS487057825TX01	2021-08-31 ...	15	NULL	Interviewed	Contact Est...	NULL	NULL	27
2	CAS487057981TX01	2021-08-31 ...	54	NULL	Interviewed	Contact Est...	NULL	NULL	28
3	CAS487058035TX01	2021-08-31 ...	28	NULL	Interviewed	Contact Est...	NULL	NULL	26
4	CAS487058529TX01	2021-08-31 ...	25	NULL	Interviewed	Contact Est...	NULL	NULL	44
5	CAS487058587TX01	2021-08-31 ...	21	NULL	Interviewed	Contact Est...	NULL	NULL	44
6	CAS487058786TX01	2021-08-31 ...	58	NULL	Interviewed	Contact Est...	NULL	NULL	44
7	CAS487058854TX01	2021-08-31 ...	29	NULL	Interviewed	Contact Est...	NULL	NULL	50
8	CAS487058914TX01	2021-08-31 ...	71	NULL	NULL	No Contact/...	NULL	NULL	49
9	CAS487058917TX01	2021-08-31 ...	41	NULL	Interviewed	Contact Est...	NULL	NULL	49
10	CAS487058925TX01	2021-08-31 ...	35	NULL	Interviewed	Contact Est...	NULL	NULL	50

Step 3P: Export Data from a Snowflake Query

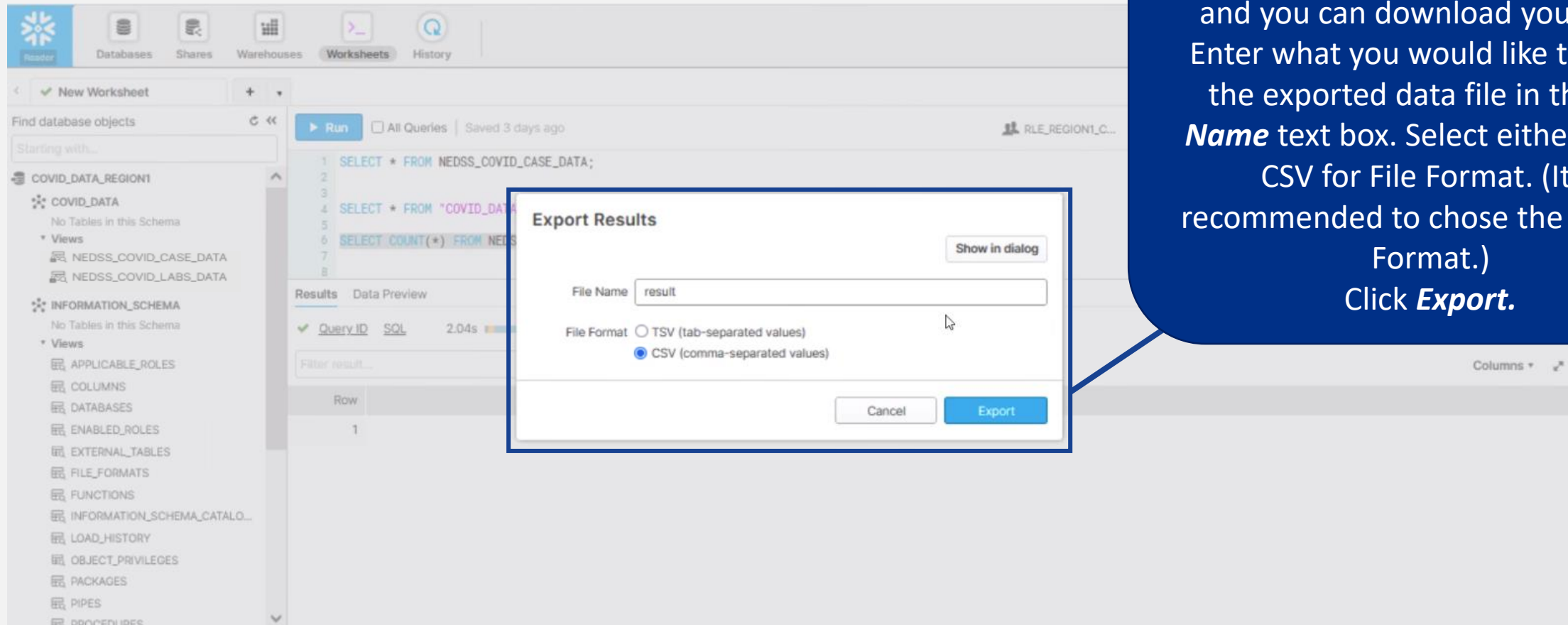
If you see this pop-up, it means Snowflake's export limits are blocking you from downloading all the data from your query. You must limit the number of records your query returns by running a more selective query. See the **Additional Resources** section of this guide for more SQL query examples

The screenshot shows the Snowflake web interface. On the left is a navigation pane with a search bar and a tree view of database objects including COVID_DATA_REGION1, INFORMATION_SCHEMA, and various views. The main area displays a query editor with a 'Run' button and a 'Results' tab. A 'Result Too Large' dialog box is overlaid on the results, asking if the user wants to export the first 100MB. Below the dialog, a table of query results is visible, with columns including Row, INV_LOCAL_ID, ADD, CASE_IDENTIFY, CASE_RPT_MM, CASE_RPT_MM, CASE_STATUS, CASE_STATUS_J, and CAS.

Row	INV_LOCAL_ID	ADD	CASE_IDENTIFY	CASE_RPT_MM	CASE_RPT_MM	CASE_STATUS	CASE_STATUS_J	CAS
1	CAS487057...	2021-08-31	NULL	27	2020	C	NULL	NULL
2	CAS487057...	2021-08-31	NULL	28	2020	C	NULL	NULL
3	CAS487058...	2021-08-31 ...	28	NULL	Interviewed	Contact Est...	NULL	NULL
4	CAS487058...	2021-08-31 ...	25	NULL	Interviewed	Contact Est...	NULL	NULL
5	CAS487058...	2021-08-31 ...	21	NULL	NULL	44	2020	C
6	CAS487058...	2021-08-31 ...	5	NULL	NULL	44	2020	C
7	CAS487058...	2021-08-31 ...	2	NULL	NULL	50	2020	P
8	CAS487058...	2021-08-31 ...	7	NULL	NULL	49	2020	C
9	CAS487058...	2021-08-31 ...	4	NULL	NULL	49	2020	C
10	CAS487058...	2021-08-31 ...	25	NULL	Interviewed	Contact Est...	NULL	NULL

If you do not see this pop-up move to the next step.

Step 3Q: Export Data from a Snowflake Query

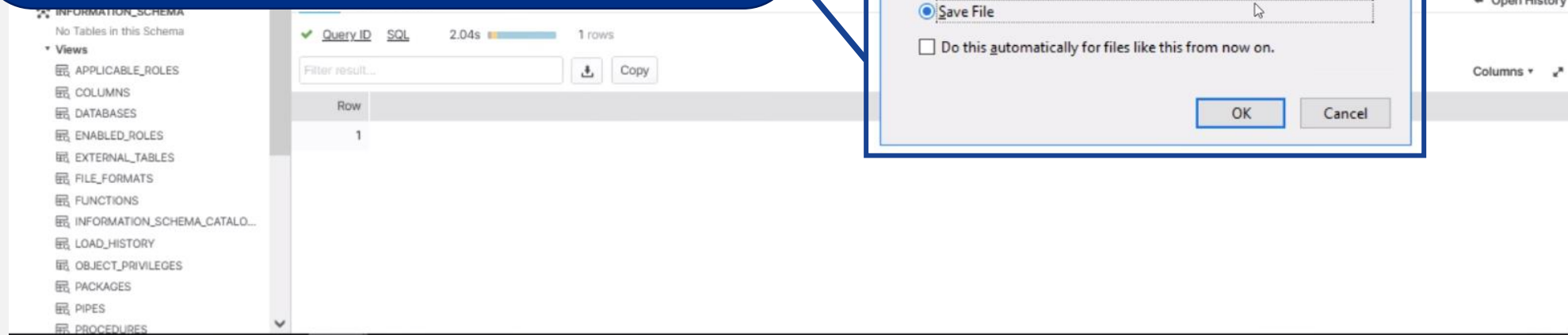


The screenshot shows the Snowflake web interface. At the top, there are navigation tabs for Databases, Shares, Warehouses, Worksheets, and History. The main area displays a query editor with a SQL query: `SELECT * FROM NEDSS_COVID_CASE_DATA;`. Below the query editor, there is a 'Results' section with a 'Data Preview' tab. The 'Data Preview' shows a table with one row and one column, with the value '1'. An 'Export Results' dialog box is overlaid on the interface. The dialog box has a title 'Export Results' and a 'Show in dialog' button. It contains a 'File Name' text box with the value 'result'. Below that, there are radio buttons for 'File Format': 'TSV (tab-separated values)' and 'CSV (comma-separated values)'. The 'CSV (comma-separated values)' option is selected. At the bottom of the dialog box, there are 'Cancel' and 'Export' buttons.

If you see this pop-up, your results are within the Snowflake export limits and you can download your data. Enter what you would like to name the exported data file in the **File Name** text box. Select either TSV or CSV for File Format. (It is recommended to choose the CSV File Format.)
Click **Export**.

Step 3R: Export Data from a Snowflake Query

After you click Export, your file will start to download. If you are presented with this popup, please select **Save File** to start the download. Once the file is downloaded, you can view the data with Excel, or your preferred analytical tool.



The screenshot shows the Snowflake web interface. On the left, a sidebar lists database objects under 'Views', including 'APPLICABLE_ROLES', 'COLUMNS', 'DATABASES', 'ENABLED_ROLES', 'EXTERNAL_TABLES', 'FILE_FORMATS', 'FUNCTIONS', 'INFORMATION_SCHEMA_CATALO...', 'LOAD_HISTORY', 'OBJECT_PRIVILEGES', 'PACKAGES', 'PIPES', and 'PROCEDURES'. The main area displays a query result with a table containing one row. A 'Filter result...' input field and 'Download' and 'Copy' buttons are visible. A Firefox download dialog is open, titled 'Opening result.csv'. It shows 'You have chosen to open: result.csv' which is a 'Text Document (19 bytes)' from a 'blob'. The dialog asks 'What should Firefox do with this file?' and offers three options: 'Open with Notepad (default)', 'Save File' (selected), and 'Do this automatically for files like this from now on.' 'OK' and 'Cancel' buttons are at the bottom.

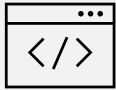
Additional Resources



TEXAS
Health and Human
Services

Texas Department of State
Health Services

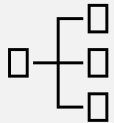
Glossary of Terms



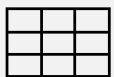
Structured Query Language (SQL) - programming language used to run queries in Snowflake.



Snowflake Database - is a collection of data stored in Snowflake.



Snowflake Schema - represents how data is stored in a database. Users have access to the *COVID_DATA* schema which has all the data that a user can access with their Snowflake Reader account.



Snowflake Table - where data is stored in Snowflake. For data security users will not have access to any Snowflake tables at this time.



Snowflake View - is a virtual table that contains data from one or more Snowflake tables. Users have access to the *NEDSS_COVID_CASE_DATA* view which contains all the COVID case information for their jurisdiction or region and the *NEDSS_COVID_LABS_DATA* view which contains all the lab information for their jurisdiction or region.



Pro tip!

Anything written after two dashes (`--`) in SQL will appear in green and will not execute when the code is run! This allows you to add comments to your SQL code in Snowflake.

Additional SQL Queries to Try in Snowflake

--Queries for NEDSS COVID CASE DATA

```
SELECT * FROM NEDSS_COVID_CASE_DATA; -- Returns all data from NEDSS_COVID_CASE_DATA
```

```
SELECT COUNT(*) FROM NEDSS_COVID_CASE_DATA; -- Returns total number of records from  
NEDSS_COVID_CASE_DATA
```

```
SELECT DISTINCT JURISDICTION_NM FROM NEDSS_COVID_CASE_DATA; -- Returns all the jurisdiction/region names  
available in NEDSS_COVID_CASE_DATA without any duplicate names appearing in the list.
```

```
SELECT * FROM NEDSS_COVID_CASE_DATA WHERE CASE_STATUS='C'; -- Returns all records with confirmed cases  
status
```

```
SELECT * FROM NEDSS_COVID_CASE_DATA WHERE CASE_RPT_MMWR_YR='2021'; -- Returns all records where the  
case was reported in the year 2021
```

```
SELECT * FROM NEDSS_COVID_CASE_DATA WHERE INV_START_DT>='2021-01-01'; -- Returns all records where the  
case investigation start date was on or past 2021-01-01
```

Additional SQL Queries to Try in Snowflake

---Queries for NEDSS COVID LABS DATA

SELECT * FROM NEDSS_COVID_LABS_DATA; -- Returns all data from NEDSS_COVID_LABS_DATA

SELECT COUNT(*) FROM NEDSS_COVID_LABS_DATA; -- Returns total number of records from NEDSS_COVID_LABS_DATA

SELECT DISTINCT JURISDICTION_NM **FROM** NEDSS_COVID_LABS_DATA; -- Returns all the jurisdiction/region names available in NEDSS_COVID_LABS_DATA without any duplicate names appearing in the list.

SELECT * FROM NEDSS_COVID_LABS_DATA **WHERE** RESULT_CATEGORY='Positive'; -- Returns all records where the category of the test result was “Positive”

SELECT * FROM NEDSS_COVID_LABS_DATA **WHERE** RESULT_TEST_TYPE='PCR'; -- Returns all records where the type of test was “PCR”

SELECT * FROM NEDSS_COVID_LABS_DATA **WHERE** LAB_UPDATE_DT>='2021-03-11 22:27:52.220'; -- Returns all records where the last updated date of the lab was on or past “2021-03-11 22:27:52.220”

SELECT DISTINCT PERFORM_FACILITY_NAME **FROM** NEDSS_COVID_LABS_DATA; -- Returns all the testing facility names available in NEDSS_COVID_LABS_DATA without any duplicate names appearing in the list.

Helpful Links



- ❑ [Snowflake Getting Started](#)
- ❑ [Additional SQL Syntax](#)