

HCF User Guide for Los Angeles County Patient Safety Information Exchange (PSIE)

PSIE website: <https://dphpsieprod.azurewebsites.net/>

Questions? Contact PSIE@ph.lacounty.gov

Contents

1	Introduction	1
2	PSIE MDRO Case Data	2
2.1	Data Sources in PSIE	2
2.2	Data Reporting in PSIE.....	3
2.3	Data Processing Criteria (Effective August 5, 2024).....	4
3	Getting Started with PSIE	4
3.1	How to Register	4
4	How to Navigate PSIE	6
4.1	PSIE Landing Page	6
4.2	PSIE Header Menu	6
4.3	Other Header Controls	6
5	MDRO Case Search	7
5.1	Search Requirements	7
5.2	How to Search.....	7

1 Introduction

Los Angeles County Department of Public Health (LAC DPH) has developed a new centralized, web-based system called the Patient Safety Information Exchange (PSIE) to address the known gap in interfacility communication, specifically concerning multi-drug resistant organism (MDRO) cases. The goal of PSIE is to provide Infection Preventionists (IP) and other healthcare personnel the information needed to guide safe care and appropriate precautions for patients as soon as possible and alleviate any missed communication between healthcare facilities about MDRO status.

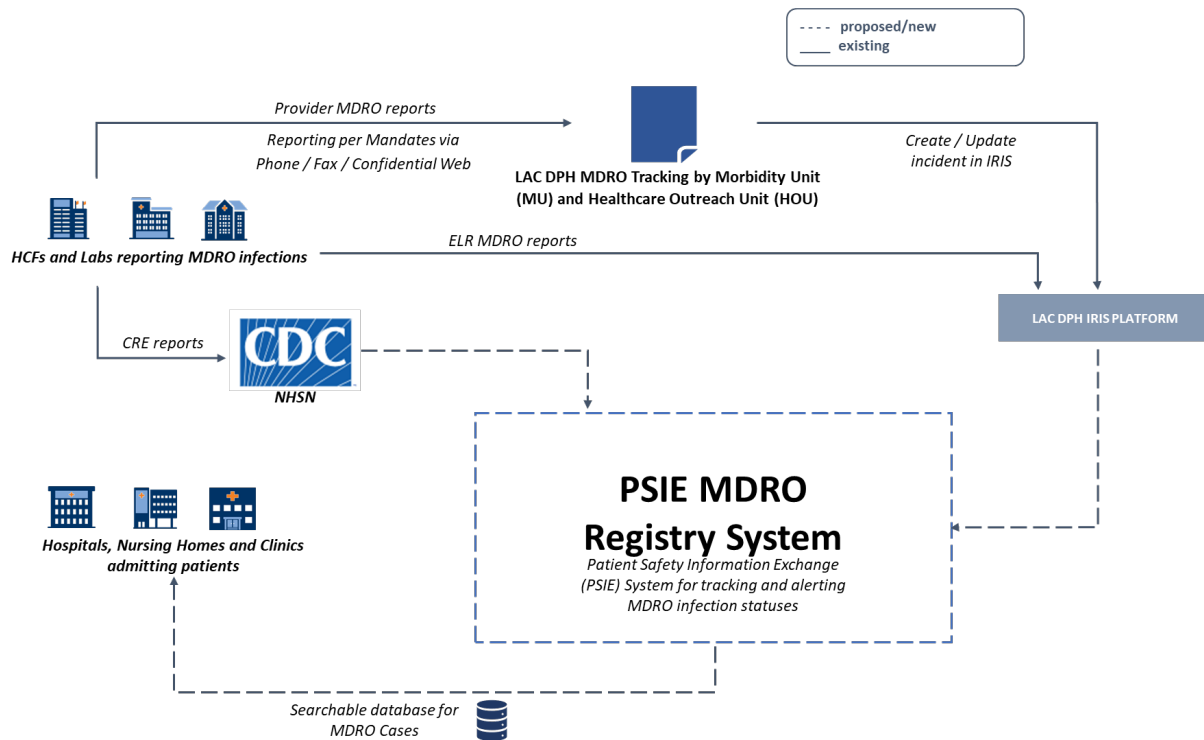
The PSIE system will feature a searchable database of known MDRO cases. All PSIE users will be able to log in and manually search for patients for their MDRO status and history. In addition, all approved PSIE users from HCFs that have the capability to send patient-identified electronic admission data will receive automated, real-time/near real-time email notifications when a patient with a history of MDRO is admitted to their HCF. Following the email notification, users will need to log in to the PSIE system to securely view patient details. Automated notifications are only available to HCFs which send patient-identified ADT data to LACDPH.



This early release beta version of PSIE will only include the searchable database of known MDRO cases, including *Candida auris*, carbapenemase-producing organisms (CPO), and carbapenem-resistant Enterobacteriales (CRE) history. We update the MDRO case data every business day (Monday through Friday). The automated notification of admitted MDRO patient feature is anticipated to be released in early 2025, more updates to come. For this pilot, some anticipated features that are not yet ready may be listed in menus as placeholders and will not be accessible. These are also noted in the user guide below.

2 PSIE MDRO Case Data

2.1 Data Sources in PSIE



PSIE only includes MDROs that have been reported to DPH. Select MDROs are required to be reported to LACDPH and the California Department of Public Health (CDPH). These include *Candida auris*, carbapenem-resistant Enterobacteriales (CRE), carbapenemase-producing organisms (CPO), vancomycin-resistant *Staphylococcus aureus* (VRSA), and pan-nonsusceptible organisms. PSIE does not include carbapenem-resistant *Acinetobacter baumannii* (CRAB) or carbapenem-resistant *Pseudomonas aeruginosa* (CRPA) that are not also carbapenemase-producing, as these are not currently reportable in Los Angeles County.

Organism	Criteria	Who Reports
<i>Candida auris</i> (<i>C. auris</i>)	Confirmed <i>Candida auris</i>	Lab
		Provider
Carbapenem-resistant Enterobacterales (CRE) ¹	Enterobacterales that are resistant to one or more carbapenems	Provider only
Carbapenemase-producing organisms (CPO)	Positive phenotypic or molecular test result for carbapenemase production	Lab only
Vancomycin-resistant <i>Staphylococcus aureus</i> (VRSA)	<i>S. aureus</i> with a vancomycin MIC \geq 16	Lab only
Pan-resistant organisms	Gram negative bacteria that are non-susceptible to all antibiotics tested	Lab only

¹*E. coli*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Enterobacter* spp.

CPO is a [laboratory-reportable](#) condition and was added to Title 17 in 2022 and replaced the prior requirement to report CP-CRE only. [Testing methods](#) include phenotypic and molecular (genotypic) and vary by laboratory. Per the updated [case definition](#), laboratories should report the following results for any specimen:

- Positive phenotypic test result for carbapenemase production, with or without identification of a specific carbapenemase type.
- Positive molecular test result detecting a carbapenemase gene.
- Detection of a carbapenemase gene by next-generation sequencing (e.g., whole genome sequencing).
- Specimen positive for a carbapenemase gene without bacterial species identification, (e.g., Xpert Carba-R rectal swab, other culture-independent diagnostic test).

2.2 Data Reporting in PSIE

The data displayed in PSIE represents what is reported by laboratories or providers. There may be incomplete data elements such as:

- **Specimen Source:** Recorded as "other" if the source is outside the PSIE standard categories such as Blood, Nasal, Urine, Rectal, Respiratory, Skin, or Wound.
- **Gene:** Noted as "not identified" if phenotypic methods were used without genetic confirmation.
- **Organism:** A designation of "not identified" is used for any data not reported to LAC DPH.



2.3 Data Processing Criteria (Effective August 5, 2024)

2.3.1 Facility Origin

Only confirmed results from Los Angeles County providers and laboratories will be processed and displayed.

2.3.2 Test Results

Only positive molecular test results from FDA-approved platforms will be included.

2.3.3 Incident Deduplication

Incidents will be considered distinct under any of the following conditions:

- There is more than 14 days between Specimen Collection dates.
- Cases involve different diseases and/or organisms.

2.3.4 Deceased Cases

Cases matching a California Department of Public Health – Vital Records death certificate are removed.

2.3.5 Data Updates

As of August 5, 2024, MDRO case data is updated in PSIE at least weekly, generally every business day (Monday through Friday). Previously, MDRO case data was updated in PSIE once a week.

3 Getting Started with PSIE

3.1 How to Register

3.1.1 Completing the HCF User Registration Form

Complete the registration form (please contact PSIE@ph.lacounty.gov for the registration form link). All fields are required. Up-to-date HIPAA training is required, with the date of last training.

- Applicants must use their facility email address for registration.
- Applicants can select more than one health care facility if applicable.
 - If your healthcare facility is not listed on the registration form, contact PSIE@ph.lacounty.gov.
- For Hospital users, please use your facility's Infection Preventionist's information for Health Care Facility Administrator, even if it is yourself.
- For Skilled Nursing Facility (SNF) users, please fill in the contact of your Administrator or Director of Nursing (DON) for Health Care Facility Administrator, even if it is yourself.

The completed registration form will be reviewed by the DPH ADMINS in the PSIE system. Applicants can submit up to 10 applications before they are locked out from submitting additional applications.

Additional application submissions will overwrite previous applications. Once a form is under review by a DPH ADMIN, applicants are locked from submitting more applications.

When an applicant is approved or denied by a DPH ADMIN, an email will be sent to both the applicant and the HCF Administrator entered on the registration form.

3.1.2 Completing the PSIE Data User Agreement

All applicants must agree to and sign the DPH ACDC PSIE Data User Agreement (contact PSIE@ph.lacounty.gov if you need a copy of the Data User Agreement). Please email completed PSIE Data User Agreement form to PSIE@ph.lacounty.gov.

- TIP: The form works best when opened in Adobe Acrobat.

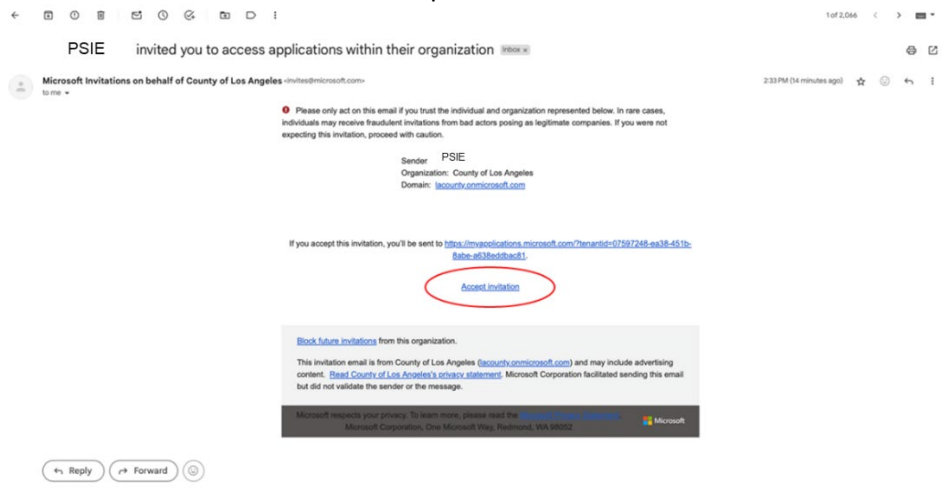


- Each PSIE user will need to complete their own Data User Agreement, they cannot be signed for an entire facility.
- Form requires your Name, your Title, and your Organization/Facility Name. Please sign on the line above your name. We accept Adobe signatures and scanned signatures.

3.1.3 Setting up Los Angeles County Microsoft Authentication

Microsoft authentication is required to access all Los Angeles County apps. When an applicant is approved by a DPH ADMIN, an email will be sent to both the applicant and the HCF Administrator entered on the registration form indicating that another email with more instructions to follow from Microsoft Invitations on behalf of County of Los Angeles.

1. There will be a link in the email to “Accept invitation.”



2. From there, the new user will need to verify their email account through a code sent to their registration email and accept permission requested by County of Los Angeles to proceed.

NOTE: If the HCF User already has a LAC DPH email in addition to their facility email address, you may not need to set up the Microsoft account authentication after Accept Invitation. If clicking on Accept Invitation goes to an Apps Dashboard, set up is complete.

 - a. User will need to set up account authentication through Microsoft through Microsoft Authenticator app.
 - i. **Effective August 31, 2024, Los Angeles County will no longer allow users to set up account authentication through phone or text, all users of Los Angeles County apps (including PSIE) must use Microsoft Authenticator.**
 - b. Once the Microsoft Authenticator app is downloaded, you can approve log-ins directly in the app.
 - i. Set up your phone by scanning a QR code or signing into Microsoft.
 - ii. Follow the directions on your app and computer to complete sign in, will likely require entering a code from your computer into the app.
 - c. Once the authentication method is complete, there will be a Success message and you can log in to the PSIE website (<https://dphpsieprod.azurewebsites.net/>).

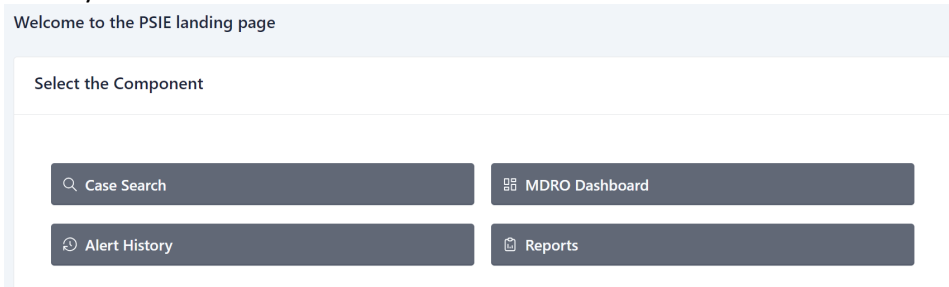


4 How to Navigate PSIE

Access PSIE through <https://dphpsieprod.azurewebsites.net/>. Many menu options are available through both the landing page buttons and the menu buttons along the top (header menu).

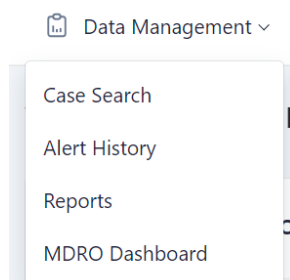
4.1 PSIE Landing Page

- **Case Search** – Search function to look up MDRO cases using First Name, Last Name, or Date of Birth of patient
- **Alert History** – (not yet available) History of notifications sent to your facility when patient with known MDRO is admitted
- **Reports** – (not yet available)
- **MDRO Dashboard** -- (not yet available) Dashboard of data about MDROs and admittances in your facility



4.2 PSIE Header Menu

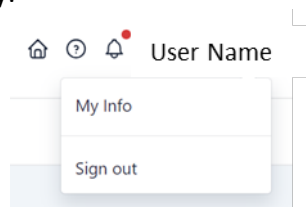
- **Data Management**
 - **Case Search** – Search function to look up MDRO cases using First Name, Last Name, or Date of Birth of patient.
 - **Alert History** – (not yet available) History of notifications sent to your facility when patient with known MDRO is admitted.
 - **Reports** – (not yet available)
 - **MDRO Dashboard** -- (not yet available) Dashboard of data about MDROs and admittances in your facility.



4.3 Other Header Controls

- **Home** – Returns to PSIE Landing Page.
- **Help** – (not yet available) Access tutorials, FAQs, or User Guides.
- **Alerts** – (not yet available) Red dot by alert symbol if there are pending MDRO notifications for your facility, click on alert symbol to see number of pending MDRO notifications.
- **Profile** – Includes your username.

- Access **My Info** to see your stored profile information. Please email PSIE@ph.lacounty.gov for any edits.
- Access **Sign Out** to log out of the PSIE system. PSIE will automatically log users out after 10 minutes of inactivity.



5 MDRO Case Search

5.1 Search Requirements

Last Name is required to search; entering First Name and DOB can be used to narrow down the search results.

In addition, there are the following validation restrictions to each search field:

- **First Name:** must be at least 2 letters to search using this field.
- **Last Name:** must be at least 2 letters.
- **DOB (Date of Birth):** must be complete date of birth to search using this field.

5.2 How to Search

- Navigate to **Case Search** through the header menu (**Data Management > Case Search**) or from the Landing Page (**Case Search**).
- The **Search** button will return any matches in the system, the **Clear** button will clear all entered search queries and results.
 - To help with searches, PSIE uses the sound of names to match results, so minor misspellings should still return expected results. The system may also suggest additional names. Partial entry of names is not currently part of the system but may be added in a future release to help with searches in the future.
- The results will show the Name, DOB, and Address of the case.
 - Hovering above the name will preview the MDRO Organism names that the case has been reported to have positive tests.
 - Clicking on the patient's name will go to a pop-up with more detailed patient Demographic, Contact, and Disease Information.
 - Disease Information is listed in reverse chronological order, with the most recent incident at the top.
 - Disease Information can be expanded for each Disease through the **^** symbol for more information about the specific reported incidents, including Organism, Gene Mechanism, Specimen Date, and Specimen Source.

Disease Information

Candida Auris

CRE (CarbapenemResistant Enterobacteriaceae)

ORGANISM	GENE MECHANISM	SPECIMEN DATE	SPECIMEN SOURCE
Klebsiella pneumonia	KPC	6/24/2020	Wound

- If there are no matches to the search query you entered found in PSIE, it will say “No records found.”

No records found