Surveillance for Antimicrobial Resistance

Antimicrobial resistance (AMR) poses a major threat to clinical medicine and public health, nationally and internationally. Antimicrobials are not only essential for the treatment of severe infections such as bacterial sepsis or meningitis, but also opportunistic infections that may occur in patients predisposed to infections, particularly in hospitals. Surveillance for AMR is a key component in combating antimicrobial resistance.

The National Department of Health (NDoH) developed a National Action Plan (NAP) for AMR which has as one of its objectives, surveillance for AMR. There are specific indicators which are the responsibilities of the Provincial AMR Committees to report on, including the resistance to key organisms with their associated antibiotics. These indicators have been identified as important for the provinces to monitor as a minimum in determining their situation on AMR and the impact of interventions.

In order to assist the Provincial Committees to gather this information, the NICD has been designated as the central coordination and AMR surveillance hub. This means that NICD can leverage off all laboratory specimens sent for microbiological testing from all health facilities in the country (public and private) to:

- Automatically collect data and apply defined case definitions and exclusion and inclusion criteria;
- Collate results to district, provincial and national levels; and
- Visualise the data as resistance "heat" maps and present year on year analysis and sensitivity profiles in dashboard format.

Provinces can then access this information for their own implementation efforts and tracking of M&E indicators.







Limitations of the data are:

- The results of this report should be interpreted with caution, as there may be an overestimation or underestimation of sensitivity reporting.
- Data may be incomplete due to missing cases not captured on the LIS or nonstandardised coding of ESKAPE pathogens and antimicrobial agents at diagnostic laboratories. Testing methods and microbiological practice may vary between hospitals and this could account for variations in the results presented.
- Confirmatory sensitivity methods not performed or recorded for any of the ESKAPE pathogens and results presented are reported as captured on the LIS by diagnostic laboratories.
- There is no reporting on colistin sensitivity as the new methods recommended by international guidelines have not yet been implemented by diagnostic laboratories.
- Vancomycin resistance is not reported for *Staphylococcus aureus* due to the lack of confirmatory test methods at diagnostic laboratories.
- For some public sector hospitals, not all ESKAPE pathogens are represented. This may be due to ESKAPE pathogens not being isolated at a particular sentinel hospital.
- Data is omitted for those hospitals that tested less than 30 ESKAPE pathogens for a particular antimicrobial agent.
- Data represents positive results only.

The attached manual explains the process of gaining access to the National AMR Dashboard.

How to access the National Antimicrobial Resistance Dashboard?

1. Register on the Self Service Portal (SSP)

- Go to <u>www.nicd.ac.za</u>
- Click on the "M&E Dashboards" link at the top of the page
- Select "AMR Surveillance"



• Select "Guest User"



- You will land on the M&E Reporting landing page:
 - Click on "Self Service Registration"

• Select "NEW USER REGISTRATION"

- Complete the registration form;
- All fields marked with an * must be filled in;
- The fields "*organisation*" and "*occupation*" are drop down menus from which the user selects the appropriate option. If the user's organisation or occupation is not available, please select "*other*" and specify occupation in the "*If other, specify*" field.
- On the right side of the page, select "*Report Category 1*", and choose "*AMR M&E*" from the drop down list;
- Click on the Terms & Conditions to view them;
- Read the Terms & Conditions carefully and select "*I have read and agree to the Terms & Conditions*" in order to continue;
- Click on "Submit";
- Select "Yes" on the "Do you want to submit your changes" notification;
- Click OK on the next notification.
- You will return to the SSP Landing Page.
- You must request access to the dashboard from the landing page by clicking on *"ADD ONLINE REPORTS"*.

2. Request access to the AMR Surveillance Dashboard

- From the SSP Landing Page, select "ADD ONLINE REPORTS".
- You will be prompted to put in your ID/Passport number:
 - This is for security reasons and to protect the confidentiality of patient information. This must be the same ID/Passport number which was used to create the New User Registration.
- Click on "*Run Document*" at the bottom left of the page;
- Click on "Add Reports" at the bottom of the next page;
- Select Applicable Dashboard and click on "Submit" (ensure that the Report Category is set to AMR M&E).
- There is a process that runs every hour processing requests. There may be a slight delay before you receive an email with your login credentials.

3. Accessing the AMR Surveillance Dashboard once approved

 Once access has been approved and you have received an email with your login credentials, use these credentials to login via the M&E Dashboards link on the NICD website (<u>www.nicd.ac.za</u>)

NHLS BI	
User name	
Password	
Login = Guest User	

• Once you have logged-on successfully, the dashboard can be accessed from the M&E Reporting landing page by selecting "Online Dashboards, AMR Surveillance".



4. The AMR Surveillance Dashboard Landing Page

• The landing page contains 3 separate dashboards; **National**, **Sentinel Sites**, and **Public-Facility Level.** In addition, there are 3 downloadable excel documents/reports.

Antional Institute For Communicable Direases	AMR Surveillance Reporting
AMR Dashboards 1. National (Incl. Private Labs)	S. Sentinel Sites 3. Public - Facility Level Image: Ima
1. National National & Provincial (Excel)	2. Sentinel Sites By Facility (Excel) By Organism (Excel)

5. Support Queries

- If you experience any problems either registering on the Self-service portal and/or accessing the dashboards, please email suec@nicd.ac.za for assistance.
- Please provide details of the problem and a contact number in your email and you will be assisted in due course.