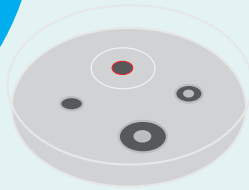


Carbapenemase-Producing Organisms

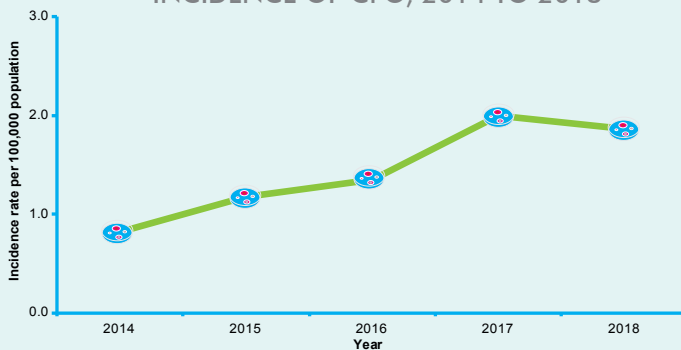


THE EMERGENCE OF **CARBAPENEMASE-PRODUCING ORGANISMS (CPOs)** IS OF CONCERN AS ENZYMES PRODUCED BY THESE ORGANISMS CAN **INACTIVATE CARBAPENEM ANTIBIOTICS**, LEAVING FEW THERAPEUTIC OPTIONS FOR CPO INFECTIONS.



CPOs HAVE BEEN REPORTED WORLDWIDE IN HEALTHCARE AND COMMUNITY SETTINGS WITH INCREASED GLOBAL TRAVEL, PARTICULARLY EXPOSURE TO HEALTHCARE ABROAD, CONTRIBUTING TO THEIR SPREAD.

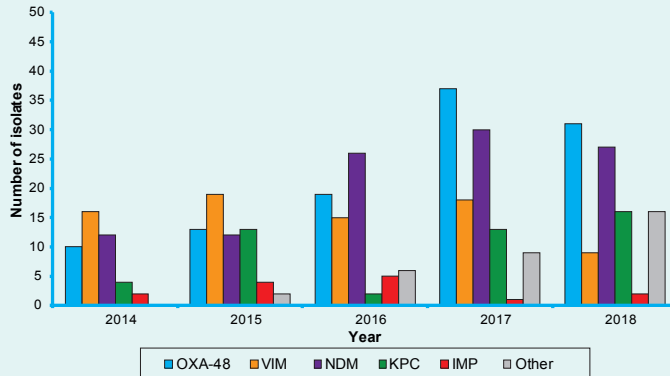
INCIDENCE OF CPO, 2014 TO 2018



1.9 ANNUAL INCIDENCE RATE OF CPO IN 2018 PER 100,000 POPULATION.

22.7% YEAR ON YEAR INCREASE IN THE INCIDENCE RATE.

NUMBER OF CPO ISOLATES BY ENZYME TYPE



MOST FREQUENTLY ISOLATED ENZYMES WERE **OXA-48, NDM AND VIM**



SCREENING FOR MULTI-DRUG RESISTANT ORGANISMS ON ADMISSION TO HOSPITAL IS A KEY INTERVENTION TO REDUCE THE OPPORTUNITIES FOR INFECTIONS TO DEVELOP AND SPREAD IN HEALTHCARE.

A TWO-STEP CLINICAL RISK ASSESSMENT (CRA) BASED SCREENING POLICY TO IDENTIFY AND MANAGE PATIENTS CONSIDERED TO BE AT HIGH RISK OF CARBAPENEMASE -PRODUCING ENTEROBACTERIALES (CPE) COLONISATION OR INFECTION, HAS BEEN IN PLACE IN ACUTE HOSPITALS IN SCOTLAND SINCE 2013.

THREE QUARTERS OF PATIENTS AUDITED UNDERWENT SCREENING IN LINE WITH POLICY.

QUALITY IMPROVEMENT AND INTERVENTIONS TO CONTAIN **CARBAPENEMASE-PRODUCING ORGANISMS**



• SURVEILLANCE



• PRUDENT USE OF ANTIMICROBIALS



• SCREENING

