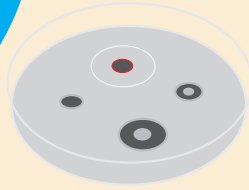


# Carbapenemase-producing Organisms



MULTIDRUG RESISTANCE AMONG GRAM-NEGATIVE BACTERIA HAS BEEN INCREASINGLY REPORTED IN THE LAST TEN YEARS. THE EMERGENCE OF **CARBAPENEMASE-PRODUCING ORGANISMS (CPOs)** LEAVES VERY FEW THERAPEUTIC OPTIONS FOR INFECTIONS.



CPOs HAVE BEEN REPORTED WORLDWIDE. INCREASED INTERCONTINENTAL TRAVEL HAS CONTRIBUTED TO THE SPREAD.

IT IS CRITICAL TO PRESERVE THE USE OF CARBAPENEMS DUE TO THE LACK OF NEW ANTIBACTERIALS UNDER DEVELOPMENT.



ADMISSIONS SCREENING FOR CPE IN HOSPITALS IDENTIFIES PATIENTS AT HIGH RISK AND REDUCES THE RISK OF TRANSMISSION.

AN EDUCATIONAL ELECTRONIC MODULE ON HAI SCREENING IS AVAILABLE TO SUPPORT FRONTLINE STAFF AND ENSURE PATIENTS CAN MAKE INFORMED DECISIONS ABOUT GIVING CONSENT TO SCREENING.

CPOs BY TYPE REPORTED IN SCOTLAND BY THE SCOTTISH AMR SATELLITE LABORATORY AND AMRHA1 (PHE)

ENZYME	NUMBER OF ISOLATES									
YEAR	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
OXA-48		1	4		1	10	13	19	37	
NDM	1			4	7	12	12	26	30	
VIM	3	5	6	3	7	6	16	19	15	18
KPC	2	4	5	2	5	8	4	13	2	13
NDM+ OXA-48								2	6	
Mixed									2	
IMP		4	2	2	1	2	4	5	1	
VIM+IMP										1
IMI		1					1	1		
IMP+NDM							1	2		
GES-5								1		
TOTAL	5	10	17	11	18	23	44	63	73	108

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



• SURVEILLANCE



• PRUDENT USE OF ANTIMICROBIALS



• SCREENING

