

CHECKLIST FOR LABORATORIES REPORTING EARS-NET AND CERTAIN OTHER PATHOGENS TO HPSC AND/OR PUBLIC HEALTH/CIDR

Version 4.0 (19th April 2016)

The latest EARS-Net protocol and isolate record forms can be found at:

<http://www.hpsc.ie/A-Z/MicrobiologyAntimicrobialResistance/EuropeanAntimicrobialResistanceSurveillanceSystemEARS/ProtocolsandForms/>

The EARS-Net isolate record forms can be used for:

- submitting quarterly returns to HPSC (for those laboratories that do not use WHONET or extract data electronically from their LIMS)
- sending isolates to reference laboratories (where indicated below)

Gram- negatives

1. *Escherichia coli* from blood and CSF

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- NOTE: Not notifiable to your local Public Health Dept or on CIDR
- complete enhanced BSI surveillance excel tool (recommended)
- send carbapenem-resistant isolates and isolates with a meropenem MIC of >0.12mg/L to the National Carbapenemase Reference Laboratory Service at Galway University Hospital for confirmation [See 4. Carbapenem-resistant Enterobacteriaceae (CRE) below]

2. *Klebsiella pneumoniae* from blood and CSF

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- NOTE: Not notifiable to your local Public Health Dept or on CIDR
- complete enhanced BSI surveillance excel tool (recommended)
- send carbapenem-resistant isolates and isolates with a meropenem MIC of >0.12mg/L to the National Carbapenemase Reference Laboratory Service at Galway University Hospital for confirmation [See 4. Carbapenem-resistant Enterobacteriaceae (CRE) below]
- send isolates (invasive only) that meet the case definition for MDRKP to the National Carbapenemase Reference Laboratory Service at Galway University Hospital [See 3. MDRKP below]

3. MDRKP from all sites

- **report all isolates from infection and colonisation that meet the case definition for MDRKP directly to HPSC using the Excel file provided on a quarterly basis (note: changed from monthly)**

Note1: Isolates with the **MDRKP/Non-CRE phenotype** are defined as ESBL-positive (or non-susceptible to 3GCs if ESBL not tested) and non-susceptible to ciprofloxacin and gentamicin (non-susceptible includes isolates that are intermediately resistant)

Note2: For isolates with the **MDRKP/CRE phenotype**, please also indicate if they also present with the **MDRKP/Non-CRE phenotype**

- NOTE: Not notifiable to your local Public Health Dept or on CIDR
- **complete enhanced surveillance form for all confirmed MDRKP/CRE isolates (i.e. carbapenemase-producing) from any site, representing both infection and colonisation, and send directly to HPSC**

4. Carbapenem-resistant Enterobacteriaceae (CRE)

- from all sterile sites (invasive only)
 - **notify your local Public Health Dept/CIDR once carbapenemase-producer is suspected (probable case) or confirmed (confirmed case):** disease = Carbapenem-resistant Enterobacteriaceae infection (invasive)
 - NOTE: isolates from **non-invasive** sites are not notifiable to Public Health/CIDR
- from all sites (invasive and non-invasive)
 - send carbapenem-resistant isolates and isolates with a meropenem MIC of > 0.12mg/L to the National Carbapenemase Reference Laboratory Service at Galway University Hospital
 - **complete enhanced surveillance form for all confirmed CRE isolates (i.e. carbapenemase-producing) from any site, representing both infection and colonisation, and send directly to HPSC**

5. *Pseudomonas aeruginosa* from blood and CSF

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- NOTE: not notifiable to your local Public Health Dept or on CIDR
- complete enhanced BSI surveillance excel tool (recommended)

6. *Acinetobacter spp.* from blood and CSF

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- NOTE: Not notifiable to your local Public Health Dept or on CIDR

Gram- positives

7. *Staphylococcus aureus* from blood only

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- NOTE: Not notifiable to your local Public Health Dept or on CIDR
- send MRSA isolates to the National MRSA Reference Laboratory
- complete enhanced BSI surveillance excel tool (highly recommended)

8. *Enterococcus faecium/Enterococcus faecalis* from blood only

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- NOTE: Not notifiable to your local Public Health Dept or on CIDR
- complete enhanced BSI surveillance excel tool (recommended)

9. *Streptococcus pneumoniae* from blood and CSF

- **notify your local Public Health Dept/CIDR once identified:** disease = *Streptococcus pneumoniae* infection (invasive), AKA Invasive Pneumococcal Disease (include isolates from all sterile sites)

- **include with quarterly EARS-Net returns (EARS-Net pathogens are notifiable directly to HPSC)**
- complete enhanced BSI surveillance excel tool (recommended)
- send all invasive isolates (including blood, CSF and other non-sterile sites, e.g. pleural fluid) to the Pneumococcal Serotyping Project

10. *Streptococcus pyogenes* (streptococcus group A) from blood, CSF or any sterile site (for confirmed iGAS) or non-sterile sites, e.g. vagina, throat, etc (for probable/possible cases of STSS or necrotising fasciitis only)

- **notify your local Public Health Dept/CIDR once identified:** disease = Streptococcus group A infection (invasive)
- **include with quarterly EARS-Net returns**
- complete enhanced surveillance form, which is available at <http://www.hpsc.ie/A-Z/Other/GroupAStreptococcalDiseaseGAS/SurveillanceForms/> (Note: in some HSE Areas, public health may already do this) and submit to your local Public Health Dept
- send all invasive isolates (confirmed cases) and non-invasive isolates (if patient presents with STSS or necrotising fasciitis) to EMBU at Children's University Hospital, Temple St for emm-typing

11. *Streptococcus agalactiae* (streptococcus group B) from blood, CSF or any sterile site in infants <90 days only (or from placenta and/or amniotic fluid if associated with a stillbirth)

- **notify your local Public Health Dept/CIDR once identified:** disease = Streptococcus group B infection (invasive)
- NOTE: do not include with EARS-Net returns
- send all isolates (as indicated above) to EMBU Children's University Hospital, Temple St for typing, if possible

CHECKLIST FOR REPORTING CERTAIN PATHOGENS TO HPSC/EARS-NET AND PUBLIC HEALTH

Specimen type/ Task	Pathogen												
	<i>Escherichia coli</i>	<i>Klebsiella pneumoniae</i>	MDRKP/Non-CRE	CRE (including MDRKP/CRE)	<i>Pseudomonas aeruginosa</i>	<i>Acinetobacter</i> spp.	<i>Staphylococcus aureus</i>	<i>Enterococcus faecium</i>	<i>Enterococcus faecalis</i>	<i>Streptococcus pneumoniae</i>	<i>Streptococcus pyogenes</i> (group A)	<i>Streptococcus agalactiae</i> (group B)	
Specimen type	bl/csf	bl/csf	all	all	bl/csf	bl/csf	bl	bl	bl	inv	inv ¹	inv	
1. Report directly to HPSC (EARS-Net) on quarterly basis	x	x			x	x	x	x	x	x ²	x		
2. Report directly to HPSC on quarterly basis using MDRKP template provided			x ³	x ³									
3. Report to local Public Health Dept once identified				x ⁴						x	x ⁵	x ⁶	
4. Complete enhanced surveillance (BSI/EARS-Net) (recommended)	x	x			x		x	x	x	x			
5. Complete enhanced surveillance (iGAS) and send to local Public Health Dept											x		
6. Complete enhanced surveillance (CRE) and send directly to HPSC				x									
7. Send isolate to Reference Laboratory	x ⁷	x ⁸	x ⁴	x			x ⁹			x	x	x	

all, all invasive (i.e. specimen types from sterile sites) and non-invasive (i.e. specimen types from non-sterile sites) isolates; inv, all invasive isolates

Superscripts

¹ Also non-invasive isolates if the clinical diagnosis includes STSS or necrotising fasciitis

² report blood and CSF isolates only to EARS-Net

³ K. pneumoniae isolates only in accordance with the MDRKP case definition

⁴ invasive isolates only

⁵ see iGAS case definition: confirmed cases (isolates from all invasive sites) and probable cases (isolates from non-invasive sites) where STSS or necrotising fasciitis

⁶ from infants <90 days only

⁷ send all isolates with suspected carbapenemase

⁸ send all isolates with suspected carbapenemase (including ALL with MDRKP/CRE phenotype) and invasive isolates of MDRKP/Non-CRE

⁹ MRSA isolates only