

## O0843 **Optimizing antibiotic use in emergency departments: the experience of an infectious disease hotline for the Paris metropolitan region**

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**Background:** Infectious diseases (ID) are a frequent cause of visit in emergency departments (ED). The rising incidence of community-onset infections due to multi-drug resistant bacteria (MDRB) has complexified the choice of the initial antibiotic regimen. Appropriate treatment of sepsis can improve the patient outcome. However in most hospitals in the Paris metropolitan region, which has a population of 12 million, an ID team cannot be reached 24 hours a day. In 2016 the regional health authorities along with the ID departments of Paris metropolitan area implemented an ID consultants hotline. Here we describe the activity of the first 18 months of this hotline.

**Materials/methods:** The 126 ID physicians (IDP) of the region are on call in turn. The hotline runs from 8pm to 8am at weekdays, from Saturday 1pm to Monday 8am and from 8am to 8am on public holidays. All reported clinical data are collected by the IDP on computerized file and recommendations for diagnosis and/or antibiotic prescriptions are orally notified during the phone call and send immediately by fax to the calling physician.

**Results:** 3108 calls were received during the period and 1839 clinical records were collected in the database. 127 healthcare centers of the region contacted the hotline, mainly ED (n = 1211, 67%) followed by medicine departments (n = 562, 31%) and intensive care units (n = 35, 2%). The calls concerned complex antibiotic therapy (ABT) or MDRB (n = 1134, 64%), severe infection/sepsis (n = 269, 15%) including meningitis (n = 117), fever among returning travelers (n = 203, 11%) or accidental exposure to blood (n = 178, 10%). The IDP advice focused on initiation of the anti-infective treatment (n = 714, 45%), non-indication of ABT (n = 361, 23%) or modification of the current ABT (n = 333, 21%). All callers of the ID hotline rated this service useful in a satisfaction survey.

**Conclusions:** The ID hotline seems a useful tool for hospital prescribers. This innovative service should help to improve antibiotic prescriptions and outcome of ED visiting patients with sepsis.