The outcome of re-treated cases (n=13 864, not shown) was less favourable, with an overall success rate of 55% (median 68%; range 36-100%), and higher proportions of deaths (9%), failures (11%), defaulters (13%) and continued treatments (5%).

Treatment outcome data are available from an increasing number of countries in Europe. In spite of remaining differences in category definitions, these data are informative and enable the description of some outcome determinants such as age or drug resistance.

In the EU & West, incomplete information, high mortality among the elderly and prolonged treatments appear to cause low success rates. Decentralised TB care implies active follow-up of clinicians to obtain complete outcome data and makes this monitoring labour-intensive. Being vigilant for TB in high risk groups and improving patient management and completeness of data collection should enable most EU countries to reach the 85% treatment completion target.

In the Baltic States, the relatively high prevalence of primary multidrug resistance [3] definitely contributes to lower success rates, and most patients failing or continuing treatment have initial multidrug resistant TB.

In the countries of the CIS, high proportions of failures among new cases are also probably contributed to by primary drug resistance, although available data do not enable description of other factors. In this area, TB programmes should urgently address diagnosis and care of multidrug resistant TB and strengthen case management.

It is expected that ongoing efforts in standardising methods of treatment outcome monitoring, including the active involvement of TB care providers, will further improve inter-country comparisons and assist the progress towards TB control targets in Europe.

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New communicable disease notification system launched in Turkey

Y Bayazit, V Buyurgan, S Tumay

Saglik Bakanligi, Temel Saglik Hizmetleri Genel Müdürlügü, Bulasici ve Salgin Hastaliklar Daire Baskanligi Sihhiye (Department of Communicable Diseases and Epidemic Control, Ministry of Health), Ankara, Turkey

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At the beginning of 2005, a new and completely revised communicable disease notification was launched nationwide in Turkey.

The communicable diseases situation in Turkey varies greatly by region, and depends on the level of development and healthcare services provided there. These differences were taken into account when devising the new communicable disease surveillance system.

As in other countries, the total number of infections notified in Turkey is underrepresentative of the true burden of disease, and case definitions also vary.

Recent changes in disease epidemiology and developments in diagnostic capability meant that the notifiable diseases and the surveillance methods in the Turkish communicable disease notification system needed to be overhauled. In 2001, a committee of almost 60 academics and representatives from the Ministry of Health began a review of the national communicable disease notification system with a view to launching a new system. The committee will continue to meet every two years to revise the system.

The following factors were considered when making the list of notifiable diseases:

- Is the disease a significant public health problem in Turkey, or could it be one in the future?
- Does the diagnostic capability exist?
- Are special surveillance or prevention programmes already being carried out?

During the first stage of the review, standard case definitions for important communicable diseases were devised. During the second stage, the need for disease surveillance was considered. At the third stage, the diagnostic capacity for different diseases was reviewed. At the fourth stage, the notification system and the forms used for notification were examined and re-drafted.

To summarise, the new system consists of:

1. An updated list of mandatorily notifiable diseases.
2. Standard case definitions of mandatorily notifiable diseases.
3. A new system of disease surveillance systems.
4. Systems for immediate and standard notification for each notifiable disease.

The new list of mandatorily notifiable diseases consists of 51 diseases, divided into four groups.

Group A mandatorily notifiable diseases

Data must be notified to the regional health authorities by all healthcare institutions, including primary healthcare. Most patients with these infections initially present to primary healthcare, and the physician diagnoses and notifies the infection according to the standard case definition. If diagnostic capacity is limited, the patient is referred or refers themselves to a state hospital. The state hospital must then notify the case to the regional health authorities, so that necessary contact tracing can be undertaken, and the source of the infection investigated, with the support of the provincial health directorate.

The diseases in group A are:

- Acute bloody diarrhoea
- Acute viral hepatitis
- AIDS
- Anthrax
- Brucellosis
- Cholera
- Cutaneous leishmaniasis
- Diphtheria
- Gonorrhoea
- HIV
- Malaria
- Measles
- Meningococcal meningitis
- Mumps
- Neonatal tetanus
- Pertussis
- Poliomyelitis
- Rabies and suspected rabies exposure
- Rubella
- Syphilis
- Tetanus
- Tuberculosis
- Typhoid fever

Group B mandatorily notifiable diseases

Diseases in group B have either never been seen in Turkey or not been present for a long time. However, they are still present in some regions of the world, have high transmission potential and mortality, and three of the diseases, smallpox, yellow fever and plague, are required to be reported according to the International Health Regulations. Any healthcare institution that encounters a possible case must directly notify the Turkish Ministry of Health immediately.

The Ministry of Health is then responsible for reporting these at an international level as well as implementing control measures.

The diseases in Group B are:

- Epidemic typhus

• Plague
• Smallpox
• Yellow fever

Group C mandatorily notifiable diseases

Most of the diseases in group C are new additions to the notification system. With the exception of trachoma, they are only under sentinel surveillance. This is because:

- Some of these diseases can only been diagnosed by state hospitals or other specialist institutions or laboratories. The notification done by these institutions is accepted as adequate.
- For diseases such as influenza, notification of each single case is not necessary, but identification of outbreaks and typing of infections is Surveillance of group C diseases is a new and important application in Turkey's healthcare system. Provincial health directorates are responsible for acting on the information generated.

The diseases in Group C are:

- Acute haemorrhagic fever syndromes
- Congenital rubella syndrome
- Echinococcus
- *Haemophilus influenzae* type B meningitis
- Influenza
- Legionnaires' disease
- Leprosy
- Leptospirosis
- New variant Creutzfeldt-Jakob disease (vCJD)
- Schistomiasis
- Sub-acute sclerozive panancephalitis (SSPE)
- Toxoplasmosis
- Trachoma
- Tularaemia
- Visceral leishmaniasis

Group D mandatory notifiable infectious agents

Group D involves the notification of an infectious agent. This is an important innovation that involves the direct participation of laboratories in the notification system. The aim is to get data on the source of communicable diseases that remain a public health problem, and to study the epidemiology of these diseases when necessary. Only laboratories using acceptable diagnostic techniques will be able notify cases. Group D data are notified to the provincial health directorates who implement actions. Group D surveillance type, with the role of the laboratories at the notification of the A, B, C group diseases, will obtain a working comprehension with quality assurance and standardisation.

The infectious agents in Group D are:

- *Campylobacter jejuni*
- *Chlamydia trachomatis* (as a sexually transmitted infection)
- Cryptosporidium
- *Entamoeba histolytica*
- Enterohemorraghic E. coli (EHEC)
- *Giardia intestinalis*
- *Listeria monocytogenes*
- Salmonella (Non-typhoidal Salmonellosis)
- Shigella

The information obtained from Group D surveillance, with the role of the laboratories at the notification of the A, B, C group diseases, will be quality assured and standardised.

The former communicable disease surveillance system has been completely replaced by the new system. Healthcare staff throughout Turkey are being trained in the new notification system. A national training meeting and several meetings at provincial level were held, and training materials have included 33 000 manuals, 50 000 CD-ROMS, and 100 000 posters.

Turkey has a Bilateral Cooperation Agreement (BCA) with the World Health Organization Regional Office for Europe, and it is hoped that this will be a source of funding for the new system.

Community-acquired PVL+ MRSA in Ireland: a preliminary report

A Rossney, P Morgan, B O'Connell

National MRSA Reference Laboratory, Dublin, Ireland

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Cases of community-acquired methicillin-resistant *Staphylococcus aureus* (CA-MRSA) infection were recently detected for the first time in Ireland [1]. CA-MRSA infections have been reported in recent years from many countries around the world. In a study comparing 117 CA-MRSA isolates from three continents, it was shown that in all cases, methicillin resistance was encoded by the SCC*mec* IV genetic complex. In addition, all the isolates contained the Panton-Valentine leukocidin (PVL) genes *lukS-PV* and *lukF-PV*. These encode the synergistic PVL proteins LukS and LukF, which damage host cell membranes.

In a preliminary study of blood culture isolates of MRSA submitted to the Irish National MRSA Reference Laboratory during the second quarter of 2003, from Irish hospitals participating in the European Antimicrobial Resistance Surveillance System, two of 112 isolates carried the PVL genes. Six isolates (from skin or nose) from six patients in whom CA-MRSA infection was suspected in 2004 also tested positive for PVL genes. All of these isolates have not yet been tested for *mec*A by PCR but were methicillin resistant by disk diffusion. Four of the 2004 isolates were obtained from one family: a child with a soft tissue infection and three asymptomatic family members. The other two patients had skin infections and an epidemiological link was suspected but not proven.

Seven of the eight patients with PVL+ MRSA did not have risk factors for hospital acquisition of MRSA. Specifically, they had not been admitted to hospital for at least two years, they had not used antimicrobials within the last year or had close contact with a healthcare worker or relative who had recently been in hospital. The isolate from the eighth patient was probably acquired in the community abroad.

All eight isolates were susceptible to ciprofloxacin; seven isolates were susceptible to erythromycin; and the four isolates from the one family were resistant to fusidic acid. Studies to further characterise these isolates and to determine the prevalence of PVL among other patient populations in Ireland are on-going but the results of this preliminary investigation suggest that CA-MRSA may already be a problem in Ireland.

MRSA is a major cause of hospital-acquired (HA) infection but in recent years it is being reported with increasing frequency in the community worldwide [2-4]. In the past, investigation of apparent CA-MRSA usually revealed some underlying healthcare-associated (HCA) risk factor such as recent hospitalisation, close contact with a patient who had been in hospital recently or previous antibiotic therapy. While hospital acquired-MRSA (HA-MRSA) may contribute to the burden of MRSA in the community, MRSA in patients without healthcare-associated risk factors is an emerging problem.

CA-MRSA has been reported worldwide in schools, prisons, sports teams, day-care centres, homeless shelters and military bases. Risk factors among these groups were minor skin trauma and risky practices including sharing of personal items such as towels. CA-MRSA from different geographical areas share a number of characteristics. Unlike HA-MRSA which are frequently multi-antibiotic resistant, CA-MRSA tend not to be multi-antibiotic resistant, tend to exhibit lower oxacillin minimum inhibitory concentrations and have shorter doubling times [2-5].

Clinically CA-MRSA appears to be more virulent than methicillin susceptible *Staphylococcus aureus* (MSSA) (PVL is found in only 2% to 3% of MSSA strains) [4,6]. In addition to PVL, one strain of