EpiSouth Project

WP7 Strategic Document

Vaccine Preventable Diseases and Migrant Population in the Mediterranean Countries and Balkans

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WP7 Vaccine Preventable Diseases and Migrant Population in the Mediterranean Countries and Balkans

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List of abbreviations

ECDC	European Centre for Disease Prevention and control
EPI	Expanded programme on immunization
ESEN2	The European Sero-Epidemiology Network 2
EU	European Union
EUVAC	European surveillance network for vaccine-preventable diseases
GIVS	Global Immunization Vision and Strategy
GPEI	Global Polio Eradication Initiative
ICMPD	International Centre for Migration Policy Development
IGOs	Intergovernmental Organizations
IOM	International Organization of Migration
NGO	Non-Governmental Organization
NGOs	Non-governmental organizations
NIP	National Immunization Programme
ST	Steering team
UN	United Nations
VENICE	Vaccine European new integrated collaboration effort
VPD	Vaccine-preventable disease
WHO	World Health Organization
WP	Work package

Key definitions

- Migrant: person moving from one place of residence to another.
- International migrant: person who changes his or her country of usual residence.
- Nomad: Person without a fixed place of residence who moves from one site to another (internal or international migrant).
- Mobile population: person moving form one place to another (including migrant and nomad).
- Refugee: person granted refugee status either before arrival or upon arrival in the receiving country. Refugee status can be granted on the basis of the 1951 Convention and the 1967 Protocol relating to the Status of Refugees or pertinent regional instruments.
- Asylum: Asylum is a form of protection given by a State on its territory based on the principle of "nonrefoulement" and internationally and nationally recognized refugee rights. It is granted to a person who is unable to seek protection in its country of citizenship and /or residence in particular for fear of being persecuted for reasons of race, religion, nationality, membership of particular social group or political opinion.
- Asylum seeker (refugee claimant): person whose application for asylum (under the 1951 Refugee Convention) is pending in the asylum procedure or who are otherwise registered as asylum-seekers.
- Seasonal Labour migration: is very common in agricultural cycles; it is arranged with farmers to provide the necessary help at the seasonal time, often with foreign nationals whose employment opportunities are more limited in their home areas.

- Legal immigrant: immigrant whose stay is legal in the hosted country.
- Illegal immigrant: immigrant whose stay is illegal in the hosted country.
- Visitors (from abroad to the country): Person admitted for short stays for purposes of leisure, recreation, holidays; visits to friends or relatives; business or professional activities not remunerated from within the receiving country; health treatment; or religious pilgrimages. Visitors include excursionists, tourists and business travelers.

Based on: *Recommendations on Statistics of International Migration, Revision 1 United Nations, New York, 1998 (http://unstats.un.org/unsd/publication/SeriesM/SeriesM_58rev1E.pdf).*

Key definitions that were used for the purposes of WP7 survey "Assessment of countries migration status profile & vaccination access of migrant population".

1. Evidence of the problem to be addressed

The communicable diseases are perhaps the classic example of where cooperation across countries is essential, given the potential for diseases to spread across national borders (6).
The best opportunities for international cooperation in the field of communicable disease control exist regarding these diseases that can be prevented by vaccines, because the vaccination is proved to be one of the most cost-effective health interventions. Through globally coordinated vaccination was eradicated smallpox and most countries in the world are polio free at present. More recently, goals for progress towards measles and rubella elimination and congenital rubella infection prevention have been proposed by a number of WHO regions, including the European Region (*Eliminating measles and rubella and prevention of congenital rubella infection, WHO European Region strategic plan 2005-2010).*
Vaccinations have an advantage in that they can be delivered with very high coverage even in the most underserved areas, on condition that appropriate policies and strong immunization systems are implemented to ensure that potent vaccines are provided safely to every person who needs them *(Global Immunization Vision and Strategy, 2006-2015).*
One of aims of the GIVS is "the effective management of vaccination programmes within the context of global interdependence" and it is completely relevant to the present situation in the countries of the Mediterranean and the Balkans, where the migration is constantly increasing.

As a matter of fact, migration is a growing phenomenon throughout elsewhere in the EU, as well as all over the world. According to the International Organization for Migration (IOM) some 192 million people are living outside their place of birth, representing about 3% of the world's population.
Migration across the Mediterranean and Balkans is a long-standing feature of the region with deep historical and socio-political causes and implications. The region has traditionally been an economic and cultural crossroads, but that role has increased in recent years.
There are diverse and complex migration flows within and from the Mediterranean:
- The first migration flow consists of South-North movements from North Africa to southern European countries. It also includes migrants from sub-Saharan Africa who transit through North Africa on their way to Europe. Recent data from the IOM *(2008 Report on "World Migration")* indicates that Europe is also increasingly becoming a destination for migrants from Egypt and Lebanon, and to a lesser extent, Syria;
- The second path for migrants is from the South East to the North, which involves migrants from Asian countries such as Pakistan and Bangladesh. Those migrants often transit through Turkey and part of them remain there. The final receiving countries of these South-East-North migrations are Spain and Italy, and to a lesser extent, Greece, Cyprus and Malta;
- South-South flows (from Algeria and Tunisia to Libya and the countries of the Maghreb and Egypt to the Persian Gulf);
- East-West flows (from the Balkans and Turkey to Western Europe).

Each year, tens of thousands of sub-Saharan Africans are believed to migrate to Spain through Morocco. These migrants generally enter Morocco from Algeria after crossing the Sahara and come from Nigeria, Senegal, the Gambia, Liberia, Mali, Ghana, Burkina Faso, Niger, Sudan, the Central African Republic, and Cameroon. Recently, even migrants from Asian countries, such as India, Pakistan, and Bangladesh, have transited through Morocco.

Migrants across the Mediterranean region fit a variety of profiles. Some are temporary workers who plan to work in Europe for a limited period of time. Others are political refugees seeking asylum in Europe as a result of war or persecution in their home country.
Of particular concern, however, are undocumented migrants, the vast majority of which are seeking employment. There are an estimated 5 to 8 million undocumented migrants living in the EU.
The International Centre for Migration Policy Development (ICMPD) has estimated that some 100,000 to 120,000 undocumented migrants cross the Mediterranean each year, with about 35,000 coming from sub-Saharan Africa, 55,000 from the south and east Mediterranean, and 30,000 from Middle Eastern countries.
The intensive migration presents challenges to the national public health care systems, responsible for the implementation of control measures against communicable diseases and in the same time to the human rights in most of the European countries, because the movement of people within and into Europe has implications for the health of both – the general population of the country and for migrating individuals/groups.
In the beginning of the 21st century the movement of people around the world is significantly increasing the epidemic risk. Apart from the increased potential for the spread of infectious disease, that a more mobile global population brings, there are also concerns that migrants' health prevention needs are not always adequately met in the receiving country, especially for certain migrant groups, e.g. irregular migrants and asylum seekers.
Because of this, with increasing numbers of people on the move, migrant health has become a key global public-health problem. It is proved now, that the migrant's health is affected manly by the conditions under which they travel and their residence status and the social conditions in which they live in the receiving country.

The Mediterranean and the Balkans are regions with particular socio-economic problems, experiencing as the rest of the world the consequences of the intensive migration, which poses serious risk of importation and epidemic spread of communicable diseases, considered eradicated (for example poliomyelitis) or eliminated (measles) at that moment, inadequately immunized general population, along with a poor access of the local migrant population and immigrants represent a potential risk for disease transmission, including a cross-border one, to the neighbouring countries.

The dimension of the human displacement, turned migrant health into a priority public-health issue is significantly complicated by the diversity of the involved population, which is not a homogeneous group: they may be immigrants, internally displaced, internal migrants (Roma population, other nomads), refugees, and returnees, victims of trafficking, asylum seekers, irregular (undocumented) migrants, and people searching work or education. Besides, the national and ethnic diversities among and within groups of migrants are significant and this may affect the acceptance of preventive public health measures such as immunizations.

Access to the regular preventive health care, in particular for relatively small migrant groups, new immigrants and especially for undocumented migrants (without a residence permit) is sometimes difficult. Provision of health care for undocumented migrants varies in the countries. A survey covering 11 European countries showed that in some countries the health system may cover part or all of the costs for undocumented migrants who are unable to pay, but in other countries the access to free health care is restricted to emergency care only (48). The report found that overall 70% of the interviewees could theoretically benefit from health coverage (percentage ranging from 3% to 98%), but a quarter of them were unaware of their rights. In the conclusion the authors, estimating that undocumented migrants represent 1.5% of a country's population on average, call for "more open and better performing of the health programmes to support this poorly treated group."
The wider determinants of the health of migrant population and hard-to reach-communities as Roma population and country specific nomads are often found to be different from those of the settled general community and requiring a different approach from the healthcare professionals. An understanding of the background of migrants is essential in order to seek out and attempt to effectively address their preventive health needs and more specifically their immunizations.

In the era of implementation of elimination and eradication programs for VPD, is crucial to have information about whole EU population susceptibility profiles, modeled by different immunization schemes, different acceptance of immunizations by the population and the different access to the immunization services. Subsequently, it is necessary to bring together the available data and practical experience and to develop specific methods for the assessment of vaccination coverage of the vulnerable mobile population and to plan

and implement effective routine and outreach immunisation programmes, able to ensure high and sustainable vaccination coverage for the whole EU population including the most vulnerable migrant population groups.
A mix of policy, legal and operational public health tools is required to address the migration challenge and to achieve the goal – better control of the VPD. The critical component is to achieve and sustain high immunization coverage in EU and non-EU countries and to improve the access of migrant populations to vaccination in recipient countries. The key strategy underpinning this policy is a multi-sectoral and international co-operation, coordinated by the WHO and IOM.

2. Scientific rationale for action

The data, obtained from the answers to the WP7 Questionnaire (see *http://www.episouth.org/outputs/wp7/WP7_9_Report_Assessment_Countries_Migration.pdf*) are confirming that migrant population (documented and undocumented) is available in all participating countries; internally displaced persons are living in countries in Balkans and Near East regions; Roma population is specific for the Balkans and for most EU countries; other country specific nomads are living in North African and Near East regions.
As a total in the region, there is no universal approach, nor enough information regarding regulations supporting immunizations of migrant population; the immunization coverage of migrants is not monitored separately and the figures are included into the national immunization coverage data.
Despite the lack of an official information, 13/22 participants in the WP 7 survey "Assessment of countries migration status profile & vaccination access of migrant population" consider that some population groups are less covered by immunisation than the general population and those are the illegal migrants, Roma people and some country specific nomads. Some studies in Croatia, Slovenia, Romania and Bulgaria evidence that Roma population has lower immunization coverage despite the full and free access to immunizations. The participants in the survey consider that the main reasons for the lower immunisation coverage within those groups are lack of information about immunisations, lack of trust in authorities, limited access to health care & financial constrains along with language barriers.

Seven out of a total of 22 responded countries (31.8%) have information about local/national VPD outbreaks occurred since the beginning of 2006 as a result of an outbreak started among mobile population. Thus, inadequately covered by the immunisation programme migrant population and immigrants are exposed to increased risk for VPD. Furthermore, a potential risk is thus generated for the occurring of outbreaks and epidemics not only in a particular country, but as well as for cross-border disease transmission to neighbouring countries.

The data obtained from measles surveillance systems in Europe are an appropriate example, supporting the survey findings.
Measles elimination is one of the key components of the WHO European region strategic plan and 98% of the Member States have implemented measles and rubella vaccination programme.
Since 1999, the incidence of measles cases has decreased substantially in the WHO European Region. However, further efforts are needed, because the principal barrier to achieving measles and rubella elimination still exists in Europe and it is the lack of an appropriate approach to reach hard-to-reach groups and populations with difficult or limited access to immunisation. As a result, while a number of countries have remained free of indigenous measles for years, others are showing a high incidence and outbreaks continue to emerge, threatening the success of the elimination plan by 2010. The transmission of indigenous measles virus have been interrupted as a result of enhanced vaccination in some countries, but multiple importations from Africa and Asia, and mostly the introduction of the virus into highly mobile and unvaccinated, hard-to-reach communities, caused a massive spread of D4 and B3 strains throughout the European region during the last years. Thus, despite the reduction of endemic measles virus circulation, importation of measles virus from other continents caused prolonged circulation and large outbreaks, after their introduction into unvaccinated and highly mobile European communities.
Various outbreaks of measles recently occurred in the European countries affected migrant population, some of which have affected Roma/Sinti people. Even though most Roma/Sinti does not refuse immunisation, none of the Roma/Sinti patients in the above outbreaks had been vaccinated against measles. Such populations are continuously on the move and for this, as well as other, mainly socioeconomic reasons, they are more difficult to be reached by routine vaccination programme (13, 14, 15, 24, 25, 26, and 41).

The occurrence of the recent measles outbreaks, as well as past poliovirus importations in the region, documented until 2001 (22) underlines the need of purposeful actions to achieve and maintain high vaccination level through routine immunisation in the general population, and to ensure that children from hard to reach populations such as the Roma/Sinti and immigrant communities also have an equal access to immunisations.

The example is clearly demonstrating that the epidemiological data are necessary to develop special methods for the assessment of vaccination coverage; factors that impede children from hard to reach populations from being immunised must be adequately addressed and special strategies should be developed for implementation of effective routine and outreach programs, able to ensure high vaccination coverage in these vulnerable populations.

3. Objectives

In order to improve the surveillance and control of vaccine preventable communicable diseases across the countries of the Mediterranean and the Balkans, the aim of workpackage 7 (WP 7), as a part of the EpiSouth project, is to create a framework for collaboration and exchange of information related to the vaccine-preventable diseases and to the specific approaches and national immunization strategies targeting under-immunized migrant groups and hard-to-reach populations, such as Roma minority and other country specific nomads.
The specific objectives of WP 7 are as follows:

- To assess the access to immunization of migrant population and hard-to-reach populations in Mediterranean and Balkan countries;
- In collaboration with EpiSouth WP6 to collect data and to establish a regular exchange of information on cases/outbreaks of vaccine preventable diseases among these target groups in Mediterranean and Balkan countries;
- To provide an overview of existing national vaccination schemes and programmes, including specific programmes for monitoring and improving migrant population's immunization coverage and to formulate recommendations facilitating the evaluation and improvement of immunization coverage and related activities among migrant population in the region.
- To build capacity in participating countries for a better organization of the national immunization programmes and for improvement of the VPD prevention and surveillance both in the general population and in high-risk groups of the population.

4. Framework

The WP7 framework is determined by the main objectives of the integral EpiSouth project, as well as by the existing at present national and international goals and programs in the field of public health policy regarding both migrant's population health and prevention of communicable diseases through immunization.

Four geographically different regions (South Europe, Balkans, Near East, North Africa), represented by 26 politically different (EU and non EU) countries are united in the EpiSouth project. Some of countries experienced intensive immigration; other were/are direct or indirect victims of international or local conflicts and hundreds and thousands of people moved to another places in their own countries or migrated to the neighbouring countries. Some countries are facing public health problems related to the country specific nomads (in North African and Near East regions) or Roma population, having various living stereotype – some groups are predominantly settled at one place, others are in-country nomads or traveling abroad (mostly to the EU countries) – with documents or as undocumented travelers.

The main approach to collect information on country specific migration status profile and immunisation programme, implemented by each country was to conduct a country based assessment survey for vaccine preventable diseases and migrant populations. A Questionnaire was developed during the first two years of the project in two stages. First, a preliminary version of the Questionnaire was prepared and pre-tested by the countries involved in the WP Steering team in 2007. This version served as a prototype of the final version of the questionnaire "Assessment of countries migration status profile and vaccination access of mobile

population", intended to be completed on-line. A total 22 countries out of 26 participating into the EpiSouth project have responded to the WP7 Questionnaire for VPD and migrants.

The questionnaire collected information about country specific migrant's groups of people, organization and performance of the national immunisation programmes and VPD surveillance, organization of the immunizations of migrant and hard-to-reach population and problems faced by the national public health system in this area. To clarify the available information, national representative persons and other networks have been contacted. After integrating Questionnaire's data received from participating countries with those available from European networks (i.e. VENICE, EUVAC, ESEN2), the final analysis on Vaccine preventable diseases and migrant population was done (see *http://www.episouth.org/outputs/wp7/WP7_9_Report_Assessment_Countries_Migration.pdf*).

The aim of the WP7, the results obtained and respectively the expected outcomes are within the framework of the goals and programs of International organizations for better prevention, control and surveillance of VPD both in the general population and in the vulnerable populations, such as migrants and hard-to-reach groups, which are generally "underserved" by the preventive medicine, including routine immunisation services.

International organizations goals and programs:

- WHO Global Immunization Vision and Strategy, 2006-2015;
- Global Polio Eradication Initiative and GPEI Programme of Work 2010-2012;
- WHO Regional Committee for Europe resolution from 2005 on strengthening national immunization systems through measles and rubella elimination and the prevention of congenital rubella infection by 2010;
- The revised International Health Regulations (2005) – the legal framework to prevent, protect against, control and provide a public health response to the international spread of disease;
- The framework of the Union for the Mediterranean ("Mediterranean Union");
- The Regional Co-operation Council (The Stability Pact for South Eastern Europe) and it's South East European Health Network;
- ECDC Programme on vaccine preventable diseases and invasive bacterial infections.

5. Players, partners and audience

The survey results and WP7 expected outcomes are of interest for the public health community, epidemiologists and decision-makers in Southern Europe, the wider European Community, Balkans and Mediterranean countries, National, European and International institutions:

- European Commission
- National health authorities and institutions (Ministries of Health in the EU and non-EU countries and other National public health institutions)
- European Centre for Disease Prevention and Control
- WHO (EURO, WHO Office for national epidemic preparedness and response in Lyon, France, EMRO, AFRO)
- International Organisation for Migration (IOM)
- Global and regional IGOs and NGOs concerned with migration, refugees and human resources
- United Nations, including its respective Offices
- International Committee of the Red Cross
- Union for the Mediterranean (The Euro-Mediterranean Partnership)
- Arabic league
- Maghreb Arabic Union
- The Regional Cooperation Council (South East European Health Network)
- Scientific community of public health experts and epidemiologists

6. Expected outcomes

An effective collaboration among the Mediterranean and Balkan countries in respect of vaccine preventable diseases and migrant populations will enable the European Commission, National health authorities and WHO to have a wider and clearer picture of this important public health issue in the region:

- Identification of the areas of significant gaps in public health activities related to the immunization of migrant population, where more efforts or more/new funds are needed and should be directed;
- Exchange of experience and adoption of successful national practices for immunization of migrant population and hard-to-reach populations and facilitation and improvement of the access to immunisation of migrant population in the countries in the region;
- Improved communication among partners and routine exchange of data on immunization coverage and trend of the vaccine preventable diseases affecting neighbouring countries, facilitating the detection and response to possible VPD outbreaks, related to inadequate vaccine coverage;
- Capacity building for a better organization of the national immunization programmes to meet the national needs and the requirements and quality indicators of the WHO and EU. Improvement of the VPD prevention and control through updating the disease and vaccine coverage surveillance both in the general population and in high-risk groups by gradual introduction of information systems for registering immunisations and reporting cases.

6.1. Recommendations

Guidelines on vaccine preventable diseases and migrant populations (general recommendations for improving the access to immunizations of migrant groups and easy VPD data exchange) could be produced in collaboration with the international organizations concerned with migration and VPD prevention (WHO, ECDC and IMO).
Based on a careful analysis of the data, obtained by the performed survey for vaccine preventable diseases and migrant population in the region, the Guidelines could be used for elaboration of National programmes for immunization and surveillance of VPD in migrants and other hard-to reach population groups. These National programmes should also be adapted to the specific country's characteristics, conditions and needs.

The Guidelines should be focused on the improvement of the immunization coverage and surveillance of VPD of migrants and other hard-to reach population groups through various approaches, such as:

- Availability of an appropriate legislative framework for effective prevention and response to communicable diseases, included into the national public health law. The health prevention should be detached from immigration policy and the necessary measures should be undertaken to ensure that access to immunization of undocumented migrants is uniformly implemented by the national and local authorities. The medical confidentiality should guarantee that at least children up to 18 years of age can access the immunization services irrespectively of the migration status of their families.
- Political agreement for mobilization of alternative resources needed for additional incentives and combined multi-sectoral efforts for a common and coordinated national, sub-national and at local level approach to strengthen the immunization programme at place.
- National team's activities: planning, discussion and resource mobilization; involvement of the sub-national and local levels; partnership (important regional and national partners, involvement of the NGOs); taking every opportunity to advice on vaccination; vaccination programme for immigrants to be implement with short time of their arrival.
- Active involvement of minority/marginalised groups/associations (e.g. co-coordinators of medical care for Roma/Sinti communities) to address hard-to-reach populations; to ensure equal opportunities and access to health care and free vaccination for all migrants (regardless of residential status) and to address the language barrier.
- Research on public perception towards vaccination and on social factors influencing vaccination coverage as well reasons for non-vaccination.
- Raising the awareness of the general population and health care workers about the existing problems in the field of migrant's immunizations and about the recognized need and right of every child to be protected against vaccine-preventable diseases; establishment of a framework for advocacy and communication at all country levels to raise awareness and join forces to mobilize resources for high immunization coverage of the general population and of the migrant population. Elaboration of a comprehensive communication strategy and further training of advocates in the field of immunization.
- Coordination at all levels (local, regional, central, European – WHO, ECDC) in case of significant decrease of the immunization coverage, that could lead to disease outbreaks and increased risk for all non-immunized individuals.

- Establishment of a network of experts on public health and migration as a basis for sharing of information on policies, successful vaccination strategies and best practices and for developing adequate actions that protect migrant's health from communicable diseases; establishment of mechanisms for routine inter-country exchange of knowledge and experiences regarding immunization of the vulnerable population, including exchange of experts in the field; regular meetings on vaccination policy in order to enhance cooperation and to share information.
- Strengthening VPD surveillance (staff, education, laboratory capacity, outbreak investigations, and monitoring and evaluation systems). Appropriate outbreak investigations can help to define susceptible risk groups such as hard-to reach-communities and immigrants, needing special attention, to identify the reasons for non-vaccination and to inform decision makers.
- Development of a national vaccination registers (information system for case-based data including vaccines given, batch numbers, dates of vaccination).
- Continuous stakeholder seminars, bringing together the concerned population, healthcare providers and authorities as a part of iterative consultations and meetings on vaccination policy in order to enhance cooperation and sharing of information on the best ways to increase/maintain the vaccination coverage.
- The public health services with its wide range of technical and organizational efficiency can play a key role, especially in the municipal sector, for an effective organization of immunizations for those who have difficulties in gaining access to the system, as well as for developing municipal networks, cooperating with a maximum number of medical service providers, organizations, and regarding specific migrant lifestyles.
- Methods and arrangements should make use of already existing resources of the health care system, but in some cases the acceptance of immunizations could be improved by direct cooperation with migrant communities and the organization of a flexible and economic complementary system, adapted to the needs of not optimally integrated immigrant populations and small ethnic groups (migrant or not).

7. Monitoring and evaluation

The National programme for immunization and surveillance of VPD in migrants and other hard-to-reach population groups in all countries should be constantly monitored and evaluated at the central and regional levels in terms of the quality of activities and outcomes (output indicators, both for quantitative and qualitative aspects):

- Compliance with the scheduled activities;
- Achievement of the stated indicators, e.g. vaccine coverage in the general population and in migrant populations, number of experts involved in the implementation of the immunisation programme, number of new and updated regulations regarding VPD prevention and surveillance, VPD incidence, number of VPD outbreaks and other approved by the national health authorities specific for each country indicators for evaluation of the immunisation coverage and the quality of the VPD surveillance. Regarding the diseases, subject of WHO programmes for disease eradication or elimination should be implemented universal indicators formulated by the WHO.

References

1. Afek LB. A health referral system for migrants. Health Serv Rep. 1973 January; 88(1): 31–33. PMCID: PMC1616057
2. Aubarell G. and Aragall X. Immigration and the Euro-Mediterranean Area: Keys to Policy and Trends. EuroMeSCopaper. 47, September 2005
3. Access to health care for undocumented migrants in Europe. Editorial. The Lancet, Vol 370 December 22/29, 2007 www.thelancet.com
4. Bratislava Declaration on health, human rights and migration, 23 NOVEMBER 2007, 8th Conference Of European Health Ministers People on the Move: Human Rights and Challenges for Health Care Systems, Bratislava, 22-23 November 2007
5. Buron A, Cots F, Garcia O, Vall O, Castells V: Hospital emergency department utilisation rates among the immigrant population in Barcelona, Spain. BMC Health Services Research 2008, 8:51
6. Coker R, Atun R, McKee M. Health Systems and the Challenge of Communicable Diseases. Experiences from Europe and Latin America. European Observatory on Health Systems and Policies Series. 2008, World Health Organization 2008 on behalf of the European Observatory on Health Systems and Policies. Open University Press, 297.
7. Connor A, Rainer LP, Simcox JB, Thomisee K. Increasing the delivery of health care services to migrant farm worker families through a community partnership model. Public Health Nurs. 2007 Jul-Aug;24(4):355-60.
8. Convention on the Elimination of All Forms of Discrimination Against Women. G.A. Res. 34/180, 34. U.N. GAOR Supp. No.46 at 193. U.N. Doc. A/34/46 1981.
9. Convention on the Rights of the Child. G.A. Res. 44/25, Annex. 44 U.N. GAOR Supp. No. 49 at 167. U.N. Doc. A/44/49 1989.)
10. Council Conclusions on Health and Migration in the EU, 5 November 2007
11. Department of Economic and Social Affairs. International Migration Report 2002. *http://www.un.org/esa/population/ publications/ittmig2002/WEB_migration_wallchart.xls*
12. Durieux-Paillard S, Figueras G, Tuosto-Aeschlimann R, Rollier V, Maso P, Stalder H. Précarité et accès aux soins: à Genève l'hôpital sort de ses murs. Med Hyg 1999, 57:1825-1829.
13. Filia A, Curtale F, Kreidl P, Morosetti G, Nicoletti L, Perrelli F, Mantovani J, Campus D, Rossi G, Sanna MC, Zanetti A, Magurano F, Fortuna C, Iannazzo S, Pompa MG, Ciofi Degli Atti ML. Cluster of measles cases in the Roma/Sinti population, Italy, June-September 2006. Euro Surveill. 2006;11(41):pii=3062. Available online: http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=3062
14. García-Comas L. Measles outbreak in the region of Madrid, Spain, 2006. Euro Surveill 2006;11(3):E060330.3. *(http://www.eurosurveillance.org/ew/2006/060330.asp#3)*
15. Georgakopoulou T, Grylli C, Kalamara E, Katerelos P, Spala G, Panagiotopoulos T. Current measles outbreak in Greece. Euro Surveill 2006;11(2):E060223.2. *(http://www.eurosurveillance.org/ew/2006/060223.asp#2)*
16. Ghent A. Overcoming migrants' barriers to health. Bulletin of the World Health Organization, August 2008, 86 (8), 583-584
17. Health of migrants. Sixty-first World Health Assembly resolution, EB123/2, 26 May 2008
18. Hjern A, Haglund B, Persson G, Rosen M: Is there equity in access to health services for ethnic minorities in Sweden? European Journal of Public Health 2001, 11(2):147-52
19. International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families. G.A. Res. 45/158, Annex. 45 U.N. GAOR Supp. No. 49(A) at 262. U.N. Doc. A/45/49 1990.
20. International Covenant on Economic, Social and Cultural Rights. G.A. Res. 2200A (XXI). 21 U.N. GAOR Supp. No. 16 at 49. U.N. Doc. A/6316. 993 U.N.T.S. 3 1966].
21. International Organization for Migration: Internal migration and development: a global perspective. 2005.
22. Kojouharova M, Zuber PLF, Gyurova S, Fiore L, Buttinelli G, Kunchev A, Vladimirova N, Korsun N, Filipova R, Boneva R, Gavrilin E, Deshpande J, Oblapenko G, Wassilak S. Importation and circulation of poliovirus in Bulgaria in 2001, Bulletin World Health Organization, 2003, volume 81, 7, 476-481
23. Kristiansen M, Mygind A, Krasnik A: Health effects of migrants. Dan Med Bull 2007, 54(1):46-7
24. Maffla C. Health in the age of migration: migration and health in the EU. Community Pract. 2008 Aug;81(8):32-5.
25. Marinova L, Kojouharova M, Mihneva Z. An ongoing measles outbreak in Bulgaria, 2009. Euro Surveill. 2009;14(26):pii=19259. Available online: *http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19259*
26. Marinova L, Muscat M, Mihneva Z, Kojouharova M. An update on an ongoing measles outbreak in Bulgaria, April-November 2009. Euro Surveill. 2009;14(50):pii=19442. Available online: *http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19442*
27. Martin R, Deshevoi S, Buddha N, Jankovic D. Approaching measles and rubella elimination in the European Region – need to sustain the gains. Euro Surveill. 2009;14(50):pii=19449. Available online: *http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19449*

28. Meeting of the Strategic Advisory Group of Experts on immunization, October 2009 – conclusions and recommendations. Weekly epidemiological record, 2009, 84, No 50, 517–532
29. Migration in the Mediterranean region: causes, consequences and challenges, 100 GSM 09 E rev 1, NATO Parliamentary Assembly, 2009
30. Mladovsky Ph. Migration and health in EU health systems. Euro Observer The Health Policy Bulletin of the European Observatory on Health Systems and Policies, Winter 2007, Volume 9, Number 4
31. Nielsen SS, Krasnik A and Rosano A. Registry data for cross-country comparisons of migrants' healthcare utilization in the EU: a survey study of availability and content. BMC Health Services Research 2009, 9:210 doi:10.1186/1472-6963-9-210
32. Norredam M, Krasnik A, Moller S, Keiding N, Michelsen JJ, Nielsen AS: Emergency room utilization in Copenhagen: a comparison of immigrant groups and Danish-born residents. Scandinavian Journal of Public Health 2004, 32(1):53-9
33. Pollard AJ, Savulescu J. Eligibility of overseas visitors and people of uncertain residential status for NHS treatment. BMJ 2004;329:346–9)
34. Recommendation Rec(2006)10 on better access to health care for Roma and Travellers in Europe
35. Recommendation Rec(2006)11 on trans-border mobility of health professionals and its implications for the functioning of health care systems
36. Recommendation Rec(2006)18 on health services in a multicultural society
37. Reijneveld S, Verheij R, Van L, De D. Contacts of general practitioners with illegal immigrants. Scand J Public Health 2001;29(4): 308–13., 7. Torres A, Sanz B. Health care provision for illegal immigrants: should public health be concerned?. J Epidemiol Commun Health 2000;54:478–9).
38. Reijneveld SA. Reported health, lifestyles, and use of health care of first generation immigrants in The Netherlands: do socioeconomic factors explain their adverse position?. J Epidemiol Commun Health 1998;52(5):298–304
39. Romero-Ortuno R. Access to health care for illegal immigrants in the EU: should we be concerned?. Eur J Health Law 2004;11:245–72.
40. Schelling E, Daoud S, Daugla DM et al. Morbidity and nutrition patterns of three nomadic pastoralist communities of Chad. Acta Tropica, 2005, 95, 16–25)
41. Schelling E, Wyss K, Bechir M et al. Synergy between public health and veterinary services to deliver human and animal health interventions in rural low income settings. British Medical Journal, 2005, 331, 1264–1267.
42. Seguliev Z, Duric P, Petrovic V, Stefanovic S, Cosic G, Hrnjakovic IC, Milosevic V, Karagiannis I, Boxall N, Jankovic D. Current measles outbreak in Serbia: a preliminary report. Euro Surveill. 2007;12(11):pii=3155. Available on line: *http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=3155*
43. Stronks K, Ravelli AC, Reijneveld SA. Immigrants in the Netherlands: equal access for equal needs? J Epidemiol Commun Health 2001;55(10): 701–7
44. Tanner M. Strengthening district health systems. Bulletin of the World Health Organization, 2005, 83, 403–404)
45. Torres-Cantero AM, Miguel AG, Gallardo C, Ippolito S. Health care provision for illegal migrants: may health policy make a difference? European Journal of Public Health, Vol. 17, No. 5, 483–485, doi:10.1093/eurpub/ckl266 Advance Access published on January 5, 2007
46. Uiters E, Devillé W, Foets M, Groenewegen P: Use of health care services by ethnic minorities in the Netherlands: do patterns differ? European Journal of Public Health 2006, 16(4):388-93
47. Virgilio A., Defilippi L., Moschochoritis K., Ravinetto R.. Right to health care for vulnerable migrants. The Lancet, 2007, Volume 370, 9590, 827-828.
48. Vlieghe E. The supply of health care for nomads. Trop Med Int Health. 2000 Feb;5(2):156.
49. Watson R. Migrants in Europe are losing out on care they are entitled to. BMJ 2009;339:b3895, doi: 10.1136/bmj.b3895 (Published 24 September 2009)
50. Wiltenburg TK, and Amon JJ. Within but without: human rights and access to HIV prevention and treatment for internal migrants. Globalization and Health 2009, 5:17 doi:10.1186/1744-8603-5-17
51. Wolff H, Durieux-Paillard S, Meynard A, Stalder H: Précarité et accès aux soins:"Mieux vaut être riche et en bonne santé que pauvre et malade...". Med Hyg 2000, 58:1927-1930.
52. Wolff H, Epiney M, Lourenco AP, Costanza MC, Delieutraz-Marchand J, Andreoli N, Dubuisson JB, Gaspoz JM, Irion O. Undocumented migrants lack access to pregnancy care and prevention. BMC Public Health 2008, 8:93 doi:10.1186/1471-2458-8-93, available from*: http://www.biomedcentral.com/1471-2458/8/93*
53. Wolff H, Stalder H, Epiney M, et al. Health care and illegality: a survey of undocumented pregnant immigrants in Geneva. Soc Sci Med 2005;60:2149–54.
54. Wolffers I, Verghis Sh, Marin M Migration, human rights, and health. The Lancet, Vol 362, December 13, 2003, 2019-2020 *www.thelancet.com*
55. Wolter H, Stark S. [Complementary system of health care in cooperation with migrant communities-requirements for successful integration in health care][Article in German], Gesundheitswesen. 2009 Jun;71(6):358-62. Epub 2009 Mar 13.
56. Zinsstag J., Ould Taleb M.and Craig P. S. Health of nomadic pastoralists: new approaches towards equity effectiveness. Tropical Medicine and International Health, 2006, volume 11, 5, 565–56, doi:10.1111/j.1365-3156.2006.01615.x

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