#67 Italy-Country Coordinating Centre

**Administrative centre**
Laboratorio di Epidemiologia e Biostatistica
Istituto Superiore di Sanita
Viale Regina Elena, 299
00161 Rome, Italy
T +39 06 49902985; F +39 06 49387069

**Description**
The Italian Coordinating Centre is based in an institute whose involvement in cardiovascular epidemiology goes back to the Seven Countries Study. At the start of MONICA it was active through its then Principal Investigator, Alessandro Menotti, in setting up three MONICACollaborating Centres in Italy, although that nearest to Rome, Italy-Area Latina lost its funding early and withdrew, see #84 Former MONICA Populations. Alessandro Menotti was also a member of the first MONICA Steering Committee and contributed to the development of the MONICA protocol. Recently, the Coordinating Centre’s involvement in MONICA has been less apparent than that of its French equivalent, although its national role in coordinating cardiovascular epidemiology has continued—as demonstrated by its involvement in Italian collaborative publications.

**Key personnel**

**Publications**
See publications of Italian MCCs.

**Simona Giampaoli**

- crucial when MONICA began
- more subtle role at the finish
among the lowest MONICA coronary-event rates
decreasing mortality and event rates and case fatality
studies of socioeconomic differences
gene-environment interaction from nested case-control studies

MCC 57: Area Brianza
Single Reporting Unit.

Administrative centre
Research Centre for Chronic Degenerative Diseases, Department of Internal Medicine, Department of Prevention and Health Biotechnology, University of Milan-Bicocca, Via Cadore 48, 20052 Monza, Italy T: +39 039 233 3098; F: +39 039 365 378

Population
Residents, aged 25–64, of 73 municipalities in Brianza, Lombardy, northern Italy, between Milan and the Swiss border. An urban industrialized population with among the highest average incomes in Italy. It experienced some economic recession in the early 1990s. The total population in 1991 was 850 000.

Funding

Dates

Additional description
Coronary mortality and event rates for men and women were in the bottom fifth of the MONICA distribution. Declining event rates and case fatality contributed to falling mortality rates but unequally in the two sexes. Attack rates were stable over time if milder events were included, which suggests diminishing severity of disease. Smoking decreased in men, but not in women; blood pressure decreased in both sexes; total cholesterol and BMI (body mass index) increased between the middle and final surveys. Social disparities have been observed in risk factors and in the trends in 28-day case fatality, presumably from pre-hospital factors, as hospital treatment is not biased.

Local research interests

Continuing activity
Coronary and stroke-event registration intermittently. Population surveys have ceased. Cohort studies continue using stored material for nested case-control studies.

Key personnel

Selected publications

Marco Ferrario, Giancarlo Cesana
MCC 32: MONICA-Friuli

Five Reporting Units, merged into one RUA.

Administrative centre
Centre for Cardiovascular Disease Prevention, A.S.S.4 “Medio Friuli”, Agenzia Regionale della Sanità, Udine, 33100, Italy
E-mail: diego.vanuzzo@ars.sanita.fvg.it
Tel: +39 432 552 456; F +39 432 552 452

Population
Residents aged 25–64 of three provinces of the Friuli-Venezia Giulia region of north-east Italy, bordering Austria and Slovenia. Mountainous near the Alps in the north and flat near the Adriatic sea in the south, the area has a mixed economy and a total population in 1991 of 940,000, including many elderly people. There are three urban centres. Udine with 100,000 people is the largest. Living standards were poor, but are now fairly high. Cardiovascular disease rates are high for Italy. The response rate to surveys was over 75%.

Funding
Regional Health Administration, CVD Registry

Dates

Additional description
Each resident has a unique personal identifier used to track cardiovascular events and deaths through computerized record linkage. Results of the population risk-factor surveys informed regional policies on prevention. Mortality rates have declined in the last decade.

Local research interests
The WHO-CCCP Martignacco cohort, including haemostatic and homocysteine studies. WHO-CINDI Associate Member. Cardiovascular disease prevention. Event registration. Publication of a disease and risk-factor atlas.

Continuing activity
Follow-up of MONICA survey cohorts with participation in the MORGAM and CUORE projects.

Developing a risk chart of the Italian population. National risk-factor surveillance system (Diego Vanuzzo, Co-Director), using the MONICA protocol, to plot risk-factor distribution and control across Italy. (Initial results can be found at: www.iss.it.)

Key personnel

Selected publications

Diego Vanuzzo, Lorenza Pilotto
The main results of Kaunas-MONICA have been surveys, and it also initiated stroke registration. The Kaunas-MONICA study was the first to include both sexes in risk factor cohort study. The Kaunas-MONICA study was conducted by WHO. The latter study included only Rotterdam Intervention study (KRIS) coordinated by WHO. The former study included only myocardial infarction register and the Kaunas-stroke register. Kaunas, event registration and population epidemiological studies of heart disease in Kaunas are similar to cardiovascular diseases in Kaunas are similar to those for Lithuania as a whole.

Local research interests

Continuing activity

Key personnel

Selected publications
#71 New Zealand-Auckland (NEZ-AUC, NZ)

- high coronary-event rates shown to be declining
- improving prognosis in 28-day coronary-event survivors
- decline in blood pressure 1982 to 1993
- studies of disease rates in those of European, Maori and Pacific ethnicity

**MCC 33: Auckland**

**Single Reporting Unit.**

**Administrative centre**
Department of Community Health, University of Auckland.
Private Bag 92019, Auckland, New Zealand
T +64 9 373 7599 x6335; F +64 9 373 7503

**Population**
Residents in the Auckland area aged 35–64. Auckland, with over a quarter of its population, is the largest city in New Zealand, situated towards the north of the North Island on an isthmus with harbours on both east and west coasts. Maori, indigenous to New Zealand, are more likely to live in Auckland than any other city. It is called the Pacific Capital because it has the highest density of Pacific Islanders in the world. The total population in 1991 was 951,000.

**Funding**

**Dates**

**Additional description**
In 1981 a one-year register of coronary and stroke patients known as ARCOS (Auckland Region Coronary and Stroke Study) was established. This formed the background to the subsequent MONICA study. Auckland participated through its stroke investigator, Ruth Bonita, in MONICA’s stroke component, but not through submitting data. Strokes were registered again in 1991 and a 16-year follow-up of the 1981 cases has been completed. Population surveys excluded Maoris as the sampling frame was the general electoral roll and not the Maori only roll. Maori event rates were derived using census data.

**Local research interests**

**Continuing activity**
Coronary-event registration has ceased. A further stroke register is planned, as is a fourth subregional MONICA study. Auckland participated in subsequent MONICA study. Auckland participated through its stroke investigator, Ruth Bonita, in MONICA’s stroke component, but not through submitting data. Strokes were registered again in 1991 and a 16-year follow-up of the 1981 cases has been completed. Population surveys excluded Maoris as the sampling frame was the general electoral roll and not the Maori only roll. Maori event rates were derived using census data.

**Selected publications**

**Alistair Stewart**

Selected publications
Before 1992: Dept of Biochemical Diagnostics

MONICA POPULATIONS

Survey data were used locally and for the Poland cardiovascular disease prevention. Additional MONICA Warsaw. The Project also promoted and health care with that of Warsaw (see POL-MONICA Krakow to contrast its rural population Tarnobrzeg Voivodship was chosen for POL-MONICA Krakow Project. V. Atypical event registration has ceased. Cohort studies until 1998. Population survey in 2001.

Key personnel


Selected publications


Andrzej Pająk, Roman Topór-Mądry

#72 Poland-Tarnobrzeg Voivodship (POL-TAR, PT)

MCC 35: POL-MONICA Kraków

Two Reporting Units merged into one RUA.

Administrative centre

Dept of Epidemiology and Population Studies, Institute of Public Health, Collegium Medicum, Jagiellonian University in Kraków.
St. Grzegórzecka, 31-501 Kraków, Poland
T +48 12 4241360; F +48 12 4217447
Before 1992: Dept of Biochemical Diagnostics and Inpatient Clinic for Metabolic Diseases, Nicolaus Copernicus Medical Academy in Kraków.

Population

Residents aged 25–64 of the south-eastern rural province of Tarnobrzeg Voivodship. There is a steel industry in the south-east, while sulphur industries (now diminished) dominated the centre and north-west. Miners and industrial workers often work smallholdings for agricultural produce as they live in villages and small towns. The total population in 1991 was 609 000.

Funding

1. Ministry of Health. 2. National Committee for Scientific Research contracts: 4 1474 91 1, 4 POSD 036 08.

Dates


Additional description

Tarnobrzeg Voivodship was chosen for POL-MONICA Kraków to contrast its rural population and health care with that of Warsaw (see POL-MONICA Warsaw). The Project also promoted cardiovascular disease prevention. Additional survey data were used locally and for the Poland and US Collaborative Study on Cardiopulmonary Epidemiology. MONICA monitored risk factors and medical care and trends in coronary heart disease mortality (which increased up to, and decreased after, 1992) during major political, economic and social changes.

Local research interests


Continuing activity


Jan Sznajd (deceased)

Baranow

Andrzej Pająk, Roman Topór-Mądry
#73 Poland-Warsaw (POL-WAR, PW)

MCC 36: POL-MONICA-Warsaw
Two Reporting Units merged as one Reporting Unit Aggregate (RIUA).

Administrative centre
Department of CVD Epidemiology and Prevention, Stefan Cardinal Wyszyński National Institute of Cardiology, 04-628 Warszawa, Alpejska 42, Poland T +48 22 815 65 56; F +48 22 613 38 07

Population
Residents aged 25–64 of the two districts of the capital city of Warsaw east of the Vistula. These are partly industrial and partly residential and home to hospitals, banks, governmental offices and universities. Poland’s changing economy has affected the living conditions and behaviour of the population. In 1989/90 the free market produced mixed benefits: loss of State social support, high inflation, high unemployment, but greater access to food products previously found only in the western market. Risk-factor profiles have changed. Cardiovascular disease mortality, previously rising, began to decrease from 1991. The total population in 1991 was 494 000.

Funding

Dates

Additional description
The population surveys included additional factors, including psychosocial factors, nutrition and drug use. Survey, coronary and stroke-registration results were published in data books and used for the Poland-US Collaborative Study.

Local research interests

Continuing activity

Key personnel

Selected publications

Stefan Rywik
#74 Russia-Moscow (RUS-MOS, RM)

**Russia-Moscow Control (RUS-MOC, RC)**
**Russia-Moscow Intervention (RUS-MOI, RI)**

- results from Moscow during a decade of change
- case fatality for coronary events increased
- fall in blood pressure, cholesterol and body mass index (BMI)
- Moscow districts divided into two RUs
- populations differed for risk-factor and event monitoring

**MCC 46: Moscow**
Three Reporting Units amalgamated into either two (Russia-Moscow Control, and Russia-Moscow Intervention) or one Reporting Unit Aggregate (Russia-Moscow). In MONICA collaborative analyses RUS-MOS contains all three Reporting Units for coronary care. RUS-MOC covers only the Octyabrsky district. RUS-MOI has two variants: it included the Cheremushkinsky district for coronary events—MOIb, but for risk-factor surveys and stroke covered only the Leninsky district—MOIa.

**Administrative centre**
State Research Centre for Preventive Medicine, 10 Petrovitsky Lane, Moscow 101990, Russian Federation
T/F +7 095 925 45 44
E-mail: organov@online.ru, shalnova@dol.ru

**Population**
Residents aged 25–64 of the Octyabrsky (RUS-MOC), Leninsky and Cheremushkinsky (RUS-MOI) districts of Moscow. Lifestyle and risk-factor surveys and stroke covered only the Leninsky district—MOIa.

**Funding**
Budget of the Russian Federation.

**Dates**

**Additional description**
In two districts, Leninsky and Cheremushkinsky, mass redevelopment occurred during the period 1984–1987; many families moved out of this area into new homes elsewhere. This changed the demographic profile of these districts, especially of the smaller Leninsky.

**Local Research Interests**
Monitoring of main risk factors and mortality in the frame of possible prevention activities at local level.

**Continuing activity**
Mortality follow-up under development. In 2000–2001 ‘MONICA-4’ took place in the Octyabrsky district, including 424 males and 386 females aged 25–64.

**Key personnel**

**Selected publications**

This page was drafted during a break in communication between Moscow and MONICA, but later modified and approved.

Vladislav Molchanov, Hugh Tunstall-Pedoe, Svetlana Shalnova
Russia-Novosibirsk Control (RUS-NOC, RO)
Russia-Novosibirsk Intervention (RUS-NOI, RT)

MCC 47: Siberian MONICA

Three Reporting Units. RUS-NOI covered only the Octyabrsky district. RUS-NOC included both the Kirovsky and Leninsky districts for coronary events and stroke (NOCb), and the baseline survey. For the middle and final risk-factor surveys it covered the Kirovsky district alone—NOCa. All three Reporting Units (districts) are grouped together in RUS-NOV for analyses of coronary care and for Monograph map graphics.

Administrative centre
Institute of Internal Medicine, Siberian Branch of Russian Academy of Medical Science, Vladimirrovsky spusk 2a, Novosibirsk 630003, Russian Federation
T +7 38 3229 2048; F +7 38 3222 2821

Population
Residents aged 25–64 of the city of Novosibirsk, central West Siberia, the industrial and scientific centre of Siberia. Coronary heart disease and stroke morbidity and mortality rates are high in men and women. The total population in 1991 was 482 000 (Novosibirsk Control, NOCb) and 160 000 (Novosibirsk Intervention).

Funding
Russian Academy of Medical Science.

Dates
Technical problems affected collaborative analysis of some of the material collected. In collaborative MONICA trend analyses (as distinct from local use) the following dates apply:


Additional description
Population surveys followed the MONICA protocol but with some additional items added. The high cardiovascular mortality in Novosibirsk increased dramatically at the beginning of the 1990s but declined modestly after 1994.

Local research interests

Continuing activity
Coronary-event registration continues. Stroke-event registration continues in two districts. A repeat population survey of the 45–64 age group was conducted in 1999/2000. Cohort studies continue.

Key personnel
Prof Yuri Nikitin. Other staff: Sofia Malyutina, Valery Gafarov, Valery Feigin, Galina Simonova, Tatyana Vinogradova.

Selected publications
MONICA POPULATIONS

#76 Spain-Catalonia (SPA-CAT, SP)

Additional description
Established to evaluate the CRONICAT Programme for the community control of chronic diseases, MONICA-Catalonia originally planned to monitor two areas. However a change of plan led to one single study area. Population surveys included 8990 men and women and additional items. MONICA-Catalonia confirmed the low incidence of coronary heart disease shown in mortality statistics, achieved good quality scores, and is the model for other surveys and registers in Spain. Outside the former 'Eastern bloc' centres of Asia, central and eastern Europe, Catalonia was the only MONICA population to see coronary-event rates increasing—but from a very low level.

Local research interests

Continuing activity
Registration continued until 1998. Population surveys have ceased. Cohort studies are ongoing.

Key Personnel

Selected publications
Comprehensive list available on request

7. Sans S, Puigdefàbregas A, Paluzie G. Acute myocardial infarction is increasing in


Susana Sans
Ignacio Balaguer-Vintró

MCC 39: MONICA-Catalonia
Two areas now counted as one Reporting Unit.

Administrative centre
Programa CRONICAT,
Hospital de la Santa Creu i Sant Pau,
P. Claret 167, Barcelona 08025, Spain
T +34 93 456 3612; F +34 93 433 1572

Population
Residents aged 25–74 of five counties in the metropolitan area of Barcelona, extending from the northern limit of the city towards the Pyrenees. One of the most industrialized areas in Spain, with a minor agricultural sector, it has several hospitals and a university providing a comprehensive health service. Half the population comes from other Spanish regions. High unemployment rates improved during the study period as did socioeconomic development. Response rates for surveys were high. Cardiovascular mortality rates were similar to the Spanish average. The total population in 1991 was 1 119 000.

Funding
1. Institute of Health Studies, Department of Health and Social Security, Generalitat of Catalonia.
3. Hospital de la Santa Creu i Sant Pau.

Dates

- the only MONICA population in Spain
- Mediterranean population, high smoking, low coronary rates but increasing
- research on coronary disease in women and the elderly
- obesity, diabetes, nutrition, psychosocial factors
- hosted 7th Council of Principal Investigators, August 1992

Susana Sans
Ignacio Balaguer-Vintró

Barcelona


Susana Sans
Ignacio Balaguer-Vintró

Barcelona
Gothenburg population has contributed much to cardiovascular epidemiology
- low all-causes mortality, coronary and stroke rates
- changes in event rates in the mid-range
- good improvements in risk factors
- results contrast with those from Northern Sweden

MCC 40:GOT-MONICA
Single Reporting Unit.

Administrative centre
Section of Preventive Cardiology, Institute of Cardiovascular Diseases, Göteborg University.
Drakegatan 6, SE–41250 Göteborg, Sweden
T +46 31 703 1884; F +46 31 703 1890
The base for coronary and stroke registers and for population surveys was Sahlgrenska University Hospital, Göteborg.

Population
Residents aged 25–64 of the city of Göteborg (Gothenburg), in the south-west of Sweden. It is Sweden’s largest port. Industries include car manufacturing, space and information technology and several universities. Immigrants make up 17% of the population. They suffer high unemployment rates. In addition, there are social and health-related differences within the city. The total population in 1991 was 433 000.

Funding
1. Swedish Medical Research Council. 2. Swedish Heart and Lung Foundation. 3. The Inga-Britt and Arne Lundberg Foundation.

Dates

Additional description
Screening of random population samples has been carried out since 1963 on 50-year old men born in 1913, 1923, 1933 and 1943; on men aged 47–55 born in 1915–1925 (excluding 1923). Samples were examined in 1970–1973, 1974–1977 and 1980. Screening was also carried out on women aged 35–64 in 1980 and on women aged 55–84 in 1997. Serum cholesterol, smoking and blood pressure as well as coronary-event rates and mortality have all declined over this period.

Continuing activity
Population screening continues, but registration of events via hospital records is now carried out nationally.

Key personnel

Selected publications

Lars Wilhelmsen

Anna Rosengren

George Lappas

Lars Wilhelmsen

Lars Wilhelmsen

Lars Wilhelmsen
MONICA SECRETARIAT, KALIX HOSPITAL, SE–952 82 KALIX, SWEDEN

MONICA POPULATIONS

#78 Sweden-Northern Sweden (SWE-NSW, SN)

Additional description

Excess cholesterol levels fell with the adoption of a pasta-type food culture. Smoking rates extremely low in men but many use smokeless tobacco. The huge decline in male coronary deaths resulted both from declining case fatality and event rates. Coronary-event rates in women and stroke rates were stable. MONICA helped build a biobank of frozen material from 85,000 people with record-linkage for events.

Local research interests


Continuing activity

 Coronary and stroke event registration continue with extended coronary age-group. Population survey in 1999 included re-examination of the 1986–94 survey subjects. Use of MONICA data in the GENOS Project (Gene-Environment Interactions in Northern Sweden) and MORGAM collaboration.

Key personnel


Selected publications


MCC 60: Northern Sweden

Two Reporting Units merged into one Reporting Unit Aggregate (RU).

Administrative centres

MONICA Secretariat, Department of Medicine, University Hospital, SE-901 85 Umea, Sweden and MONICA Secretariat, Kalix Hospital, SE–952 82 Kalix, Sweden

T +46 90 785 2518 or +46 92 31 3133; F +46 90 13 7633

E-mail: Kjell.Asplund@medicin.umu.se and torbjorn.messner@nl.se

Population

Residents aged 25–64 (for coronary events), 25–74 (for strokes and risk-factor surveys) of the Norrbotten and Vasterbotten counties in the north of Sweden. Income and employment in these counties are below average. The people are of south Scandinavian, Saamish and Finnish ethnicity. Skiing, hiking, fishing and hunting during long summer days and winter nights. There are nine acute hospitals. Participation in population surveys was high. The total population in 1991 was 518,000.

Funding


Dates

Two distinct Reporting Units merged for coronary care.

Administrative centre
Institut universitaire de médecine sociale et préventive, rue du Bugnon, 17, 1005 Lausanne, Switzerland
T +41 21 314 72 72; F +41 21 314 73 73.

Population
Residents aged 25–74 of the French-speaking cantons of Vaud and Fribourg, and the Italian-speaking canton of Ticino. They are both mixed urban and rural communities but had the lowest and highest mortality from coronary heart disease in Switzerland. Women were excluded from event-registration because projected numbers of female events were considered too low for estimating trends. The total population of Vaud-Fribourg in 1991 was 791,000, and of Ticino was 288,000.

Funding
1. Swiss National Science Foundation (grant numbers 3.856–0.83, 3.938.0.85, 32–9271.87, 32–30110.90). 2. Canton of Vaud. 3. Canton of Ticino.

Dates

Additional description
A community programme for primary prevention of coronary heart disease was launched in Ticino in 1984. The evaluation used the results of the three MONICA population surveys, with Vaud-Fribourg acting as the control comparator region. The surveys inspired opportunistic studies such as a study of the decline in blood lead as the use of unleaded petrol increased; and monitoring of physical activity over a one-week period using a pedometer. MONICA serum is being used extensively as an archive of reference values for Switzerland, for example of serum 25-Hydroxyvitamin D, serum lipoprotein(a), and antibodies to the herpes simplex virus.

Local research interests
Association between blood lipids and obesity. Epidemiological transition (comparison with the Seychelles Heart Study). Diffusion of health technology in coronary care.

Continuing activity
All activities have ceased but coronary-event registration using a coronary-care survey is planned for a one-year period in the near future.

Key personnel

Selected publications

Vincent Wietlisbach
Local research interests

Local studies linked to MONICA included physical activity, diet and homocysteinaemia. Belfast joined up with the three French MONICA centres in the ECTIM Study, a case-control study exploring the genetic basis of myocardial infarction (leader: François Cambien), and the PRIME cohort study of 10 600 Northern Irish and French men (leader: Pierre Ducimetière). The Belfast PI has been active in the administration and co-ordination of research and secured European Commission funding for MONICA between 1996 and 1999 through a BIOMED 2 grant, as well as funding for the MORGAM study (see below).

Continuing activity

The MORGAM (MONICA Risk Genetics Archiving and Monograph) involves many MONICA and other centres and is coordinated from Belfast. It includes a general risk cohort, a genetic cohort, archiving the MONICA Database, and support for work on this Monograph.

Key personnel


Selected publications

United Kingdom-Glasgow (UNK-GLA, UG)

Hugh Tunstall-Pedoe, Caroline Morrison

MCC 37: Scottish MONICA
Single Reporting Unit.

Administrative centre
Cardiovascular Epidemiology Unit, Dundee University, Ninewells Hospital, Dundee DD1 9SY, Scotland, United Kingdom
T +44 1382 641 764; F +44 1382 641 095
Website: http://www.dundee.ac.uk/cardioepiunit
MONICA Quality Control Centre for Event Registration.
Registration centre was in Glasgow Royal Infirmary.

Population
Residents aged 25–64 of Glasgow city, north of the River Clyde. Built on former trade and heavy industry, Glasgow’s inner city had high levels of deprivation, chronic disease and population decline. Chosen for its exceptional coronary disease mortality in both sexes, survey response rates were below average for Scotland, and MONICA. The total population in 1991 was 392,000.

Funding
1. Chief Scientist Organization of the Scottish Office Department of Health. 2. British Heart Foundation.

Dates

Additional description
Originally Scottish MONICA planned to compare two differing populations but the loss of Edinburgh left Glasgow alone to represent Scotland and mainland Britain. The first population survey, with many items added to the MONICA protocol as the Scottish Heart Health Study, visited 25 districts across Scotland recruiting 12,000 men and women in 1984–87. Results of this study of risk factors and lifestyle led to national policies on prevention. World-record disease rates in Glasgow, now in decline, caused national embarrassment—as well as perverse pride. The Dundee Unit was home to the Rapporteur and oversaw quality control work. It was also responsible for editing two MONICA Congress supplements, and this Monograph.

Local research interests

Continuing activity
Extended ECTIM study, MORGAM (See Belfast page). Registration ceased 1996, no MONICA population surveys after 1995. Cohort studies continue.

Key personnel

Selected publications
Comprehensive list and abstracts available at: http://www.dundee.ac.uk/cardioepiunit


Hugh Tunstall-Pedoe, Caroline Morrison

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MONICA MONOGRAPH AND MULTIMEDIA SOURCEBOOK
Additional description

The Stanford Five-City Project began in 1978 with two intervention cities (Monterey and Salinas) and three controls (Modesto, San Luis Obispo, and Santa Maria). Population surveys were not conducted in Santa Maria. Community health education took place during 1980–86. Coronary and stroke events were registered to evaluate the interventions. When MONICA was proposed in 1980 the Stanford MCC participated using data from the Five-City Project. The registration procedures predated MONICA so challenging manipulations were needed to provide compatible coronary-event data—not attempted for stroke.

Local research interests
Cardiovascular disease epidemiology and prevention, cancer prevention, behavioural sciences, health communication, exercise, nutrition, lipid disorders, tobacco interventions and control, successful ageing, women’s health, social and cultural determinants of health, disease prevention in children and adolescents.

Continuing activity
Registers and population surveys have ended.

Key Personnel

Selected publications
Comprehensive list available at: http://prevention.stanford.edu/

Novi Sad is the only MONICA population in Yugoslavia. The first MONICA survey determined the levels and distribution of major risk factors, contributing to preventive work on coronary and cerebrovascular disease. In the period 1984–1990 morbidity and mortality from coronary and cerebrovascular diseases fell by about 20 percent. Since 1991, with war and economic sanctions, this beneficial trend has reversed and rates have increased continually.

Local research interests
Risk factors in children and young people. Primary prevention. Methodology of monitoring and evaluation; management.

Continuing activity
Event registration. Sample surveys, using the MONICA protocol. Preventive activities.

Key personnel

Selected publications
Some MONICA Collaborating Centres did not contribute to collaborative testing of hypotheses on trends because data received in the MONICA Data Centre were too scanty, of inadequate quality, or not received in time to do this. Much time and effort were spent over many years trying to help the MCCs that were experiencing difficulties. Eventually some were encouraged to withdraw, some failed to meet deadlines for data, some discovered major problems with their data which could not be resolved, some failed to obtain continuous funding for the local activities and others simply lost contact, failing to reply to repeated communications. Brief descriptions follow, including what data were registered in the MONICA Data Centre and used in cross-sectional analyses for data books and publications. Note that comments below on what data were used apply to data that went through the full data collection process.

Belgium-Luxembourg (BEL-LUX) MCC 14: MONICA-Bellux
Luxembourg is the south-east province of Belgium. Rural and forested its low density pop-

ulation is characterized by traditional lifestyles, low socioeconomic status, high mortality and low migration.

Pt: M Jeannet, Inter-University Association for Prevention of Cardiovascular Disease, UCL Brussels.
Problems: after several years of collaboration, data stopped coming to the Data Centre.

Germany-East Germany (GER-EGE) MCC 23: MONICA East Germany, formerly known as DDR-MONICA
This MCC began with 39 Reporting Units, but managed to survive with only 3, one of which recorded coronary care. The MCC therefore survived and contributed to MONICA. Most of its initial population Reporting Units either did not contribute or did so only to early cross-sectional papers. See #65 Germany-East Germany.

Germany-Rhein-Neckar Region (GER-RHN) MCC 25: Heidelberg
The region of Baden-Württemberg is a mixed urban and rural region. It includes the university town of Heidelberg. There is medium industry, the population enjoying high socioeconomic status and average mortality and risk-factor levels.
Pt: E Nüssel. Former Co-PI: E Östör-Lamm, Dept. of Clinical and Social Medicine, University Medical Clinic, Heidelberg.
Problems: data stopped coming to the Data Centre following the retirement of Dr Östör-Lamm.

Hungary-Budapest (HUN-BUD), Hungary-Pecs (HUN-PEC) MCC 27: HUN-MONICA
Budapest: three industrial districts of south Budapest, inhabitants living mainly in blocks of flats with a population of low and middle socioeconomic status.
Pecs: third largest town in Hungary's south-west. The population enjoys above average socioeconomic status. An industrial area dominated by mining. The region was involved in the Healthy Cities and WHO CINDI Projects.
Problems: serious problems were discovered with the quality of initial survey data, and when gaps were discovered in the coverage of coronary and stroke-event registration the combination of problems proved irreparable.

Israel-Tel Aviv (ISR-TEL) MCC 30: Israel-MONICA
Holom and Bat Jam suburbs of Tel Aviv. The population is mainly middle and lower middle-class with blue-collar workers.
Pt: D Brunner. Donolo Institute of Physiological Hygiene, University of Tel Aviv.
Problems: non-receipt of data according to MONICA protocol requirements.

Italy-Latina (ITA-LAT) MCC 31: Area Latina
Province of Latina and neighbouring health units in the region of Lazio, south of Rome. The region was malarious until the 1920s. Eighty
percent of the region is rural. Low incidence area.
PI: G Righetti, Cardiology Dept, SM Goretti Hos-
pital, Latina.
Problems: early loss of funding led to withdrawal of this population.

Japan (JPN-JPN)
MCC 58: Japan MONICA
Twenty Reporting Units (1985) scattered over Japan.
No Japanese data used in collaborative analyses.
Problems: the MCC’s attempt to adapt a large number of different local monitoring studies to the MONICA Project was not successful because of major methodological and structural differences in the study protocols. The very large number of Reporting Units gave the Principal Investigators similar problems to those in East Germany. Loss of this Asian population from MONICA was much regretted.

Malta (MLT-MLT)
MCC 52: Malta
The island of Malta, not including its neighbour Gozo.
PI: Government Chief Medical Officer. Former Co-
PIs: J Cacciottolo, J Mamo.
Population survey: 1984. No routine mortality, demographic, coronary-event, coronary care or stroke-event data used in collaborative analyses.
Problems: data stopped coming to the Data Centre following the retirement of Dr Cacciottolo.

Romania-Bucharest (ROM-BUC)
MCC 53: Bucharest
Part of Bucharest and possibly a neighbouring rural area.
PIs: C Carp, I Orha. Medical Institute, Fundeni Hos-
pital, Bucharest.
tality, demographic, coronary-event, coronary care or stroke-event data used in collaborative analyses.
Problems: non-receipt of data according to MONICA protocol requirements, poor definition of study population. Catastrophic earthquake.

United Kingdom-Edinburgh
(UNK-EDI)
MCC 38: Scottish MONICA Edinburgh
Edinburgh city, Scotland.
Population survey: 1986. No data used in col-
laborative analyses.
Problems: pilot studies showed cold pursuit of coronary cases failed to capture them all, but hot pursuit would need to be prohibitively intensive and expensive because of the rapid movement of cases through the hospitals. Survey data were sent to Helsinki from the 1986 survey but were purged when the MCC was withdrawn. Unlike the survey data from MCCs whose other prob-
lems emerged later, Edinburgh’s initial survey data were not therefore used in cross-sectional analyses.

Yugoslavia-Belgrade (YUG-BEL)
City of Belgrade.
PI: D Kozarevic. Institute of Chronic Diseases and Gerontology, Belgrade.
No data used in collaborative analyses.
Problems: after an initial pilot period the MCC’s parent body was re-organized and decided not to join MONICA.

Reference
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