COUNCIL OF EUROPE COMMITTEE OF MINISTERS

RECOMMENDATION No. R (84) 20

OF THE COMMITTEE OF MINISTERS TO MEMBER STATES ON THE PREVENTION OF HOSPITAL INFECTIONS

(Adopted by the Committee of Ministers on 25 October 1984 at the 376th meeting of the Ministers' Deputies)

The Committee of Ministers, under the terms of Article 15.b of the Statute of the Council of Europe,

Considering that the aim of the Council of Europe is to achieve a greater unity between its members and this aim can be furthered by the adoption of common measures in the health field;

Calling to mind Resolution (72) 31 on Hospital Hygiene whose technical principles have lost none of their force ;

Recalling Resolutions (68) 26 on the Protection of Foodstuffs at their Preparation, Handling and Distribution Stages, (76) 7 on Different Types of Hospitals and Hospital Groups, and Recommendation No. R (80) 15 concerning a Better Distribution of Medical Care Inside and Outside Hospitals;

Aware on the one hand of the need to determine rapidly the source, nature and mode of transmission of hospital infections so that the required steps may be taken promptly and considering, on the other hand, that to this end the adoption of a common definition of such infections and common procedures for reporting them is to be encouraged;

Stressing the value of establishing effective and efficient co-operation between clinical medicine, microbiology, hygiene and pharmaceutical departments, at the same time not overlooking the administrative departments and technical services ;

Believing in the importance of setting up and developing Infection Control Committees, and in particular infection control teams, in hospitals;

Recalling the role of the Infection Control Committee in the selection of antimicrobial agents, with an eye to confining antibiotic preventive measures to cases where they are strictly necessary;

Mindful of the importance of protecting the health of hospital personnel and aware of the professional risks to which they are exposed and the possible consequences for patients ;

Realising that blood transfusions and the use of plasma derivatives may be responsible for transmitting viruses, bacteria and parasites;

Calling to mind the hygienic measures to guarantee the cleanliness of water, air and, in particular, sanitary installations in the hospitals;

Believing in the need to regulate the use of cleaning materials, disinfectants and antiseptics on the basis of proper scientific data supplied by the competent national bodies and/or of a list approved by the Infection Control Committee ; Pointing to the role which the Infection Control Committee should play in the matter of hospital building and structural changes in hospitals and considering the advantages of introducing pre-admission and pre-discharge departments or else of providing hostel accommodation as a means of freeing specialised beds;

Considering the importance of a coherent policy for waste disposal designed to avoid harmful effects on the hygiene of the hospital and the environment;

Emphasising once again the importance of effective control of harmful animals and insects in hospital precincts ;

Considering the need for all hospital personnel—whether engaged in caring for patients or not—to be properly trained;

Convinced that in addition to the suffering caused to patients and the risks to which they are exposed, hospital infections have serious consequences which impede recovery and burden the community with considerable extra direct and indirect expenditure which needs to be kept in check ;

Calling to mind the results of the pilot experiments carried out in Council of Europe member states,

Recommends that the governments of member states, in pursuing their efforts to give full effect to Resolution (72) 31, promote by all means the application of the strategy described in the appendix to this recommendation and work together within the Council of Europe to give support to member states which request it, including the organisation of periodical courses in hospital hygiene for all relevant categories of staff.

Appendix to Recommendation No. R (84) 20

STRATEGY FOR THE PREVENTION OF HOSPITAL INFECTIONS

Definitions

a. Hospital infection : any illness contracted in hospital, due to clinically and/or microbiologically¹ recognisable micro-organisms which affect either patients, as a result of admission to hospital or of treatment received there, whether as in-patients or as patients in ambulatory care, or hospital staff as a result of their work, whether or not the symptoms of the illness show themselves while the person concerned is in the hospital.

- b. Infection : multiplication of micro-organisms with :
 - locally : invasion of healthy tissues immediately or progressively;
 - regionally : presence of lymphangitis and adenopathy ;
 - generally : existence of bacteraemia or septicaemia with or without septic metastases.
 - To avoid any linguistic ambiguity, the following definitions are adopted :
- c. Contamination : process resulting in the presence of pathogenic or potentially harmful micro-organisms on equipment or on the person.
- d. Inoculation : introduction of micro-organisms capable of multiplying in the tissues—a microbiological concept, not a clinical one.
- e. Colonisation : localised multiplication of germs which may derive from contamination or inoculation without any tissue reaction, and which become part of the subject's flora.

^{1.} Microbiologically is to be understood in the widest sense of the term, as including serological data, for example.

The following activities should be undertaken

I. Surveillance, awareness and prevention of infections acquired in hospitals

a. Monitoring hospital infections

Keep as full a record as possible of each infection as defined above, using, for instance, a notification form (models 1a, medical septic complication or 1b, surgical septic complication, as appended) to identify the portals of entry of the infection, the probable mode of transmission and the analysis and assessment of its consequences for the individual, the department and the institution.

Failing that :

- keep a routine record of all infections on a simplified form (models 2a and b appended), and resort to keeping a full record (models 1a and b appended) in departments where serious problems have arisen, or else use the detailed record (models 1a and b appended) for sampling purposes in high-risk departments or for specific infections in order to obtain a clearer view of the situation ;

- promote double-checking of the data recorded with full co-operation between the laboratory and the clinical departments.

b. Infection Control Committees

The setting up of Infection Control Committees should be continued and further developed, as advocated in Resolution (72) 31, and they should be rendered more effective by the appointment of *infection* control teams to carry out daily duties in accordance with the rules laid down by the said committees and in close co-operation with them.

c. Rational use of anti-microbial agents in the prevention of infections

Check periodically the consumption in the different departments of anti-microbial agents, to which the following rules should apply :

i. base their use on the sensitivity of the germs isolated and adjust it to the clinical terrain of each patient;

ii. avoid general recourse to antibiotics for systematic prevention purposes ;

iii. where controlled antibiotic therapy is required for prevention purposes abide by the directives issued by the Infection Control Committee or similar body and in particular by the following basic criteria :

- lowest possible toxicity,
- excellent pharmacokinetics,
- least possible modification of normal endegenous flora,
- very short course of administration,
- lowest possible cost.

Have the Infection Control Committee draw up a selective list of antibiotics for therapeutic use in the hospital and make the introduction of any new antibiotics depend on compliance with sound criteria concerning spectrum of activity, pharmacokinetics, toxicity, duration of administration and cost.

II. Prevention of transmission of micro-organisms

a. From person to person

i. Impose cleanliness and standards of dress and behaviour on personnel at all levels.

ii. In order to obviate the risk of transmission of micro-organisms, lay down guidelines concerning treatment methods and techniques so framed that they can be adopted and added to in each hospital, depending on the staff available and the equipment used.

iii. Have the Infection Control Committee :

- draw up a list of conditions which, where staff are microbial or parasitic carriers, would require their transfer to other duties within the hospital or even their suspension from work; to this end take appropriate measures within the institution in agreement with the social security authorities to ensure that personnel so affected do not suffer any direct or indirect loss of salary and hence be tempted to conceal their condition;

- formulate preventive policy aimed at avoiding the transmission of micro-organisms by "carriers" (circumstances in which it is to be applied and choice of tests) ;

- introduce a clear and simple system of signposting to direct movements of persons inside the hospital, identifying in each hospital the areas to which access is restricted;

iv. Control and conserve whole blood, its components and derivatives and use them rationally in accordance with Council of Europe Recommendations Nos. R (80) 5 concerning Blood Products for the Treatment of Haemophiliacs; R (81) 5 concerning Antenatal Administration of Anti-D Immunoglobulin; R (81) 14 on Preventing the Transmission of Infectious Diseases in the International Transfer of Blood, its Components and Derivatives; and R (83) 8 on Preventing the Possible Transmission of Acquired Immune Deficiency Syndrome (AIDS) from Affected Blood Donors to Patients receiving Blood or Blood Products.

b. By equipment

iv.

i. Require all equipment used in hospitals to be selected with reference not only to the uses to be made of it and its reliability, but also to the microbial risks attaching to it and to the ease with which it can be decontaminated or sterilised and ensure that the Infection Control Committee is consulted in this matter.

ii. Take all necessary steps to ensure that in each hospital sterilisation by ethylene oxide is restricted to central sterilisation services and carried out in suitable premises by qualified staff required to undergo periodical examinations.

iii. Pay attention to the quality of the packaging material of sterilised articles since this determines how long they can be kept and make sure that the date of sterilisation and the expiry date for all sterile articles is shown on all packages.

Employ adequate antiseptics, disinfectants and cleaning materials, to which end each hospital must :

- know the chemical composition of the products proposed and the activity and toxicity tests used ;

— have the Infection Control Committee make a selection of these products for a specified period, so as to allow for alterations in micro-organisms over a certain time and avoid using ineffective products ;

- have the Infection Control Committee specify the conditions governing the use of disinfectants and decontaminants.

III. Improvement in the salubrity of the hospital environment

i. In addition to the measures advocated in the relevant paragraphs of Resolution (72) 31 on Hospital Hygiene and Resolution (76) 7 on Different Types of Hospitals and Hospital Groups, take the following steps :

— when a hospital is built, see that the purpose and functions of premises are specifically suited to the requirements of the different departments, and that a meticulous building programme and very detailed specifications are drawn up, in close association with the hospital staff;

- when converting old buildings, make sure that top priority is given to considerations of hospital infection prevention in the alterations;

— in order to prevent patients' occupying specialised treatment beds for too long, encourage the provision of premises to accommodate incoming and outgoing patients before admission to hospital and prior to discharge, or else arrange for hostel accommodation to be provided, subject to prior authorisation by the hospital.

ii. Introduce or extend measures designed to improve hospital living conditions with a view to keeping the hospital in touch with the outside world, while making sure that the fundamental rules of hygiene are constantly respected, especially with regard to people's movements inside the hospital and the separation (wherever possible) of in-patient departments from departments for patients in ambulatory care, and of these from entrance halls, cafeterias and other commercial premises.

IV. Intensive care units

Pay special attention to intensive care units and, in particular :

i. avoid large intensive care units and give preference to small, well-designed more specialised units with good hand-washing facilities (wash-basins with dismountable taps, no overflow, etc.);

ii. be very strict about the rules of general hygiene : cleanliness, cleaning, general disinfection, especially of surfaces, asepsis of the skin, asepsis of techniques (particularly catheterisation) as well as about the choice of the antibiotics used.

V. Pest control

Take all necessary steps to eliminate pests which are vectors of parasitic and bacterial diseases by eliminating their haunts and opportunities to find food.

VI. Identification, handling and transport of hospital waste

Take measures recommended by the World Health Organisation into consideration in the hospital waste disposal policy to be formulated by the Infection Control Committee, as follows :

i. separation by type of hospital waste from the point of origin until final disposal, by means of different-coloured sacks;

ii. design of a complete waste disposal circuit ;

iii. waste management under the responsibility of a person working in co-operation with the medical hygiene officer;

iv. rapid removal of waste from hospital departments and transport in frequently cleaned and disinfected trollies, lorries or containers;

v. crushing of soiled items (needles, syringes) or their treatment in sealed receptacles in order to render them totally harmless;

vi. storage of waste in closed rooms, easy to clean and disinfect, before removal for final disposal;

vii. steam pressure autoclaving of materials used by the clinical pathology laboratory and provision for the incineration of all non-salvageable waste ;

viii. treatment of sewage where appropriate before its discharge into local collectors ;

ix. ban on disposal of non-wrapped waste (particularly via chutes);

x. adoption of a policy of recovering certain unsoiled wastes in the interests both of reducing pollution and of saving money.

VII. Training and education of staff and of "non-patients"

i. Give instruction in hospital hygiene in the first part of the medical course, of the nursing course and of courses for other auxiliary staff, especially before these students begin their practical work in clinical departments on the basis of a programme worked out in agreement with the Infection Control Committee and designed to rely as much as possible on audio-visual aids.

ii. Make sure that the management staff and other administrative staff of hospitals receive instruction in hospital hygiene covering more than strictly financial considerations.

iii. Arrange training courses in such a way as to accustom staff to team-work from the beginning of their hospital experience, so as to foster a multidisciplinary approach to the question and prepare them for cooperation with the Infection Control Committee.

iv. Take steps to see that staff are offered in-service training enabling them to keep pace with changes in techniques and progress made in prevention of the transmission of infection in all its forms, having regard to the nature of the institution and to the policy advocated by the Infection Control Committee.

v. Supply suitable information to hospital patients and visitors so that they will be ready to contribute to infection prevention by their behaviour and in particular by complying with the rules of hygiene laid down by the Infection Control Committee.

VIII. Medical surveillance of staff

i. Require permanent and temporary staff of all categories working in the hospital to undergo a medical examination on recruitment; special measures should apply to staff working in high-risk sectors and to those handling food.

ii. Recommend a vaccination schedule for staff, having regard to their duties and to any risks to which they may be exposed or, failing this, administer prophylactic treatment based on specific immunoglobulins wherever there is a serious risk of infection due to contamination.

MEDICAL REPORT OF A SEPTIC COMPLICATION (Model 1a)

Name of patient			Dept. D	isease Ons	et J	Days after
File No.	Date of birth	Date of entry	WH	O Code	lication	Days after start of treatment
N	ature of complaint		Ur	BP Sept		Other
Micro (see no	o-organisms omenclature)	Micro-ol M 1 M 2 M 3 M 4		0	Prigin/Nature of	sample
Antibiogram M 1 M 2 M 3 M 4	(Insert the usual na Put R for Resistant	me of the antibiotic. or S for Sensitive.	s used in the hos	pital in the boxes belo	'ow)	
Patient is direct admission From another department Hord No. Present Ward No. Present Previous Previous Location Catheter Catheter Duration Days Previous Previous Previous Previous Previous Previous Previous Previous Previous Previous Previous Previous Previous Previous Probable entry portals See Code Duration Days						
Treatment being giv when complication a	ven arose	Corticosteroids Nature		Immunodepressan	its	Antibiotics Nature
Treatment of complication Local Generai Antibiotics used :	Nature	Course of cor Cure Sequelae Death	nplication	Extension o	f stay	Optional epidemiological report To be freely drafted

SURGICAL REPORT OF A SEPTIC COMPLICATION (Model 1b)

Name of patient		De	pt. Disease	Onset	Days after admission
File No.	Date of birth	Date of entry	₩НО Со	of complication	Days after start of treatment
Patient's Chronic	predisposition	Pre-o Skin in vio	peration stage infection	M	Nature/ Origin of Micro-organism sample
Congenita Type	al	Remote	e focus of	М	2
Preparati Day befo	on of skin	Presence of a micro-organism septic symptom	n without	M	3
Same day		Op	infection	М	4
M 1 M 2 M 3 M 4 Use of antibiotics	Put R for Resistant or S	S for Sensitive.	Days	/ / / / ·	
	diana an ann a tha ann an ann an ann ann an ann an an an	Operation (the operation	ation report may t	be attached)	······································
Date Time Duration Emergency During operation Ac	Nature of the operation	Block No Dirty Clean Clean- Contaminate Drainage	o.	Disinfection before operation Anaesthesia	local general loco-regional
Trans Sample during	sfusion taken operation	ESC			
An	tibiotics	In situ		Nat	ure

Post-operative stage

Post-operative room	Intensive care	Ward resuscitation	Other room		
Antibiotic therapy					
Routine	Nature Dose	Nature	Dose		
Non-routine					
		Days Duratio	n Days		
	Septic complication	1			
	No. of days after operation				
	Probable portal of entry				
Patient admitted	Nature of complication	on l	Micro-organisms		
from outside	Broncho-pulmonat	ry	Origin/ Nature		
Patient from	Local symptoms	M 1	Micro-organism of sample		
another department	Locatio	n			
	Туре				
Ward No.	Urinary	M 3			
present	Septicaem	ia M 4			
previous	Septic metastas	ses			
previous	Location				
	Bacterial of	evidence			
Antibiogram (Insert the usual no Put R for Resistan	ame of the antibiotics used in the hospi t or S for Sensitive	ital in the boxes below)			
M 1					
M 2					
M 3					
M 4					
Treatment of complication Nature Nature Nature					
Duration L Duration L Duration L Duration L Duration L Duration					
Local	Course of complication	Extension of stay	Epidemiological		
General Cure Sequelae	Death Death Verification	Estimated at	The second secon		
v					

MEDICAL REPORT OF A SEPTIC COMPLICATION (Model 2a)

(Simplified version)



SURGICAL REPORT OF A SEPTIC COMPLICATION (Model 2b)

(Simplified version)

Name of patient			Dept.	Disease
File No.	Date of birth	Date of entry		۱۱
				WHO Code

I. Preoperative pháse

2	Type of skin preparation	:	
Same day		Previous day	
Di	Use of antibiotics : Type		
II. Operation			
Nature	WHO code		
	Clean		
	Contaminated clean		
	Not clean		
Type of anaes	sthesia		
	Local		
	Regional		
	General		
Transfusion			
Drainage			
Antibiotic the	rapy		
	Nature of the antibioti		
	Duration		



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Epidemiological report

Death

Further operation

Extension of stay (in days)

Nomenclature and codes to be used for medical and surgical reports of septic complications

Nomenclature : bacteria and yeasts

This nomenclature covers the micro-organisms most frequently encountered ; any others are to be stated :

ACINETORACTER (incl. MORAXELLA GROUP I)	ACIN
RACTEROIDS	BACT
CITROBACTER	CITR
CLOSTRIDIUM	CLOS
ENTEROBACTER AFROGENES	ELOS ENAE
ENTEROBACTER CLOACAE	ENCL
NLEDJIELLA DROTEUS MIRADU IS	
PROTEUS MIRABILIS	
PROTEUS MORGANII	PRMO
PROTEUS RELIGERI	
PROTEUS VULGARIS	PRVU
PROVIDENCIA	PROV
PSEUDOMONAS AERUGINOSA	PSAE
PSEUDOMONAS (OTHERS)	PSAU
SALMONELLA	SALM
SERRATIA	SERR
STAPHYLOCOCCUS AURES	STAA
STAPHYLOCOCCUS EPIDERMIDIS	STEP
STREPTOCOCCUS (GROUP A)	STRA
STREPTOCOCCUS (GROUP B)	STRB
STREPTOCOCCUS (GROUP D) (incl. FAECALIS)	STRD
STREPTOCOCCUS (OTHER)	STAU
YEASTS	LEVU
OTHERS	AUTR

Probable portals of entry	Origin/nature of samples	Site	
01 Natural cavity	01 Wound	10 Head	
02 Surgical operation	02 Pleural suction drain	11 Neck	
03 IM injection	03 Ventricular drain	12 Thorax	
04 IV injection	04 Other drains	13 Abdomen	
05 IA injection	05 Perfusion catheter	14 Thigh	
06 Perfusion catheter	06 Peritoneal catheter	15 Lower leg	
07 Peritoneal catheter	07 Impacted material	16 Ankle	
08 Monitoring catheter	08 Tracheal	17 Foot	
09 Tracheotomy	09 Urinary catheter	18 Hand	
10 Intubation	10 Ureteral catheter	19 Forearm	
11 Urinary catheter	11 Nephrostomal catheter	20 Arm	
12 Ureteral catheter	12 Shunt	21 Fontanelle	
13 Nephrostomal catheter	13 Fistula	22 Femoral artery	
14 Redon's drain	14 Nose	23 Subclavian artery	
15 Pleural suction drain	15 Throat	24 Jugular artery	
16 Ventricular drain	16 Ear	25 Crook of the arm	
17 Other drains	17 Vagina/uterus		
18 Shunt	18 Expectoration		
19 Fistula	19 Urine without catheter		
20 Burn	20 Urine through indwelling catheter		
21 Open wound	21 Blood culture		
22 Closed wound	22 Peritoneal fluid, ascites		
23 Other	23 Pustule		
	24 Cerebrospinal fluid		
	25 Pleural fluid		
	26 Bile		
	27 Other		