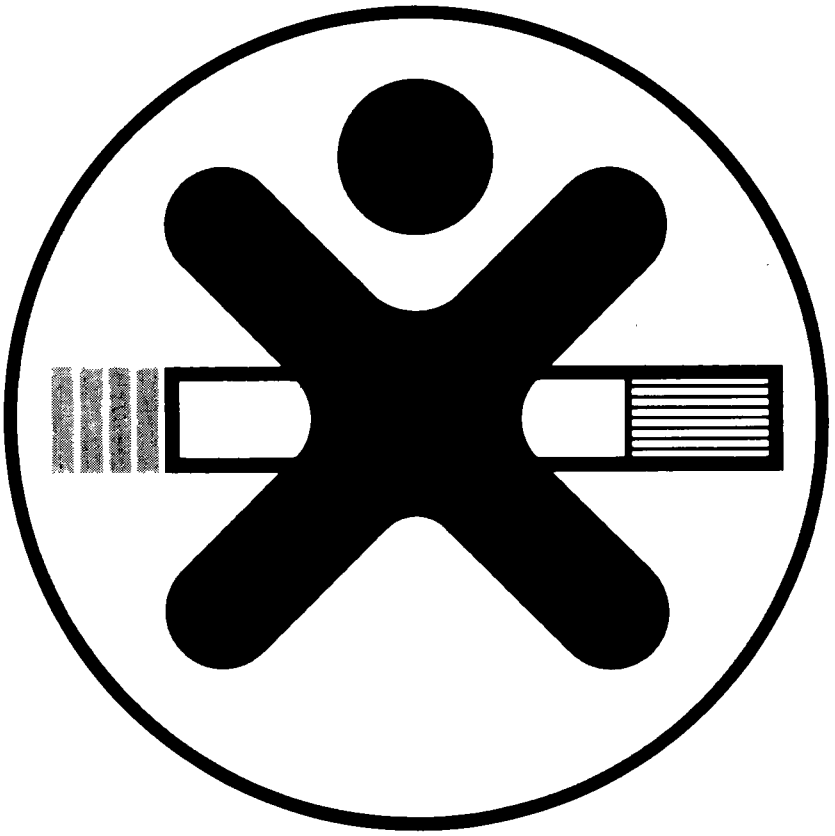
The Evaluation and Monitoring of Public Action on Tobacco



Smoke-free Europe: 3

This booklet is part of a series written to support the Action Plan on Tobacco adopted by the World Health Organization's Regional Committee for Europe in September 1987, and the "Europe Against Cancer" programme of the European Community.

It has been co-produced by the WHO Regional Office for Europe and the Commission of the European Communities.

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Introduction

The purpose of this booklet is to chart the evolution of the various components of the Action Plan on Tobacco adopted by the WHO Regional Committee for Europe in 1987. In that same context and with reference also to the Europe Against Cancer programme, it will serve as a basis for Member States to evaluate their situation in regard to tobacco use.

Thus, it was proposed:

- to develop and monitor indicators to assess the smoking situation in Member States and enable the impact of their control programmes to be assessed;
- to identify and extend ad hoc surveys of exemplar populations (e.g. health professionals, the young, teachers) and to publish technical guidelines for psychosociological studies on smoking determinants and smoking inequalities;
- to study a computerized system for incorporation and exchange of data.

It is in an attempt to attain these various objectives that the present booklet has been written. It should enable the Member States, which have decided to launch national programmes of concerted activities to control tobacco use, to:

- select the principle indicators for monitoring and evaluating their programmes;
- harmonize definitions and standardize methods of collecting statistical information;
- develop ad hoc qualitative studies on the origin of smoking behaviour and habits.

2

Monitoring and evaluation indicators

The indicators that should be monitored fall into three categories: essential indicators, recommended indicators and facultative indicators.

The essential indicators are concerned with the few indispensable basic data that must be collected in order to monitor the evolution of a national programme and compare different countries. It is vital that they should be obtained by reliable methods in accordance with appropriate procedures and at regular intervals. These indicators have been incorporated in the regional indicators of progress towards achieving health for all by the year 2000 and have therefore been regularly monitored since 1985 in the countries of the European Region.

The same requirements in regard to quality must govern the development of the recommended indicators. Their periodicity, however, may vary.

As for facultative indicators, while they are not essential to national programmes, they do, nevertheless, make it possible to monitor those programmes more closely so that they can be better adapted to requirements.

In order to develop these tools, information should be used from regular official statistics. If the required statistics are not available, specific surveys should be undertaken.

To achieve this, standardized procedures are proposed. They are inspired by guidelines drawn up earlier by WHO[a] and are based in part on surveys carried out by Member States which have already gained some experience in this respect.

[a] *Guidelines for the conduct of tobacco smoking surveys of the general population.* Geneva, World Health Organization, 1983 (unpublished document WHO/SMO/83.4).

Essential Indicators

These are mortality rates, tobacco consumption, the prevalence of smoking and smoking control policy.

Mortality rates

Referring to the International Classification of Diseases (ninth revision), mortality rates by sex and age per 100 000 inhabitants should be monitored annually for the following groups of causes of death:

— malignant neoplasm of trachea, bronchus and lung (162);

— chronic bronchitis, emphysema and asthma (491–493);

— ischaemic heart disease (410–414).

In respect of each of these causes or groups of causes of death, a series should be established covering some 20 years, taking as its point of departure the year 1960, for example.

On the basis of the estimates of the WHO Regional Office for Europe that 90% of deaths from cancer of the trachea, bronchus and lung, 75% of deaths from bronchitis, emphysema and asthma and 25% of deaths from ischaemic heart disease can be ascribed to smoking, a series can be drawn up for the same period giving minimum estimates of the number of deaths due to tobacco use per 100 000 inhabitants, giving separate figures for the two sexes.

Tobacco consumption

The indicator to be monitored is the consumption of tobacco per head among the population aged 15 years and above. It can sometimes be expressed as consumption per head, without reference to a minimum age of 15 years.

This information should be monitored at least every two years once the national programme has been launched. Ideally, here again a series going back to 1960–1965 should be constructed.

In many countries, the amount of tobacco sold is published and can be calculated on the basis of fiscal data. For various reasons, these data do not always represent what has really been consumed. Among those reasons are:

— frauds, contraband, duty-free sales;

— changes in smoking habits (hand-rolled cigarettes, manufactured cigarettes, etc.);

— changes in the weight of tobacco per cigarette, etc.

Consequently, very often these data should be supplemented by means of specific surveys which will make it possible to estimate the prevalence of smoking by sex and age.

The prevalence of smoking

The essential indicators selected for monitoring the prevalence of smoking in Member States are the proportion of nonsmokers and the proportion of heavy smokers (20 cigarettes or more per day) (Fig. 1).

The necessary information will be gathered by means of the surveys mentioned above. The methods to be used will be described later. The following definitions have been adopted.

(*a*) *Nonsmoker:* any person who does not smoke at the time of the survey. The nonsmoker category can be divided into:

— ex-smokers: people who once smoked every day for at least six months but are no longer smoking when the survey is conducted;

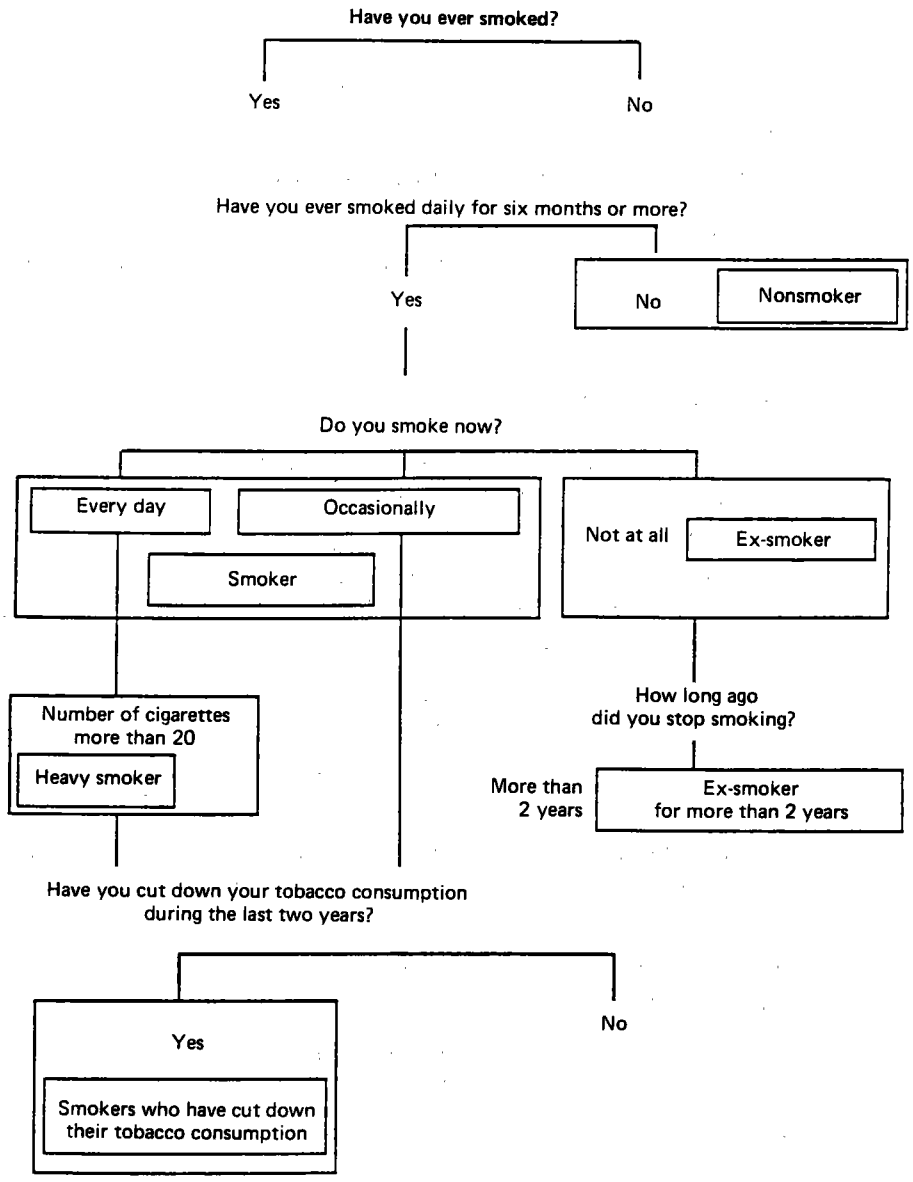
— other nonsmokers: people who have never smoked or who have smoked during such a short period (less than six months) as not to be considered as ex-smokers;

(*b*) *Regular smoker:* any person who at the time of the survey smokes some tobacco product every day. This category can be subdivided as follows:

— heavy smoker: anyone who smokes every day and at the time of the survey is smoking 20 or more cigarettes a day;

— occasional smoker: any person who at the time of the survey smokes but less than once a day.

Figure 1


Have you ever smoked?
Yes
No
Have you ever smoked daily for six months or more?
Yes
No
Nonsmoker
Do you smoke now?
Every day
Occasionally
Smoker
Not at all
Ex-smoker
Number of cigarettes more than 20
Heavy smoker
How long ago did you stop smoking?
More than 2 years
Ex-smoker for more than 2 years
Have you cut down your tobacco consumption during the last two years?
Yes
Smokers who have cut down their tobacco consumption
No

These data should be collected regularly in representative samples and broken down by sex, age and socio-occupational category.

Smoking control policy

Here a brief description is required of the measures taken locally and nationally in the following domains:

— specific legislation on tobacco and its use (limitation of production, distribution, promotion and publicity);

— fiscal policy and the fixing of prices;

— measures to protect nonsmokers;

— development of health education and information of the public;

— training of health professionals (and of personnel in other sectors);

— practical assistance in giving up smoking;

— community programmes;

— model surveys.

To enable international comparisons to be made, Member States should provide these data at least for 1988 and 1990.

Recommended Indicators

The purpose of these indicators is to enable changes in the prevalence of smoking to be monitored more precisely.

The recommended indicators are essentially concerned with:

- the percentage of the population who have never smoked;
- the percentage of the population who have not smoked for at least two years at the time of the survey;
- the percentage of the population who have cut down their tobacco consumption in the two years immediately preceding the survey.

These items of information should be broken down for submission by age, sex and socio-occupational category. In the case of adults, educational level and unemployment should be taken into account. In the case of young people, account should be taken of parental occupation and level of schooling or occupation at the time of the survey.

The age groups recommended are those adopted by WHO: 9–11 years, 12–14 years, 15–17 years, 18–19 years, 20–24 years, 25–29 years, 30–34 years, etc., or less than 15 years, 15–24 years, 25–44 years, 45–64 years, 65 and over. In every case, the age in question is age at last birthday.

Facultative Indicators

Facultative indicators are mainly concerned with morbidity data and the prevalence of smoking in certain key populations.

Morbidity data

To monitor the development of national programmes, a special effort must be made to obtain data on ischaemic heart disease and cancers of the trachea, bronchus and lung.

The data required can be extracted from cancer registers, registers of cardiovascular diseases where they exist, and hospital morbidity statistics.

Prevalence in certain key populations

Here it is essentially a question of monitoring changes in the consumption of tobacco products among pregnant women (it would also be useful to monitor the evolution of birth weights), in the medical and allied professions, and among teaching staff.

Using procedures to be described later in this booklet, it would be advisable to monitor in each of these groups the evolution of the indicators defined earlier for the population at large (essential indicators or recommended indicators).

3

Quantitative surveys on smoking

Advantages and Drawbacks of Quantitative Surveys

With the position as it is at the moment in regard to the data available in most of the countries, only sample surveys can provide estimates of the prevalence of smoking by sex, age and socio-occupational background. Such surveys have several useful features. If they are carried out when national smoking control activities are launched and repeated at regular intervals thereafter, they throw light on the trends in consumption and make it possible to assess the impact of the control activities, to adapt the lines along which they are carried out, and to strengthen desirable trends.

Among sources of statistical data, surveys of this nature are beyond doubt the most valuable for planning and evaluating smoking control and enabling international comparisons to be made. Compared with administrative or exhaustive surveys, they are relatively cheap and rapid.

Since the observations to be made are few in number, they can be verified, thus reducing errors of observation to a minimum. Finally, sample surveys make it possible to measure several features in each member of the sample, thus greatly facilitating analytical studies and consequently attempts at forecasting.

On the other hand, quantitative surveys are not so inexpensive as to be repeatable at close intervals. They must be confined to sufficiently well defined and localized populations. Nor do they enable very detailed results to be obtained, for they are limited by the possibilities of those questioned. In some respondents (smokers are no exception) memory, sincerity and a willingness to give serious answers are often far from being one hundred per cent. It must be realized that the psychological conditions of the interview are also very different from the conditions of real life, particularly when the persons being questioned belong to a very different sociocultural environment from that of the questioner.

Surveys conducted on representative samples are not specially designed to solve problems of analysis. While it is difficult enough to observe human behaviour, it is still more difficult to determine its motivation. Thus, ingenuous questions such as *"Why do you smoke?"* rarely elicit satisfactory replies. To try to understand and analyse how smoking patterns become established, a certain number of "qualitative" techniques must be used. They are considered in Section 4 of this booklet.

Sample surveys are designed essentially to obtain a description of the study population. The quality of the results produced depends on the way in which the sample is selected and on the quality of the observations made on each of the persons questioned.

While techniques are sufficiently sophisticated to limit errors due to sample selection, it must be emphasized that when a survey is a failure, it is above all errors of observation that are to blame. It is vital in sample surveys that each observation be made with the greatest of care, hence the importance that must be attached to the drafting of the questionnaires and to the qualifications of those administering them.

Population Groups to be Studied

The adult population

Surveys of a representative sample of the adult population provide a glimpse of the magnitude of the smoking problem in the country as a whole and make it possible to estimate the prevalence of smoking in relation to certain attributes (sex, age, educational level, socio-occupational category).

Young people

The definition of "young people" may vary from one country to another. The upper limit generally adopted is the legal age of majority. To evaluate tobacco use among young people, recourse must be had to surveys covering sufficiently narrow age groups and to special questions that do not imply habitual or regular tobacco consumption. Surveys among young people are of particular

importance in that they make it possible to assess the age at which smoking begins and hence the long-term risks it poses for health.

The medical profession

Studies of smoking among doctors can be perceived as a way of making them aware of their professional responsibility. It is also possible to cite this group as an example when few of its members smoke (as is the case in some countries of Europe), to encourage and motivate the rest of the population to stop smoking.

Other groups

In the light of their professional responsibility or social role, the reasoning applied to the medical professional applies equally to groups such as teachers or the professions allied to medicine.

Another group that it is important to monitor is expectant mothers.

Sampling Methods

There are numerous ways of selecting samples representative of the population to be studied and the one chosen will depend on local resources and conditions. The selection should be made in close collaboration with a statistician, a specialist in the social sciences or an epidemiologist. Whether use is made of empirical techniques, such as the quota method, or random techniques, the choice must be made by specialists and the sampling done by specialist institutions.

Among observation techniques, direct observation must have pride of place. The classical interview in the home or at the workplace is the method of choice.

Sample Size

To determine the size of the samples, account must be taken of the degree of precision looked for in the results and the extent of breakdown into subgroups.

For example, when it is wished to ascertain the percentage of nonsmokers in a given population, a representative sample of 1000 people produces an estimate with 95% precision and a margin of error of ±3.2% at most. Consequently, when it is a question of estimating the proportion of smokers by age and sex, such a sample amply suffices. If more precise estimates are sought, taking into account sex, age and socio-occupational category or standard of education, a sample increased to 2000 is amply sufficient also. To go beyond that and obtain still more detailed data, for example on a particular subgroup in a survey on adults, it will be more useful to carry out a special survey on that subgroup rather than to select a larger overall sample. There is an empirical rule that arises directly from these considerations: in presenting the results of a sample survey, statistical tables containing, on average, less than 30 individuals per box will not be used.

The sample sizes thus proposed are amply sufficient for significant variations with time to be observed. As a general rule, it is considered that, on the basis of representative random samples of less than 2000 people, a variation below 2.5% is not significant.

If it is wished to monitor the variations with time of the proportion of smokers in a particular sex or age group, it is best to select a sample of 2000–4000 people distributed, for example, as shown in Table 1.

Table 1

Age (years)	Males	Females
15-24 or 18-24	(200)	(200)
25-34	200	200
35-44	200	200
45-54	200	200
55-64	200	200
≧65	200	200
Total	1000 (or 1200)	1000 (or 1200)

Grand total = 2000 (or 2400)

Questionnaires

In the case of each population to be studied (e.g. adults, young people, the medical professions, pregnant women), three main types of information will be considered in turn: smoking habits, attitudes to smoking and opinions regarding tobacco products.

Questionnaire intended for adults

Smoking habits of adults

In so far as the use and consumption of tobacco is concerned, several categories of user can be distinguished. It should be noted that the terms used in particular questionnaires or particular countries for defining the various categories of smoker and nonsmoker are not always employed in a very strict fashion and are often invested with varied and even imprecise meanings. For the sake of uniformity, it is proposed to use the following definitions in studies undertaken to monitor and evaluate national programmes:

- daily smoker: any person who smokes a tobacco product of any sort every day at the time of the survey;
- occasional smoker: any person who smokes a tobacco product of any sort less than once a day;
- nonsmoker: any person who does not smoke at all at the time of the survey.

Within the category "daily smoker", a distinction should be drawn between the smoker who smokes cigarettes every day (whether manufactured or hand-rolled) and the person who consumes other tobacco products (chewing tobacco, pipe tobacco, cigars, etc.) every day.

In certain cases, it would be better to break down the "daily smoker" group into even more detailed subgroups:

— smokers who smoke only cigarettes every day,

— people who consume only other tobacco products every day,

— people who consume both cigarettes and other tobacco products every day.

Basic questionnaire intended for adults[a]

1. Have you ever smoked? Yes ☐ No ☐

2. Have you ever smoked daily for 6 months or more? Yes ☐ No ☐

3. Nowadays, do you smoke
   - Daily? (go to questions 4 and 6) ☐
   - Occasionally? (go to question 6) ☐
   - Not at all? (go to question 5) ☐

4. How many of each of these do you use per day? If *none* write 0.
   - Manufactured cigarettes .....
   - Hand-rolled cigarettes .....
   - Pipefuls of tobacco .....
   - Cigars or cigarillos .....
   - Bidis/goza/hookahs .....
   - Pinches of snuff/quids of tobacco .....

   Do you take snuff or chew tobacco
   - Daily? ☐
   - Occasionally? ☐

5. If you do not smoke nowadays, how long ago did you give up?
   - Less than 6 months ☐
   - 6 months - 1 year ☐
   - 1-2 years ☐
   - More than 2 years ☐

6. Have you cut down your consumption of tobacco during the last 2 years? Yes ☐ No ☐

Respondent's attributes

Sex	Socio-occupational category
Age at last birthday	Level of education
Place of residence	Marital status

[a] See the detailed version of this questionnaire on p. 36.

The "nonsmoker" category can be subdivided as follows:

— ex-smoker: a person who has once smoked every day for at least six months but no longer smokes at the time of the survey;

— other nonsmoker, i.e. a person who has never smoked or has smoked so little (and for so short a period) that he or she cannot be considered as part of the "ex-smoker" category.

Information on individual consumption of tobacco products is concerned normally with the level of individual consumption: the number of items that the respondent is in the habit of consuming daily (cigarettes, cigars, pipefuls of tobacco, pinches of snuff, etc.). These questions are intended for the person who smokes every day. The frequency with which occasional smokers consume tobacco varies too much for their average consumption to be statistically exploitable.

Attitudes and opinions

The questions concerning attitudes and opinions are of a facultative nature. The wordings suggested in the detailed version of the adult questionnaire (see p. 36) are given only as examples. They should be tested and refined in line with the results of the qualitative surveys described later. They are, however, indispensable.

Various subjects can be taken up. Which are selected and what questions are asked concerning them will depend on the objectives of the country's activities and on the probable frequency of the surveys.

For example, questions might be asked concerning:

- pressure to give up smoking — information on this would help in planning activities to encourage people to stop smoking and in evaluating the perceived extent of the smoking problem;
- the probability of people giving up tobacco — this information would represent a more sensitive indicator of the impact of smoking control activities than the number of people actually giving up tobacco;
- support for the government's action — this information is useful for planning and justifying the activities of the public authorities;
- opinions on the harmfulness of tobacco and the beneficial effects on health of giving it up;

- the reasons for smoking or not smoking — this information makes it possible to study what encourages and what inhibits tobacco use in various subgroups, in relation to age, sex, educational level or socio-occupational category; it is also found valuable for planning health education programmes;
- social norms — these norms could provide precise indicators of changes occurring in the social climate that might portend a modification in smoking behaviour.

Questionnaire for young people and adolescents

In the case of young people and adolescents the questions should be formulated differently, for young people smoke on average much less than adults. The social environment plays an important role in shaping their behaviour. Furthermore, their habits are often changeable: periods of precocious use of tobacco are followed sometimes by periods of abstinence, followed by new experiments with smoking.

The smoking habits of young people and adolescents

Apart from daily tobacco use, forms of weekly or irregular consumption may be observed among young people. It happens quite frequently that they adopt a behavioural pattern just to experiment and begin to smoke regularly every week, or even every day, for a certain period and then stop.[a] Bearing in mind the definitions proposed for adults, the following categories can be used for young people; they partly overlap the categories used for adults:

- young smoker consuming tobacco every day: any young person who is smoking a tobacco product of any kind every day at the time of the survey;
- young smoker consuming tobacco every week: any young person who smokes at least once a week but is not smoking every day at the time of the survey;
- young smoker consuming tobacco by way of experiment: any young person who smokes less than once a week;

[a] As a criterion of stability, one can decide, for example, that a young regular smoker is a young person who has smoked every week for at least three months immediately preceding the survey. Criteria should be set by the specialists in charge of the survey.

Basic questionnaire intended for young people and adolescents[a]

1. Have you ever smoked, even once? Yes ☐ No ☐

2. Have you smoked at least once a week for 3 months or less? Yes ☐ No ☐

3. At the present time, do you smoke
   - Every day? ☐
   - Every week? ☐
   - Less than once a week? ☐
   - Not at all? (go to questions 5 and 6) ☐

4. What is your daily consumption (or weekly, depending on your answer to question 3) of the following? If *none* write 0.
   - Manufactured cigarettes .....
   - Hand-rolled cigarettes .....
   - Pipefuls of tobacco .....
   - Cigars or cigarillos .....
   - Bidis/goza/hookahs .....
   - Pinches of snuff/quids of tobacco .....

5. How long is it since you stopped smoking?
   - Less than 6 months ☐
   - 6 months - 1 year ☐
   - 1-2 years ☐
   - More than 2 years ☐

6. Do you think that in a few years you will be smoking every day?
   - Certainly ☐
   - Probably ☐
   - Probably not ☐
   - Certainly not ☐

Respondent's attributes

Sex

Age at last birthday

Place of residence

Education level

Occupation (if any)

Marital status

[a] The detailed version of this questionnaire will be found on p. 40.

- young nonsmoker: any young person who does not smoke at all at the time of the survey (same definition as for adults).

  The "young nonsmoker" category can be divided into:

  — ex-smoker: a person who has smoked every day or every week, i.e. a person who is a nonsmoker at the time of the survey but who has in the past smoked every day or every week for at least three months;

  — ex-smoker who has consumed tobacco by way of experiment: i.e. a person who is a nonsmoker at the time of the survey but has in the past smoked less than once a week for at least three months.

When levels of consumption are being recorded, care must be taken to give those who smoke regularly (but not necessarily every day) an opportunity of stating their consumption in numbers of cigarettes (or other tobacco products) per week. Here again, however, as in the case of adults, the replies should be treated with caution, in view of inconstancy in the frequency of smoking.

The attitudes and opinions of young people and adolescents

In the case of young people and adolescents, it is especially important to discover indicators predictive of future smoking behaviour, particularly if it is wished to assess the effect of activities designed to prevent smoking. For example, 15-year-olds can be asked how they envisage the evolution in the future of their behaviour in regard to tobacco. Other variables of this type are concerned with what they think of smokers and the image they have of the nonsmoker. The categories of variables mentioned earlier in regard to adults can be used, after adaptation, among young people and adolescents. Examples are given in the detailed version of the questionnaire intended for young people (see p. 40).

Questionnaire intended for health professionals

In the case of health professionals, and particularly doctors, who have a special role to play in smoking control programmes, the information to be collected is concerned with the following items.

The smoking habits of health professionals

The questions are the same as those put to the adult population. The replies are all the more important in that it will be possible to use them to demonstrate to

the public that many health professionals, and particularly doctors, have given up smoking because of the risks of tobacco use. Examples of proposed wordings are given in the detailed version of the questionnaire intended for health professionals (see p. 43).

The attitudes and opinions of health professionals

Particular emphasis should be placed on:

- the role of the doctor as health educator: informing patients of the effects of smoking on health, encouraging them to stop smoking, helping them to do so, etc.;
- their role as leaders of opinion, particularly in the establishment of a no-smoking environment in hospitals, health centres, clinics, etc.;
- the degree to which they think they can influence politicians and national and local leaders and encourage them to take measures against smoking.

Questionnaire intended for teaching staff

In the case of teaching staff, the questions concerned with their smoking habits are of the same nature and based on the same definitions as those used for the adult population and the health professionals.

In regard to their attitudes and opinions, more particular stress will be laid on the dynamic role they can play in schools and universities in encouraging the prohibition of smoking and on the good example they can set to their pupils.

Questionnaire intended for pregnant women

In the case of pregnant women, the same survey procedure will be followed as for all the women in the adult population. The questions on smoking should be integrated into the epidemiological studies conducted to monitor the progress of pregnancies and to assess the impact of the measures taken in regard to the perinatal period.

A special effort will be made to measure the percentage of women who have given up smoking. In this regard, pregnancy will be subdivided into the following periods: less than 1 month, 1–3 months, 3–6 months and 6–9 months. Among

the reasons which have led to the cessation of smoking, a reasonable place should naturally be assigned to pregnancy.

In the case of this group, questions regarding future smoking will be particularly important. Certain studies have shown that one woman in four stops or cuts down smoking during pregnancy but that starting up again after the birth is common.

Processing and Presenting the Data from Quantitative Surveys

The processing and presentation of the data are the two tasks that make up the phase of analysis of the results. The items listed below will be useful to those conducting a smoking survey.

It is indispensable that one or more persons with experience of processing and presenting data (statistician, epidemiologist or specialist in the social sciences) should take part both in planning the survey and in analysing its results. This is essential, for if the surveys are flawed, particularly in regard to sampling or to organizing checks on the interviewers, no remedy will be possible during the analytical phase.

In practice, it is found that data analysis sometimes takes longer than foreseen because a good proportion of the information collected provides interesting subject matter for research. It is important, therefore, to provide sufficient time and adequate resources for the analytical phase.

The first task entailed is checking the quality of the data collected. Even if appropriate computerized programmes exist, a phase of manual checking should be provided for.

The next stage is evaluation of the prevalence and intensity of smoking in relation to sex and age. Prevalence is the percentage of persons who smoke, while the intensity of tobacco consumption provides an estimate of the amount of tobacco smoked. When the data are being tabulated, the results for men and women should be presented separately. The age groups are those recommended by WHO (see Section 2).

In the case of the smoking habits of young people, it is desirable to use narrower age groups, preferably limited to one year (or two at most) for the ages at which habits evolve rapidly.

Tobacco consumption can be presented in various ways, provided that the average number of cigarettes smoked per day and the distribution of smokers by level of consumption are shown. Here again, a distinction must be drawn between males and females. Smokers should be grouped according to whether they smoke 1–7, 8–12, 13–17, 18–22, 23–27 or 28 or more cigarettes a day and so on. These categories have been selected because the figures put forward by smokers asked about how many cigarettes they smoke are usually around multiples of 5 or 10. For reasons of presentation and international comparability, the indicator selected to evaluate progress towards health for all distinguishes between those who smoke less than 20 cigarettes a day and those who smoke 20 or more. It must not be forgotten that it could also be important to study the prevalence of very low levels of tobacco consumption, i.e. one or two cigarettes a day, since that may be a common form of smoking behaviour in women in a number of countries and also among young people (subject to the reservations indicated earlier).

The tabulations should indicate the percentages corresponding to each category as well as the absolute figures from which the percentages have been calculated.

It is important to measure the validity of all the results relating to estimates of the prevalence of smoking and the consumption of tobacco. One of the methods available for this is calculation of the 95% confidence intervals, if the sampling procedure used enables that to be done without too many difficulties.

It must be realized, however, that confidence intervals make it possible to estimate the so-called sampling error. While in surveys covering 1000–2000 persons that error may be more or less negligible, a much more important error may result from a bias ascribable to non-responses or to invalid responses. If the percentage of non-responses is not very high, upper and lower limits can be fixed by adding them and the invalid responses to each category.

For example, if in a sample of 1000 persons the survey finds 600 smokers, 300 nonsmokers and 100 invalid responses or non-responses, the lower and upper limits of the proportion of smokers in the sample are determined as follows.

Lower limit: $600/1000 = 0.6$

Upper limit: $(600 + 100)/1000 = 0.7$

In general, it must not be forgotten that there are very many sources of error unconnected with sampling. They may result from the way the interviewers have been trained, the way in which the responses are recorded and, naturally, the way the questions have been formulated. That is why it is so valuable to supplement or prepare quantitative surveys on the basis of the results of qualitative studies.

4

Qualitative surveys on tobacco use

Their Value

Qualitative, psychosociological or motivational studies are aimed at analysing in depth the reasons that impel individuals or groups to adopt, consciously or unconsciously, a particular type of opinion, attitude or behaviour.

Studies of the qualitative type are based on the technique of nonstructured interviews, supplemented where necessary by semi-structured or group interviews. During these interviews, conducted by specially trained psychologists, the person being questioned is invited to express himself very freely and at length on the subject put to him/her.

Analysis of 50 or so interviews is enough to determine most of the attitudes, curbs and motivations encountered among the population in regard to the subject concerned.

Unlike opinion polls, the purpose is not to establish percentages but to produce a typology of the various kinds of behaviour and attitudes encountered among the study population and to throw light on the principal mechanisms underlying them.

These studies confirm that among the public there is often a relatively high level of knowledge of the factors favourable and detrimental to health. Of course, this is not thorough or perfectly assimilated knowledge but the basis does exist.

In reply to such questions as *"Why does an individual's knowledge of the risks linked to smoking not lead him/her to adopt healthier behaviour?"*, qualitative studies can provide much information. They show that side by side with a domain of rational knowledge there exists an nonrational domain which is often more extensive. This nonrational domain results, on the one hand, from people's personal history in the shape of experiences gone through often since

childhood and, on the other hand, from the social, cultural and aesthetic values of the society in which they have their being. It includes elements that are not anchored in reason or reasoning and it is in that sense that it appears irrational.

Of course, not all these nonrational components are negative in their effect but those that are seem to take a long time and much effort to change.

But while it is difficult to observe human behaviour — the recording of apparently simple facts carries with it fearsome risks of error — it is an even more delicate task to ascertain the reasons for that behaviour. It is, however, essential to try to understand them if it is wished to find the most effective arguments to bring about changes in the study populations.

One of the main reasons for the comparative ineffectiveness of health education lies, moreover, in a misunderstanding of the psychological and social mechanisms underlying the behaviour it is wished to modify.

The Techniques Used

A description will be given here of nonstructured or in-depth interviews, group discussions and other techniques.

The nonstructured or in-depth interview

An in-depth interview allows the persons interviewed to express themselves freely on a given subject without being forced to follow a rigid questionnaire and with the least possible intervention on the part of the interviewer, who does, however, have the task of directing the conversation to make sure that certain key points are dealt with but makes no effort to curtail digressions. For the purpose, the interviewer is given not a questionnaire but a practical guide which is no more than a list of points that must be discussed.

This kind of interview, which may last between half an hour and two hours, could not possibly be entrusted to an ordinary interviewer. Study of the responses, which are all set down in the terms used by the person being interviewed, must itself be entrusted to specialists.

An in-depth interview obviously involves a very high unit cost, which makes it impossible to use on a large sample. While the samples are not of a nature to

permit the estimation of absolute values, and still less of percentages, a number of interviews limited to 30–50 persons nevertheless amply suffices to ascertain the main psychological mechanisms brought into play and the various types of attitude or opinion that underlie those mechanisms. This method is useful above all, therefore, for deriving hypotheses in the preliminary phase of a quantitative survey, to be tested later by other methods on a representative sample.

Group discussions

A small number of persons, generally from six to ten, are brought together and given a specific subject to discuss as in an in-depth interview. A discussion leader (usually a psychologist) directs the conversation so that it touches all the points which he/she considers important. The discussion leader takes notes and the discussion is recorded on tape.

A group is made up of persons with a sufficiently similar background to ensure that the discussion does not peter out but who are not known to one another. The technique amounts to holding several in-depth interviews simultaneously, thus saving time and money.

Apart from these two methods, there are numerous other procedures that combine quantitative and qualitative study. They are all indirect, in the sense that the person interviewed should in principle not know the purpose of the interview, so that any revelation of certain aspects of personality, attitudes towards a particular subject, or type of behaviour will be unconscious.

Other techniques

Among these techniques of indirect observation, the following may be briefly mentioned.

- *Sentences to be completed.* The beginnings of several sentences are read out to the person being interviewed, who is asked to complete them (*"She was ashamed of smoking because . . .", "What I appreciate most in a cigarette is . . .", "People who do not smoke . . .",* etc.). This technique is considered the simplest, the most revealing and the most reliable of the various projective methods.

- *Word associations.* The trigger is no longer the beginning of a sentence but a word. The person being interviewed is asked to associate another word with it, chosen either freely or from a list. This test must, of course, be administered rapidly. Respondents have great difficulty in discerning the aim in view and may therefore give themselves away even quite profoundly. However, the results are quite difficult to interpret.
- *Attitude tests.* These consist of a series of assertions on a particular subject. The persons interviewed are asked if they agree with each assertion, whether they think it true or false. This method is often used in classical sample surveys.
- *Mental images test.* An imaginary situation is outlined to respondents and they are asked to fill in a few details.

Each of these techniques involves risks of error and for that reason must be entrusted to specialists. Their use is all the more justified in that they are employed at various stages in the study of a situation. Several of them overlap.

A Study Plan

When a smoking control plan is being launched, several levels of study can be distinguished.

The *pre-pilot stage,* which entails a small number of in-depth interviews or a few group discussions, is structured in such a way as to explore the problem as widely as possible.

The *second stage* will entail 30–60 in-depth interviews for each of the study populations or populations likely to be the target of one of the components of the action plan. The interviews will be carried out with the help of a practical guide. A few projective tests will also be incorporated. At this stage, the small samples used naturally have no need to be representative. On the other hand, they must include persons from various population groups: smokers, non-smokers, ex-smokers, young people, adults, men and women.

On the basis of these studies, batteries of attitude tests can be developed.

The *third stage* will entail traditional quantitative surveys. This confirmatory phase is the only one which will provide results that can be used for

programming, monitoring and evaluating the control campaign. Depending on the correlations to be examined in the study populations, the samples may consist of between 1000 and 2000 interviews.

A Case Study

When a smoking prevention programme among French adolescents was launched in 1978, all these techniques were used by the French Committee for Health Education to devise, plan and monitor a campaign and evaluate its impact. The method used, the main results and the underlying principles will be discussed below.

The method

The objective of the qualitative studies was to ascertain and understand the following aspects.

- *Positive and negative motivations in young people connected with tobacco use.* Why are there smokers and nonsmokers? What do smokers find in their cigarettes? What satisfaction, conscious or unconscious, does it give them? What distinguishes smokers from nonsmokers?
- *Specific motivation impelling young people to take up cigarette smoking.* Are there any more particular reasons that incite the young to smoke or determine why some take up the habit and others do not? How do young people perceive the first-time smoker? What motives of their own do they ascribe to him or her?
- *Processes leading up to cigarette smoking.* Under what circumstances, in what way does one smoke one's first cigarettes? How does the habit become gradually established?
- *Different types of smoker and nonsmoker among the young.* Are there any specific traits that distinguish smokers from nonsmokers and are there differentiated subgroups within these groups?

The material was collected by means of 44 nonstructured interviews, conducted by interviewers specializing in that technique, with children aged 8–16 years. The interviews were taped and retranscribed.

For ease of contact with young children aged 8–10 years, the interviewer had available a set of illustrations drawn specially for the study and representing the following situations:

— two adolescents smoking together;

— a mother knitting and smoking while keeping an eye on two children aged 6–8 years;

— a man offering a cigarette to a person of indeterminate age and sex;

— two men and two women sitting at a table, all smoking except one of the women;

— a man reading his newspaper and smoking next to two children playing;

— a hand holding a lighted cigarette.

This qualitative study was supplemented by a representative sample survey among 1000 boys and 1000 girls aged 12–17 years inclusive. For each age group and each sex the number studied was about 150. A relatively large sample had been chosen in order to be able to measure significant changes for each year of age, or better for two-year periods: 12–13, 14–15, 16–17 years.

The main results

Since the quantitative results naturally reflect the national context at the time of the survey, they will not be reproduced here. On the other hand, some of the qualitative results are very instructive. They demonstrate that information on the risks connected with smoking that could be disseminated during schooling is not by itself sufficient to impel adolescents not to smoke.

Moreover, every smoker and every nonsmoker is unique in the development of an attitude to smoking. Nevertheless, a general outline can be discerned within which everyone is more or less recognizable.

Before 10–11 years: repulsion

Young children up to the age of 10 or 11 are very hostile to smoking. Their virulent reaction shows itself in various ways and in numerous domains: *"It's disgusting!", "It stinks", "It makes you cough", "It makes everything dirty", "It blackens the walls", "It smokes up the house".*

At that age children are acutely aware of the dangers of smoking for health and even dramatize them: *"That makes holes in your lungs", "It leaves a coating all through the body", "It leads straight to the hospital".*

These dangers are a source of anxiety for children. They fear for the lives of their nearest and dearest who smoke. They are also very often afraid for their own health: *"When he smokes, I'm breathing it in as well".*

For them, smoking is a trap that is all the more ridiculous in that they only see its disadvantages. They state very firmly that they will never smoke. Militant antismokers, they try to discourage their parents and their elders from smoking . . . and sometimes succeed.

11–13 years: forbidden games

Even for those who are not going to become smokers, this is the age of the first cigarette. Children see adults take pleasure and even delight in smoking. They begin to think that there is something mysterious about cigarettes, which cannot be appreciated until one has reached a certain maturity and a certain age. They have a very strong desire to prove that they are grown up, that they are a big boy or girl now. Smoking is the handiest — and not too dangerous — way of convincing themselves of the fact: *"Smoking! It's to be like the grown-ups!".*

The attraction of the forbidden reinforces the desire to smoke. It is time to take the plunge. But it often happens differently for boys and girls. The boy usually takes his first smoke on the sly with a friend of the same age. They "egg each other on" to do the deed. Girls rarely take the step in exactly that way: more often they smoke their first cigarettes less furtively with other girls a little older than they are. Their motive is seeking feminine solidarity rather than mutual courage: *"The first time I smoked was with my girl cousins, who were 15 years old".*

13–15 years: "Smoking is putting on an act"

This is the age when smoking really takes hold, the age of the break between smokers and nonsmokers. In the not so distant past, the break-point for men came during their military service, while women used to smoke comparatively little. Today, smoking becomes established during adolescence and almost on the same footing in girls as in boys.

This is the period of the group of pals, of the gang. Cigarettes provide assurance, self-confidence. You need them so much to keep your end up with the others: *"When you're smoking with your mates, you feel ashamed if you cough!".*

In these groups the youngest are led to smoke more and more by those who are older. Young boys are afraid of being thought "sissy" and "chicken" if they do not smoke. Cigarettes help to overcome shyness. In reality — and they should be told this — it is very often the nonsmokers who impress the others, by having been able to stand up to the pressure of the group. It is they who are the strong ones!

Girls, for their part, generally start smoking a little later than boys, towards the age of 14 or 15, in mixed groups in which the boys are older than they are. They ascribe an aesthetic or seductive value to the gesture of smoking: *"When you smoke, everything is in the way you do it!"*.

During this period, for those who smoke, the cigarette is a disagreeable ordeal, but one thought necessary. They do not yet smoke for pleasure but to put on an act.

After 15 years of age smoking becomes an end in itself

Interest in the group or the gang declines. Adolescents no longer have so much need to prove that they are grown-up. It is then that the pleasure of smoking becomes the smoker's prime motivation: the need to have something to suck into the mouth or occupy the hands, the need to envelope oneself in a protective screen that shuts out the world, etc.: *"At our age you smoke because you want to smoke"*.

The habit then becomes for the smoker a need. The amount of tobacco consumed tends to level off. At 18 years of age, over half of French boys and girls smoke, if only occasionally. Sometimes, however, they are aware that putting on an act has led them to poisoning themselves. Clear-headed about the absurdity of the process of which they are the victims, some of them decide to break the vicious circle. It cannot be done without difficulty or without a conscious effort and a calling into question.

The principles underlying the action to be taken

On the basis of the results of this study it was possible to determine preventive principles related to smoking and its image and at the same time to the way in which the types of behaviour concerned are built up.

Activities concerned with smoking and its image

No anti-tobacco activity among adolescents can have any lasting effect unless an effort is made to attack the sources of habituation. In the case of smoking, the first step is to deglamorize the image of the adult smoker. In this respect the media have a preponderant role to play.

Naturally, prohibitions would be insufficient unless the media (which from morning to night carry programmes, films and shows that enhance the attractiveness of the smoker's everyday gestures) put out information that gives a new image of smoking and the smoker.

However, even the long-term task of modifying the image would be ineffective if it were not backed up by activities aimed directly at behaviour.

Activities aimed directly at behaviour

Activities among adolescents should be undertaken during the different stages of their socialization. They should be based on the sensitivity of young people: at the age of 10 or 11 to objective scientific facts anchored in reason, then, towards 13–15 years of age, to psychological analysis, thanks to the sense of perspective acquired at that age.

Educational activities must be based on adolescents thinking things out for themselves, on discussion with a teacher who treats them on a footing of equality. It is during these thinking sessions, these round-tables, that the position of the smoker as a model of the fully involved man or woman will be brought into question, that the idea of smoking as a gateway to freedom will be denounced, that stress will be put on the alienating nature of smoking and on the enslavement implicit in the tobacco habit.

Health education must be presented to adolescents as a seeking after a harmonious balance and not as a set of prohibitions or pieces of rather sententious advice. It must be based on the values to which their generation attaches most importance. Its objectives must seem to them to lead to a better quality of life, enabling them to strengthen the links they forge with their peers and not hindering communication. It is just as much a question of learning to live better as of not learning to smoke.

The fact that smoking has come to symbolize the independence and freedom of the adult and to act as a remarkable means of interchange and socialization means that it is essential to promote positive forms of behaviour that perform the same functions. That, too, is a whole field of research that needs exploring and for which qualitative studies are of very great value.

5

Conclusion

Evaluation of public policies differs in numerous respects from evaluation of the policies of private undertakings. There are differences in procedures, whether in budgeting or management, but also and above all there are differences because public objectives are not measurable or are less measurable than those pursued by the commercial sector. Thus the quantitative effects of smoking control policies on health indicators can only become apparent after a long interval.

For that reason the purpose of the educational process in the public policy sector should be first and foremost to find means of measuring as objectively as possible the effectiveness of public activities. An approach of the cost–benefit type must be used for monitoring campaign and operational objectives, measured by means of relatively inexpensive indicators that are not too difficult to establish. Those suggested in this booklet, together with the techniques used to establish them, meet these criteria.

If they are devised when the national programmes are launched, they will enable their promoters to monitor and modify the various stages in their activities.

In the case of local or community activities, while these techniques may appear too costly to be systematically employed, that does not mean that all evaluative efforts should be abandoned. It is in fact possible at less cost to monitor the launching and progress of a local campaign and evaluate its impact on the target population. This is an essential step if progress is to be made in selecting methods of carrying out decentralized educational campaigns, which are necessary for the success of any national smoking control programme.

Annex 1

Questionnaires[a]

[a] The questionnaires contained in this Annex are in accordance with the guidelines for conducting smoking surveys issued following a meeting organized by WHO at Helsinki from 29 November to 4 December 1982 (unpublished document WHO/SMO/83.4).

DETAILED VERSION OF THE QUESTIONNAIRE INTENDED FOR ADULTS

Behaviour[a]

1.	If you smoke manufactured cigarettes, indicate the type and brand which you usually smoke (tick the appropriate box).	Filter-tip Non-filter No preference	☐ ☐ ☐
2.	Do you take snuff (tick the appropriate box)	Every day? Occasionally? Never?	☐ ☐ ☐
3.	Do you chew tobacco (tick the appropriate box)	Every day? Occasionally? Never?	☐ ☐ ☐

4. Indicate any other form of tobacco consumption which you habitually practise.

.....

.....

Attitudes and opinions

Questions 5 to 7 are for smokers only. Nonsmokers go on to question 8.

5.	Have you already thought of giving up smoking? (Tick the appropriate box)	Yes No (go on to question 8)	☐ ☐
6.	Have you already really tried to stop smoking? (Tick the appropriate box)	Yes No (go on to question 8)	☐ ☐

[a] The following questions could be asked in addition to those listed in the basic questionnaire (see p. 14).

7. When you last tried, how long did you go without smoking? (One reply only)	..... (number)	days
	..... (number)	weeks
	..... (number)	months
	..... (number)	years
8. Five years from now do you think you will be smoking or using tobacco daily? (Tick the appropriate box)	Certainly	☐
	Probably	☐
	Probably not	☐
	Certainly not	☐
9. Do you think that tobacco is harmful to health? (Tick the appropriate box)	Certainly	☐
	Probably	☐
	Don't know	☐
	Probably not	☐
	Certainly not	☐

Questions 10 to 12 are for smokers only;
nonsmokers go on to question 13.

10. Are you worried by the harmful effects that the tobacco you smoke may have on *your own* health? (Tick the appropriate box)	Very worried	☐
	Quite worried	☐
	Not very worried	☐
	Not worried at all	☐
11. Are you worried about the harmful effects of tobacco on the health of nonsmokers when they are in the presence of people who smoke? (Tick the appropriate box)	Very worried	☐
	Quite worried	☐
	Not very worried	☐
	Not worried at all	☐

12. State whether or not you agree with the following statements (tick one box per statement).

Statement	*Completely*	*More or less*	*Don't know*	*Not really*	*Not at all*
A warning of the dangers of smoking should appear on every cigarette packet.	☐	☐	☐	☐	☐
Tobacco advertising should be completely banned.	☐	☐	☐	☐	☐
Smoking in enclosed public places should be limited.	☐	☐	☐	☐	☐
The price of tobacco products should be greatly increased.	☐	☐	☐	☐	☐
The sale of tobacco should be totally prohibited.	☐	☐	☐	☐	☐
Doctors, nurses and other health workers should abstain from smoking in order to set a good example.	☐	☐	☐	☐	☐
Teachers should abstain from smoking in order to set a good example.	☐	☐	☐	☐	☐
Parents should abstain from smoking in order to set a good example.	☐	☐	☐	☐	☐
Everyone should have the right to breathe air unpolluted by tobacco smoke.	☐	☐	☐	☐	☐
Some cigarettes entail more risk than others.	☐	☐	☐	☐	☐

13. In your opinion, what is the importance of the following reasons for not smoking? (For each reason, tick one box)

Reason	*Very important*	*Unimportant*
To enjoy good health and wellbeing.	☐	☐
To prevent illness.	☐	☐
To set a good example.	☐	☐
To economize.	☐	☐
To prove one's independence and self-control.	☐	☐
To respect the rights of nonsmokers.	☐	☐
To avoid the risk of fires.	☐	☐
To promote a healthy environment in the home and at the workplace.	☐	☐
Religious principles.	☐	☐

DETAILED VERSION OF THE QUESTIONNAIRE INTENDED FOR YOUNG PEOPLE

Behaviour[a]

1. If you smoke manufactured cigarettes, indicate the type and brand which you usually smoke (tick the appropriate box).
   - Filter-tip ☐
   - Non-filter ☐
   - No preference ☐

2. Do you take snuff (tick the appropriate box)
   - Every day? ☐
   - Occasionally? ☐
   - Never? ☐

3. Do you chew tobacco (tick the appropriate box)
   - Every day? ☐
   - Occasionally? ☐
   - Never? ☐

4. Do the following people smoke? (Tick one box for each person)

	Smoke	*Do not smoke*	*Don't know*	*Don't have any*
Father	☐	☐	☐	☐
Mother	☐	☐	☐	☐
Elder brother	☐	☐	☐	☐
Elder sister	☐	☐	☐	☐
Best friend	☐	☐	☐	☐

[a] The following questions could be asked in addition to those listed in the basic questionnaire (see p. 17).

Attitudes and opinions

5. What would the following people think if they saw you smoking? (Tick one box for each person)

	Wouldn't like it	*Wouldn't mind*	*Don't know*	*Don't have any*
Father	☐	☐	☐	☐
Mother	☐	☐	☐	☐
Elder brother	☐	☐	☐	☐
Elder sister	☐	☐	☐	☐
Best friend	☐	☐	☐	☐

6. In the case of each of the following statements, tick the reply which most closely corresponds to what you think (tick one box per statement).

Statement	*True*	*False*	*Have no opinion*
Tobacco is only bad for your health if you smoke a lot every day.	☐	☐	☐
In general, smokers die younger than nonsmokers.	☐	☐	☐
A smoky atmosphere is harmful for babies and young children.	☐	☐	☐
Almost all people with lung cancer are smokers.	☐	☐	☐
A pregnant woman who smokes puts the baby she is carrying at risk.	☐	☐	☐
Tobacco use slows down the heart rate.	☐	☐	☐
Smokers may be bothersome to nonsmokers.	☐	☐	☐

7. What do you think of the following statements? (Tick one box per statement)

Statement	*Agree*	*Agree to some extent*	*Don't really agree*	*Don't agree at all*
Smoking gives pleasure.	☐	☐	☐	☐
You have to smoke if you're with friends who are smoking.	☐	☐	☐	☐
If you smoke, you don't like people trying to persuade you not to.	☐	☐	☐	☐
Tobacco isn't as harmful as they say.	☐	☐	☐	☐
My parents shouldn't allow me to smoke.	☐	☐	☐	☐
Teachers should not be allowed to smoke at their place of work.	☐	☐	☐	☐
Tobacco advertising should be banned.	☐	☐	☐	☐
The price of cigarettes should be increased so that young people stop smoking.	☐	☐	☐	☐
Smoking should be banned in public places.	☐	☐	☐	☐
When you smoke, you look grown-up.	☐	☐	☐	☐

QUESTIONNAIRE INTENDED FOR THE MEDICAL PROFESSION

The first page of this questionnaire is to be filled in by the investigator. Interviews, although more costly and time-consuming than surveys by correspondence, will doubtless be the best method in certain countries. If the survey is nevertheless carried out through the post, the first page of the questionnaire will have to be modified or discarded.

Investigator's name .....

Date: .....
Day Month Year

Place: .....

Number of inhabitants covered by the health service:

- Less than 10 000 ☐
- Between 10 000 and 50 000 ☐
- Between 50 000 and 100 000 ☐
- Between 100 000 and 300 000 ☐
- Between 300 000 and 1 000 000 ☐

The community being surveyed is mainly:

- Rural ☐
- Urban ☐
- Surburban ☐

Characteristics of the health service

The service is mainly:

- Public ☐
- Private ☐

Nature of the service:

- Non-hospital service ☐
- Hospital ☐

Number of health professionals in the centre

General practitioners	.....	Nurses	.....
Health administrators	.....	Psychologists	.....
Health educators	.....	Social workers	.....
Health visitors	.....	Medical specialists	.....
Laboratory workers	.....	Others	.....

Respondent's professional category

To which of the above-mentioned groups does the respondent belong? .....

Part to be filled in by the respondent

Professional category

To which of the following professional categories do you belong?

General practitioners	☐	Nurses	☐
Health administrators	☐	Psychologists	☐
Health educators	☐	Social workers	☐
Health visitors	☐	Medical specialists	☐
Laboratory workers	☐	Others	☐

Demographic data

1. Sex — Male ☐ Female ☐
2. Age ..... years
3. Are you
   - Single? ☐
   - Married or cohabiting with someone? ☐
   - Separated or divorced? ☐
   - A widow/widower? ☐

Smoking behaviour

4. Have you ever smoked? (If *no*, go to question 12)
   - Yes ☐
   - No ☐
5. Have you ever smoked every day for 6 months or more?
   - Yes ☐
   - No ☐
6. At the present time, do you smoke
   - Every day? ☐
   - Occasionally? ☐
   - Not at all? ☐
7. If you do not smoke at the moment, how long ago did you stop?
   - Less than 6 months ☐
   - Less than 1 year ☐
   - Less than 2 years ☐
   - More than 2 years ☐
8. How much of the following do you consume per day (if *none* write 0)?

Manufactured cigarettes	.....	Cigars	.....
Hand-rolled cigarettes	.....	Pinches of snuff	.....
Pipefuls of tobacco	.....	Quids of chewing tobacco	.....

9. Have you already made a serious attempt to stop smoking?
   - Yes ☐
   - No ☐

10. Do you think that in 5 years' time you will be smoking or using tobacco every day?
    - Certainly ☐
    - Probably ☐
    - Probably not ☐
    - Certainly not ☐

11. Do you ever smoke in front of a patient?
    - Yes ☐
    - No ☐

12. What degree of importance do you attach to the following reasons for not smoking yourself?

	Important	*Not important*
To protect your health	☐	☐
To avoid unpleasant symptoms	☐	☐
Pressure from professional colleagues	☐	☐
Unpleasantness for those round you	☐	☐
Setting a good example	☐	☐
Pressure from friends or family	☐	☐

13. In what proportion of cases do you advise patients with the following conditions to stop smoking?

Patients with:	*All or almost all*	*Between 30% and 70%*	*Very few*
Lung problems	☐	☐	☐
Severe respiratory disorders	☐	☐	☐
Cardiac complaints	☐	☐	☐
Gastroduodenal ulcer	☐	☐	☐
Pregnancy	☐	☐	☐
Use of oral contraceptives	☐	☐	☐
Lesions of the mouth or lips	☐	☐	☐
Nervousness, lack of appetite, insomnia	☐	☐	☐
Other problems treated	☐	☐	☐

14. Do you permit smoking in your waiting-room?

Yes	☐
No	☐
Not applicable	☐

15. Do you advise patients, in the following cases, not to smoke?

	Often	*Some-times*	*Rarely*	*Never*
(*a*) Patients with tobacco-related illness	☐	☐	☐	☐
(*b*) Patients who themselves bring up the question of smoking	☐	☐	☐	☐
(*c*) Patients who smoke but do not have symptoms of tobacco-related illness and do not themselves bring up the subject of smoking	☐	☐	☐	☐

16. Do you agree or not with the following statements?

	Agree	*Dis-agree*	*No opinion*
(*a*) My present knowledge is sufficient to enable me to advise a patient who wishes to stop smoking	☐	☐	☐
(*b*) The possibility of smoking in hospitals should be restricted or eliminated	☐	☐	☐
(*c*) Health professionals should receive special training on how to help patients who wish to stop smoking	☐	☐	☐
(*d*) Smoking prevention should form part of the normal training of health professionals	☐	☐	☐