



Trachoma control

**A guide for programme
managers**



**World Health
Organization**



WHO Library Cataloguing-in-Publication Data

Trachoma control : a guide for programme managers.

Published jointly by the World Health Organization, the London School of Hygiene & Tropical Medicine, and the International Trachoma Initiative.

Includes 30 slides on the assessment of trachoma and a CD-ROM which contains electronic versions of forms, an antibiotic requirement estimator, a template budget and a generic evaluation manual.

1. Trachoma - prevention and control. 2. Trachoma - drug therapy. 3. National health programs - organization and administration. 4. Program evaluation. 5. Guidelines. I. Solomon, Anthony W. II. World Health Organization. III. London School of Hygiene and Tropical Medicine. IV. International Trachoma Initiative.

ISBN 92 4 154690 5

(NLM classification: WW 215)

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Printed in Switzerland

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Preface

Trachoma is an infectious eye disease that causes blindness; it is prevalent in many poor rural communities. The World Health Organization has set the year 2020 as the target for global elimination of trachoma as a public health problem. To reach this target, the SAFE strategy (Surgery for trichiasis, Antibiotics to treat *Chlamydia trachomatis* infection, and Facial cleanliness and Environmental improvement to reduce transmission of *C. trachomatis* from one person to another) is recommended for districts and communities with endemic disease.

This guide has been written for managers of national and district trachoma control programmes. It sets out, step-by-step, what is needed to assess the magnitude and extent of the trachoma problem in the area and how to plan, implement, monitor and evaluate a programme to control, and ultimately eliminate, trachoma.

Throughout this guide, the term 'community' is used to refer to the minimum number of persons for whom mass trachoma control is to be implemented (for example, a defined group of households, one village or a group of neighbouring villages). The term 'district' is defined as the usual administrative unit for health care management, and the term 'region' is used to indicate the administrative unit one level higher than the district. These definitions and definitions of other terms used are found in the glossary.

Templates for a number of forms recommended for use in a programme can be found in the annex. To allow adaptation of the forms for use in a specific programme, electronic versions are available on the CD-ROM that accompanies this guide. The CD-ROM also contains an antibiotic requirement estimator (section 3.2.4), a template budget (section 4.5) and a generic evaluation manual (section 5.3).

We hope you find these materials useful.

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Acknowledgements

The authors are grateful to

Alistair Bolt,
Dr Peter Kilima,
Dr Jacob Kumaresan,
Dr Silvio P. Mariotti,
Declan Moore,
Dr Edith Ngirwamungu,
Shekhar Sharma,
Sakuntala Singh,
Christian Stengel and
Jennifer Stoltz

for guidance and for comments on drafts of this guide.

Victoria Francis and
Teresa Robertson

for assistance with design.

Rosa Arques

for excellent administrative support.

1. Background

Trachoma is a major cause of blindness. It affects very poor people living in rural areas, where access to water and sanitation is limited. It is caused by a bacterium called *Chlamydia trachomatis*, which is passed from the eyes of one person to those of another by flies, fingers or shared cloths or towels. Repeated infection with these bacteria over many years produces scarring of the inner part of the upper eyelid, which turns the lashes inwards so that they scratch the eyeball. Eyelid scarring also causes poor tear secretion and drying of the eye. These conditions increase the risk of corneal ulceration and scarring. Scarring of the cornea impairs vision.

C. trachomatis infections of the eye are commonest in young children. They are associated with a group of clinical signs known as 'active trachoma'. The condition in which the eyelashes are turned inwards is called 'trichiasis'. A person's risk of trichiasis probably increases in relation to the total number, duration and intensity of *C. trachomatis* infections during his or her lifetime. As a result, trichiasis tends to occur more commonly in women, because they tend to spend more time than men do with children, who are most frequently infected. It also becomes more and more common with increasing age. Implementation of trachoma control activities is prioritized in communities where the prevalence of active trachoma in children aged 1–9 years is 10% or higher or where the prevalence of trichiasis in people aged 15 years and over is 1% or higher. Places in which trachoma is known to be endemic are shown in Figure 1. Within many of these areas, however, the distribution of trachoma is focal, affecting certain communities, and within these communities only some households. In some areas, trachoma is a problem in nearly all rural communities.

Blindness due to trachoma is irreversible once it has occurred, but it can be prevented. The SAFE strategy (Surgery for trichiasis, Antibiotics to treat *C. trachomatis* infection, and Facial cleanliness and Environmental improvement to reduce transmission of *C. trachomatis* from one person to another) is recommended for the control of trachoma. With the SAFE strategy, the World Health Organization (WHO) and its partners are targeting the Global Elimination of Trachoma as a cause of blindness by the year 2020 (GET2020). GET2020 is one element of a broader strategy known as 'VISION 2020: The Right to Sight', which has as its goal the elimination of all avoidable blindness by the same year.

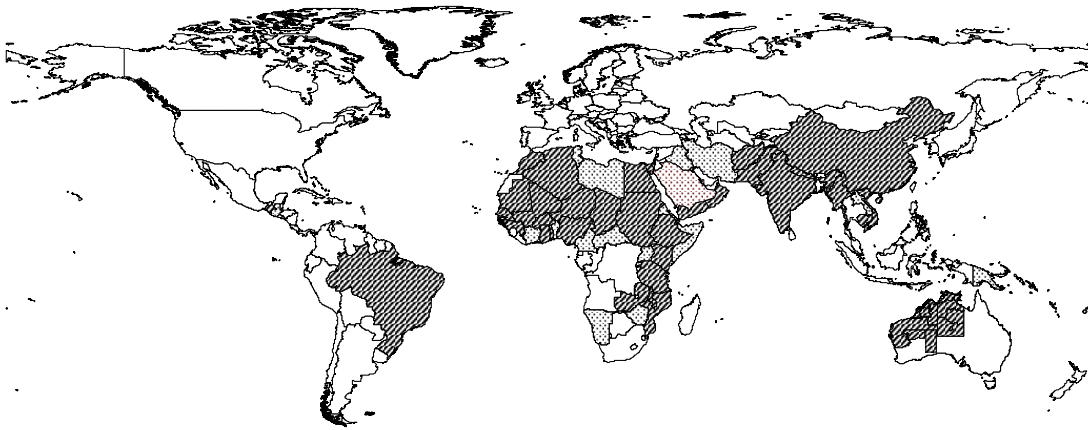


Figure 1. Global distribution of trachoma. Administrative areas in which trachoma is known to be a public health problem are shaded dark grey. Areas in which trachoma is believed to be a problem, but for which no data are available, are shaded light grey.

2. Assessment

People are examined for clinical signs of trachoma for one of two reasons:

- (1) to determine whether they have trichiasis and therefore require surgery; or
- (2) to measure the prevalence of clinical signs of trachoma.

The latter allows determination of whether trachoma is a public health problem, assists in selection of locations in which interventions are a priority and provides baseline or follow-up data for monitoring and evaluation of the control programme.

In this section, we explain how examinations and assessments are carried out. Even if you do not examine people for trachoma yourself, it is important to understand how it should be done and what your examiners are looking for. Pictures of a normal conjunctiva and the signs of the WHO simplified grading scheme are shown on the enclosed **trachoma grading card**; if you are unfamiliar with these signs, it is recommended that you examine the card as you read.

2.1 How to grade trachoma

2.1.1 *Know the appearance of the normal eye*

In a normal eye, none of the eyelashes touches the eyeball. The cornea is smooth and clear. The tarsal conjunctiva is pink, smooth, thin and transparent; there are normally large, deep-lying blood vessels that run vertically over its entire area.

2.1.2 *Know the appearance of TT, CO and TF*

The WHO simplified grading scheme [1] comprises five signs. For programme planning, monitoring and evaluation, three of these five signs are particularly important: trachomatous inflammation – follicular (TF), trachomatous trichiasis (TT), and corneal opacity (CO). The prevalence of TF in children aged 1–9 years is the key index for determining whether an area needs intervention with the A, F and E components of SAFE. The prevalence of TT determines the probable need for surgical services. The prevalence of CO is a (rough) measure of the burden of blindness and visual impairment due to trachoma.

At an individual level, the presence of TT means that that person needs surgery to reduce the risk that he or she will develop CO. The presence (and area) of

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