

# *IARC Handbooks of Cancer Prevention Volume 19*

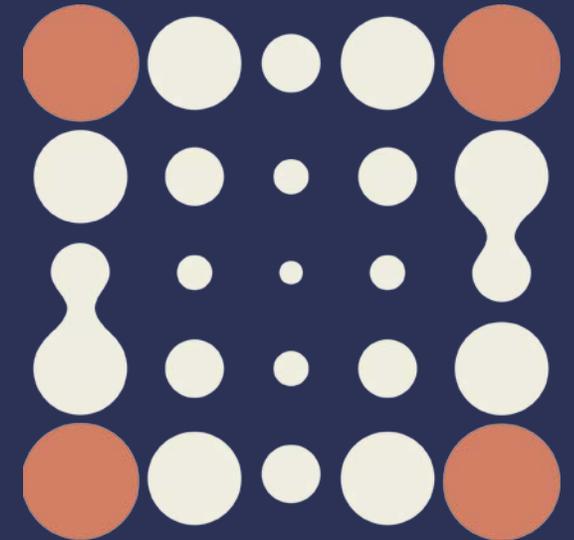
## The 3-in-1 *Handbook* of oral cancer prevention

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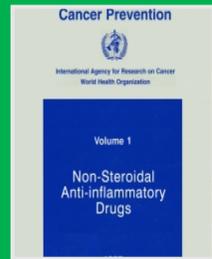
International Agency  
for Research on Cancer



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# Topics covered by the *IARC Handbooks*



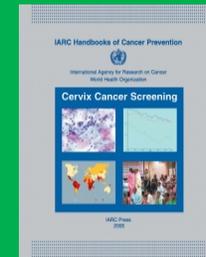
## Primary prevention

Interventions or exposures with cancer outcome



## Primary prevention

Interventions with “exposure to risk/preventive factor” outcome



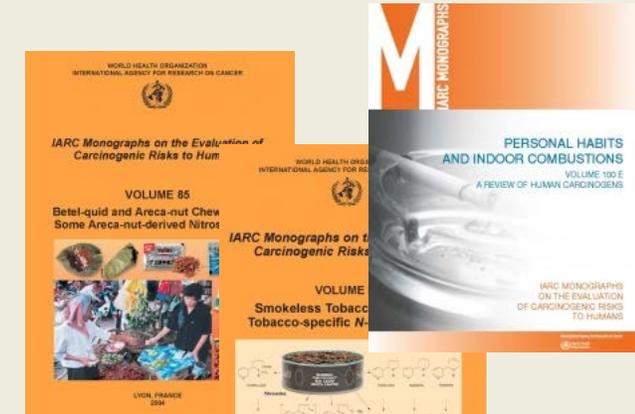
## Secondary prevention

Screening  
Early detection

# Scope of *Handbook Volume 19*

- First-time evaluation of prevention measures for oral cancer control
- Based on *IARC Monographs* Group 1 agents with *sufficient evidence* for oral cancer:
  - Tobacco smoking
  - Consumption of alcoholic beverages
  - Use of smokeless tobacco
  - Use of betel quid with or without tobacco
  - Human papillomavirus type 16 (HPV16)
- Oral cancer is highly prevalent in South Asia, South-East Asia, and the Western Pacific Islands and is linked to use of smokeless tobacco (SLT) and areca nut (AN)
  - special emphasis on the oral cancer burden in these regions
    - ✓ Interventions\* of primary and secondary prevention
    - ✓ Interventions\* that act on precancerous lesions or cancer

\* The term “intervention” is to be understood as also including “exposure”



Oral cavity

- Alcoholic beverages
- Betel quid with tobacco
- Betel quid without tobacco
- Human papillomavirus type 16
- Quitting smoking
- Smokeless tobacco
- Tobacco smoking



# Topics covered in *IARC Handbook Volume 19*



## Primary prevention

Impact of reduction of exposure to known risk factors on cancer risk



## Primary prevention

Interventions to quit use of smokeless tobacco or areca nut



## Secondary prevention

Screening for oral cancer by clinical oral examination

# Primary prevention – Interventions\* reviewed



## Primary prevention – reducing consumption of SLT/AN

- Interventions
  - Behavioural interventions
  - Pharmacological interventions
  - Combined interventions
- Policies
  - Smokeless tobacco
  - Areca nut-related products

Step 1

## Primary prevention – reducing incidence of oral cancer/oral potentially malignant disorders (OPMDs)

- Smokeless tobacco (SLT)
- Areca nut (AN) products with tobacco
- Areca nut products without tobacco
- Smoked tobacco
- Alcoholic beverages

Step 2

\* The term “intervention” is to be understood as also including “exposure”

# Assessment of the strength of the evidence in studies reviewed

## Sufficient evidence

Cancer-preventive association between the intervention and oral cancer is **established**.

## Limited evidence

Cancer-preventive association between the intervention and oral cancer is **plausible**.

## Inadequate evidence

**No conclusion** can be drawn about a cancer-preventive association between the intervention and oral cancer.

## Lack of cancer prevention

Evidence suggesting **lack of effect**.

# Final evaluations

## Primary prevention – Step 2

What is the strength of the evidence that quitting the risk factor reduces the risk of cancer compared with current users?

Risk factor	Strength of evidence
Smoked tobacco	<i>Sufficient</i>
Smokeless tobacco	<i>Inadequate</i>
Areca nut products (including betel quid) with or without tobacco	<i>Sufficient</i>
Alcoholic beverages	<i>Sufficient</i>

## Primary prevention – Step 1

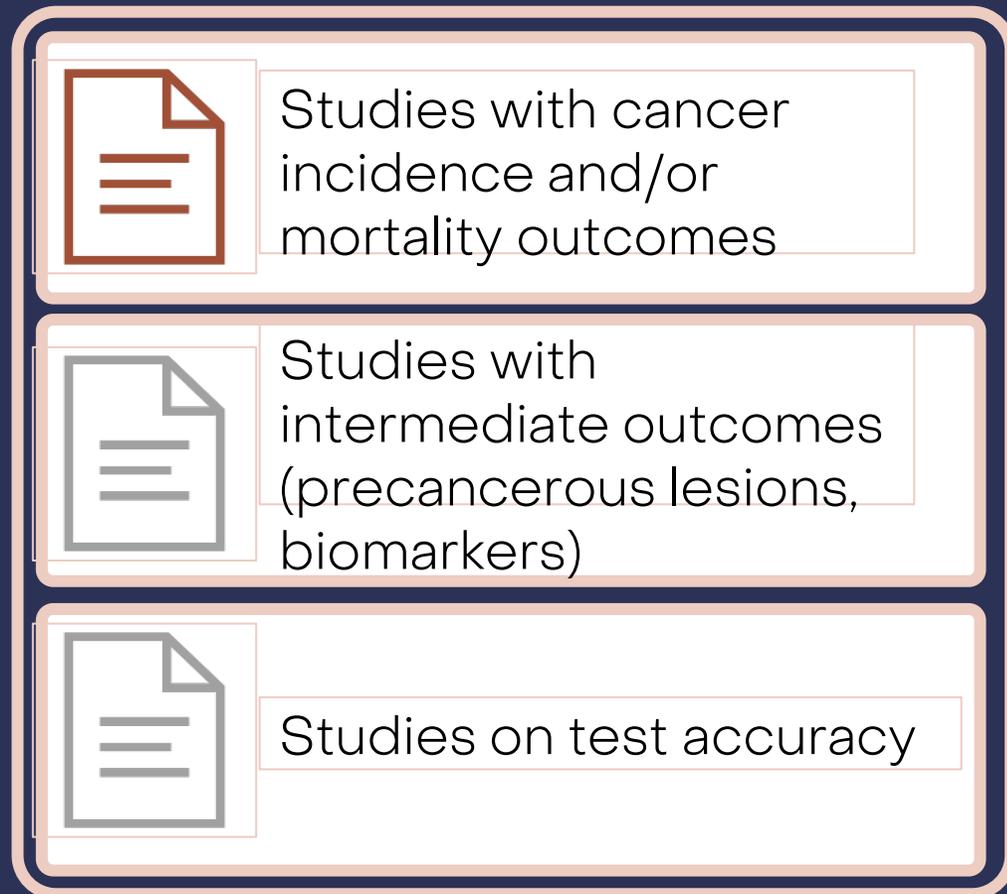
What is the strength of the evidence that interventions for quitting SLT/AN products are effective?

Intervention	Strength of evidence
Behavioural interventions in adults	<i>Sufficient</i>
Behavioural interventions in youth	<i>Limited</i>
Pharmacological interventions	<i>Limited</i>
Combined pharmacological and behavioural interventions	<i>Limited</i>

Note: No overall evaluation could be conducted because the agents reviewed in Step 1 did not match the agents reviewed in Step 2

# Secondary prevention – Evaluations

- Takes into account all available research to make an evaluation (efficacy and effectiveness studies)
- Harms and balance of benefits and harms are described in the qualifying statement



## OVERALL EVALUATION OF A SCREENING METHOD

Group A

The screening method *is established* to reduce cancer incidence or mortality

Group B

The screening method *may* reduce cancer incidence or mortality

Group C

The screening method *is not classifiable* as to its capacity to reduce cancer incidence or mortality

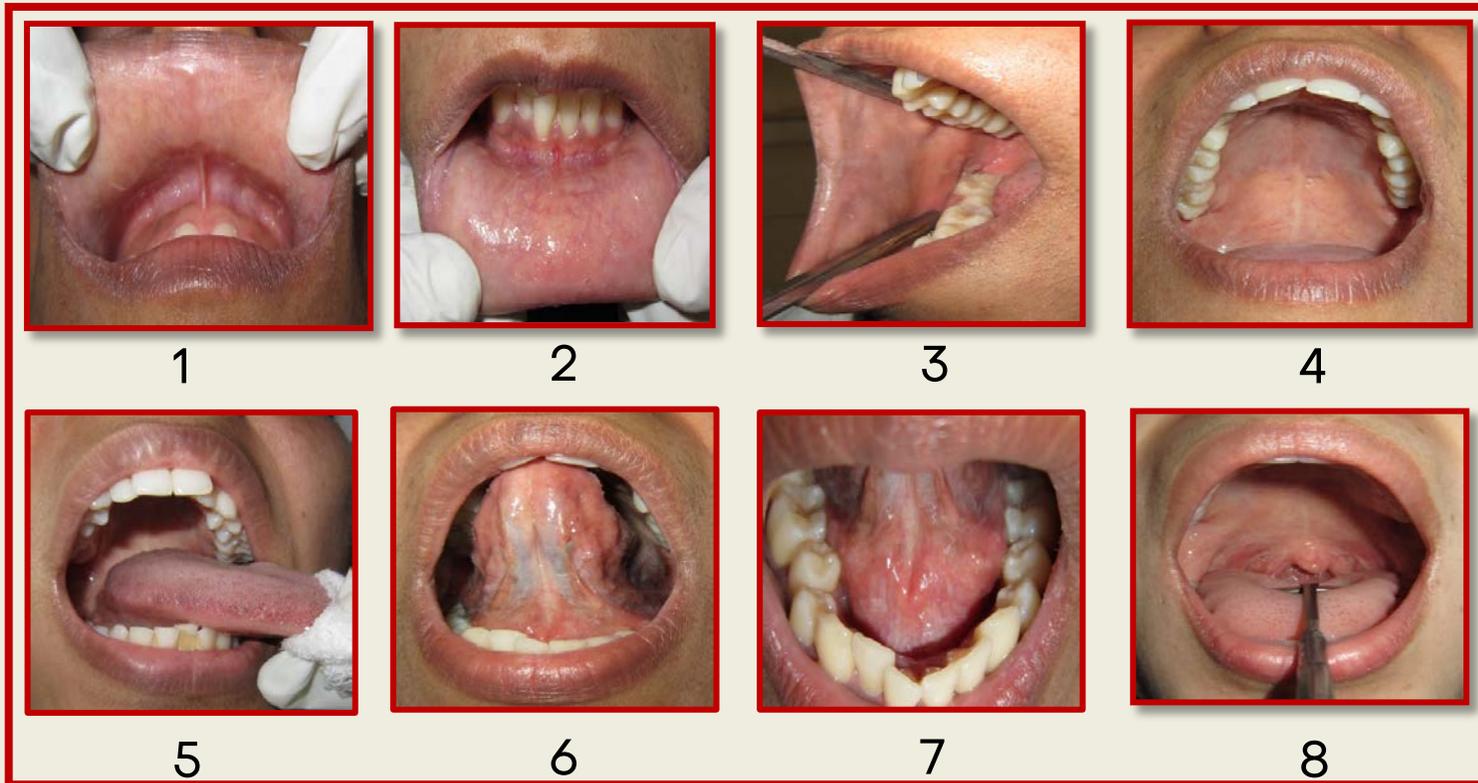
Group D

The screening method *may lack the capacity* to reduce cancer incidence or mortality

# Final evaluation

## Secondary prevention – Screening

Screening method	Evaluation
Clinical oral examination in high-risk populations	Group B



# Participants



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<https://handbooks.iarc.fr/>



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