

## TABLE OF CONTENT

Content	Page
TITLE PAGE.....	i
PAGE OF REQUIREMENT.....	ii
AGENDA REPORT.....	iii
APPROVAL OF ADVISOR.....	iv
APPROVAL OF DEAN.....	v
DEDICATION.....	vi
ASSERTION.....	vii
ACKNOWLEDGEMENT.....	viii
TABLE OF CONTENTS.....	x
LIST OF FIGURES.....	xii
LIST OF ABBREVIATION.....	xiii
ABSTRACT.....	xiv
INTISARI.....	xv
I.INTRODUCTION.....	1
A. Background.....	1
B. Scope and Focus of Review .....	5
A. Review Question .....	6
B. Review Objective .....	6
C. Benefits of Review .....	6
II. REVIEW METHOD .....	7
A. Database Used.....	7
B. Keywords.....	7
C. Inclusion Criteria.....	7
D. Exclusion Criteria .....	7
III. DISCUSSION .....	8
A. Chemical composition and toxicity of Portland cement.....	8
1. Definition and composition of Portland cement .....	8
2. Source of exposure of Portland cement dust towards human	10
3. Toxicity of Portland cement dust .....	11
B. Chemical composition and toxicity of asbestos.....	18
1. Definition and composition of asbestos .....	18
2. Source of exposure of asbestos dust towards human.....	20
3. Toxicity of asbestos .....	21
C. Oral mucosa.....	22
1. Anatomy of Oral Mucosa .....	22
2. Functions of oral mucosa.....	27
3. Structural variation of the oral mucosa.....	27
D. Pathologic condition of oral epithelial cells.....	29



1. Cell death .....	29
2. Genotoxicity .....	31
E. Formation of micronuclei caused by Portland cement and asbestos in oral mucosa.....	36
IV. CONCLUSION AND SUGGESTIONS.....	41
A. Conclusion .....	41
B. Suggestions .....	41
BILIOGRAPHY .....	42