

TABLE OF CONTENTS

SUMMARY	1
LIST OF ABBREVIATIONS	5
INTRODUCTION	9
1. Epidemiology of chronic respiratory diseases	11
1.1. Epidemiology of CRD in the world	11
1.2. Epidemiology of CRD in Vietnam	12
2. Three major chronic respiratory diseases	13
2.1. Chronic obstructive pulmonary disease	13
2.1.1. Definition	13
2.1.2. Clinical features	13
2.1.3. Genetic mechanisms	14
2.1.4. Spirometry	14
2.1.5. COPD Management	15
2.2. Asthma	16
2.2.1. Definition	16
2.2.2. Clinical phenotypes	16
2.2.3. Cellular mechanisms.....	16
2.2.4. Spirometry	17
2.2.5. Asthma management	18
2.3. Asthma and Chronic obstructive pulmonary disease Overlap Syndrome.....	18
2.3.1. Definition	18
2.3.2. Clinical features	18
2.3.3. Diagnosis criteria	18
2.3.4. Mechanisms	19
2.3.5. Initial treatment	19
3. The main causes	20
3.1. Genetic factors	20
3.2. Environmental factors	21
3.2.1. Tobacco smoke	21
3.2.2. Air pollution	21
3.2.2.1. Outdoor pollution	21
3.2.2.2. Indoor pollution	22
3.2.3. Occupational factors	24
3.2.4. History of pulmonary tuberculosis	25

3.2.5. Allergen sensitization	25
3.2.5.1. The common allergens	25
3.2.5.2. The role of allergic sensitization in chronic respiratory diseases ...	29
4. The potential risk factors related to CRD in HCMC	30
4.1. Outdoor pollution	30
4.2. Indoor pollution	30
4.3. Occupational factors	31
4.4. High prevalence of smokers	31
4.5. High prevalence of helminthiasis	31
4.6. High prevalence of pulmonary tuberculosis	31
5. Pham Ngoc Thach Hospital	32
AIMS OF THE THESIS	35
1. General background	37
2. Aims	37
PRESENTATIONS OF THE STUDIES	39
Part 1. Prevalence and risk factors of allergen sensitization among CRD patients	41
Part 2. Skin prick test as a method to screen dust mite sensitization in CRD population	59
Part 3. The risk of mite sensitization in native and migrant population, in regard with environment factors	69
Part 4. A new definition of the three major CRD phenotypes	87
GENERAL CONCLUSIONS AND PERSPECTIVES	109
REFERENCES	115