



WORK-RELATED PNEUMOCONIOSIS

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Leticia Peres Mendonça Carvalho¹, Celso Saleh Neto², Lucas Pissolato³ and Luana Bretas dos Santos Leonhardt⁴

ABSTRACT

Pneumoconiosis represents a serious public health problem in Brazil, with a higher incidence in the Southeast region, especially in the states of Minas Gerais and São Paulo. The analysis of the data reveals the urgent need for actions to control and prevent these diseases in the workplace, focusing on the populations at greatest risk, such as men and workers in the Southeast region. The implementation of effective interventions, such as health education actions, company inspections, and periodic examinations (chest X-rays and pulmonary function tests), is essential for the early detection of cases and the improvement of the prognosis of workers exposed to agents that cause pneumoconiosis.

Keywords: Pneumoconiosis. Occupational Health. Occupational Diseases. Occupational Risks. Public health.

¹ UNIPTAN

E-mail: leticiaperes76@gmail.com

² UNIPTAN

E-mail: celsoaleh3@gmail.com

³ Federal University of Rondônia Foundation

E-mail: pissolato.lucas18@gmail.com

⁴ UNIVALE

E-mail: draluanabretas@gmail.com

INTRODUCTION

Pneumoconiosis is a generic term that encompasses a group of diffuse interstitial lung diseases caused by the inhalation of dust in the workplace. The most common etiologic agents include silica, asbestos, coal dust, and metal oxides. These substances, when inhaled repeatedly, trigger a chronic inflammatory process in the lungs, leading to severe and irreversible lung changes. Pneumoconioses usually have a long latency period, which means that symptoms may not manifest for years after the initial exposure. The most affected work sectors include mining, metallurgy, ceramics, glass industry, mineral processing, construction, timber and agriculture.

OBJECTIVE

To analyze the incidence of pneumoconiosis cases in the different states of Brazil and the factors that contribute to the prevalence of these diseases in the period from 2020 to 2022.

METHODOLOGY

This is a descriptive cross-sectional study that used data from DATASUS (Department of Informatics of the Unified Health System) regarding diagnosed cases of pneumoconiosis in Brazilian states between 2020 and 2022.

RESULTS

The Southeast region of Brazil concentrates most of the diagnosed cases of pneumoconiosis, especially in the states of Minas Gerais and São Paulo. This prevalence is directly related to the economic activity of the region, which concentrates a large part of the manufacturing industry, civil construction, mining and other risk sectors. The results indicate a direct correlation between economic activity and exposure to agents that cause pneumoconiosis.

Notificações por UF de residência segundo Sexo
Período: 2020-2022

Sexo	AC	AM	RR	PA	TO	CE	RN	AL	SE	BA	MG	RJ	SP	PR	SC	RS	MS	MT	GO	Total
TOTAL	1	3	3	10	5	2	34	1	1	76	179	4	191	51	7	107	6	2	20	703
Masculino	-	3	3	8	5	2	28	1	1	73	177	4	187	43	6	106	6	2	19	674
Feminino	1	-	-	2	-	-	6	-	-	3	2	-	4	8	1	1	-	-	1	29

Fonte: Ministério da Saúde/SVS - Sistema de Informação de Agravos de Notificação - Sinan Net

Notas:

1. Períodos Disponíveis / Período - Correspondem aos anos de notificação dos casos.
2. CAT - Comunicação de acidente de trabalho.
3. O campo "CNAE - Ativ. Econ." considera os códigos referentes as tabelas CNAE 1.0.
4. Dados a partir 2020 do Espírito Santo não estão disponíveis neste sistema, pois são oriundos do Sistema de Informação e-SUS VS, em uso pelo estado desde janeiro de 2020.
5. Dados de 2006 a 2017 revisados e atualizados em 15/08/2022.
6. Dados de 2018 revisados e atualizados em 22/08/2022.
7. Dados de 2019 a 2022 revisados e atualizados em 16/01/2023, sujeitos à revisão.

*Dados disponibilizados no TABNET em 01/2023

Legenda:

- Dado numérico igual a 0 não resultante de arredondamento.
- 0; 0,0 - Dado numérico igual a 0 resultante de arredondamento de um dado originalmente positivo.

DISCUSSION

The results of this study confirm the importance of surveillance and prevention of pneumoconiosis in Brazil, especially in the Southeast region. The high prevalence of cases in this region, associated with its intense industrial and mining activity, suggests the need for stricter control and inspection measures in the workplace. It is essential for companies to adopt adequate protective measures for their workers, such as the use of personal protective equipment (PPE) and the implementation of dust control measures. In addition, it is crucial that workers are informed about the risks and receive adequate training for the correct use of PPE.

CONCLUSION

Pneumoconiosis represents a serious public health problem in Brazil, with a higher incidence in the Southeast region, especially in the states of Minas Gerais and São Paulo. The analysis of the data reveals the urgent need for actions to control and prevent these diseases in the workplace, focusing on the populations at greatest risk, such as men and workers in the Southeast region. The implementation of effective interventions, such as health education actions, company inspections, and periodic examinations (chest X-rays and pulmonary function tests), is essential for the early detection of cases and the improvement of the prognosis of workers exposed to agents that cause pneumoconiosis.

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