HIV infection, mainly scarifications and/or tattoos (23.1%), drug abuse (12.9%) or history of hepatitis B and/or C (12%). In cases of unknown sources, PEP was prescribed if the BEA occurred in a suspicious socio-epidemiological context. The PEP was started within four hours of the BEA in 42.8% of cases and covered 28 days in 56.8% of cases. Poor compliance with PEP was noted in 55% of cases. The serological follow-up at one, three and six months was carried out in 11.6%, 6.5% and 4.5% of cases, respectively. Positive HIV serology of the source was significantly associated with compliance to serological follow-up at one month (p=0.023) and at three months (p=0.029). None of the cases had a seroconversion.

Conclusion A well-managed PEP prevents the risk of HIV seroconversion following a BEA. It is crucial to develop a national updated guideline for management of BEA and PEP.

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**SMALL BUSINESS EXPERIENCES WITH COVID-19 PROTECTION MEASURES: A CROSS-SECTIONAL STUDY COMPARING EMPLOYER AND EMPLOYEE PERSPECTIVES IN RURAL NEW BRUNSWICK.**

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**Introduction** There is a limited understanding of what is known about the implications of recent occupational health and safety (OHS) protection measures on small business management and employees during the coronavirus disease (COVID-19) pandemic. The study examines the different COVID-19 measures that have been used by small businesses in Miramichi, New Brunswick.

**Objectives** The study identifies the most common OHS protection measures in use within small businesses during COVID-19 and explores whether differences exist in perspectives of employees and managers of small businesses on the most effective OHS protection measures used.

**Methods** Recruitment was collected through convenience sampling between February 6th, 2021 and March 9th, 2021. Participants for the online survey included business management personnel and employees from Miramichi, NB. The cross-sectional study used a web-based survey containing 25 items concerning demographics (n=7), experiences working during COVID-19 (n=7), and information and experiences with characteristics of personal protective equipment (PPE) used (n=11).

**Results** Results showed moderate ratings of positive endorsement (60%) from both employers and employees on the use of COVID-19 OHS protection measures. No significant differences were found between employer and employee perceptions on the effectiveness of employed protection measures. The most frequently used protection measures utilized in these small businesses constitute the three lowest levels of control represented on the NIOSH Hierarchy of Controls: engineering controls, administrative controls, and PPE.

**Conclusion** This study provides new knowledge through the collection of stakeholder perspectives about how current workplace strategies to prevent the spread of COVID-19 in small businesses and may help guide future recommendations for small businesses dealing with other OHS and public health crises.

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**SERIOUS WORK ACCIDENTS IN CIVIL CONSTRUCTION IN BRAZIL IN 2019**

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**Introduction** Civil construction is responsible for most occupational accidents, generating social and economic losses and causing serious damage to workers' health.

**Objective** To characterize the cases of serious work accidents (SWA) reported in civil construction in Brazil.

**Methodology** This is a descriptive study with a quantitative approach with secondary data in the public domain extracted from SWA records from Notifiable Diseases Information System occurred in 2019. Population data were obtained from the Continuous National Household Sample Survey, from the Brazilian Institute of Geography and Statistics. The incidence coefficient was calculated and presented by 100 thousand workers.

**Results** 10,551 cases of SWA were reported in civil construction in 2019, most of them concentrated in the Southeast (33.14%) and South (22.72%) regions of the country. The occupations with the highest number of registered cases were bricklayers (70.10%), installation electricians (12.10%) and carpenters (10.56%). Most of the injured workers were male (99.02%), black (57.35%), aged between 30–59 years (73.19%) and with incomplete elementary education (31.75%). Accidents were mainly caused by contact with other and unspecified machinery (8.81%), fall on and from scaffolding (6.81%) and fall from, out of or through building or structure (5.94%). The most affected part of the body was the hands (27.28%) and most cases evolved with some type of disability (61.73%). Fatal accidents stand for 3.07%. The incidence coefficient was 154.64 cases/100 thousand workers.

**Conclusion** SWA were concentrated in the most productive regions of the country and occur mainly in adult workers, black and with low education. In addition, it assumes that the causes of accidents were mainly related to the work environment and the use of individual and collective protective equipment. Thus, measures for the prevention and promotion of workers’ health are recommended to minimize the occurrence of work accidents.

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**BIOLOGICAL AGE AS AN INDICATOR OF THE HEALTH STATE OF MINERS**

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**Introduction** The study of the biological age of miners living and working in the central Kazakhstan allows us to talk about such a phenomenon as premature aging. The main group of men with a moderate acceleration in the rate of aging was made up of workers in occupations with the most harmful working conditions, i.e., tunnellers and drillers with more than 10–15 years of work experience.

**Objectives** The purpose of our research was to study the health status of workers in the mining industry of central Kazakhstan, based on the results of determining the biological age.