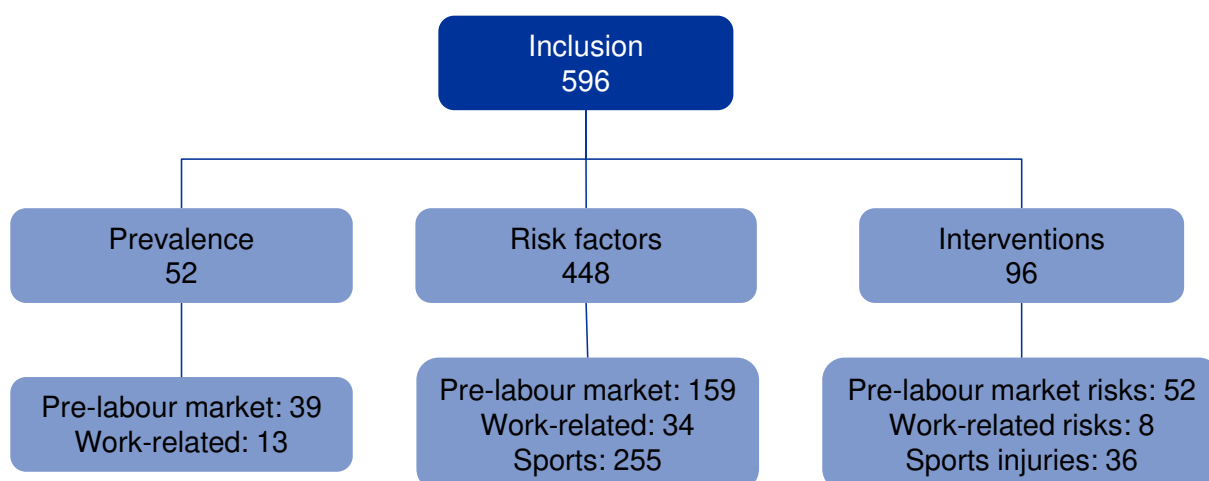


Figure 2 **Classification of included studies according to population and study content**

Altogether, we could identify a large number of studies ($n = 448$) on risk factors for MSDs. The risk factors analysed by the studies or reviews are listed in Table 7. Some studies and most reviews analysed multiple risk factors.

Table 7 **Pre-labour market and work-related risk factors for MSDs analysed or identified in the studies (number of studies/reviews in brackets, multiple answers possible)**

Factor	Pre-labour market risk factors	Work-related risk factors
Physical	Nutrition and weight	Physical workload (9)
	Nutrition (17)	Occupation/industrial sector
	Body weight (38)	Medical professions (15)
	Lifestyle	Musicians (6)
	Physical activity (20)	
Psychosocial	Leisure activity (12)	
	Sleep habits (8)	
	Smoking (8)	
	Alcohol consumption (1)	
	Postural problems	
Socioeconomic	Sedentary behaviour (15)	
	Use of electronic devices (19)	
	Backpack load (21)	
Environmental	Playing an instrument (10)	
Individual	Mental health factors (25)	Psychosocial factors (2)
	Socioeconomic factors (6)	Socioeconomic factors (1)
	Environmental factors (1)	Environmental factors (1)
	Age (6)	Gender (4)
	Gender (7)	

However, with so many relevant risk factor studies, not every study found could be described in detail. Therefore, we decided to report the risk factors in a narrative matter. Especially in the field of sports as a risk factor for injuries (where $n = 255$ studies were found), only the topic's surface could be explored.

Additionally, we identified 96 studies describing preventive measures to counteract MSD risks and to improve the health of children and young workers. The interventions covered education (18), exercises (23), manipulative therapy (7), ergonomic measures (9), neuromuscular training (2), orthopaedic aids (1) and sports injury prevention (36). We also decided to report these interventions in a narrative matter.