



## Musculoskeletal Health Current Awareness Update

**March 2020**

Welcome to the monthly **Musculoskeletal Health Current Awareness Update** (MSKH-CAU), produced by **PHE Knowledge and Library Services** and the **MSK Health team**. The purpose of this update is to provide the latest research to inform future policy and practice to support the prevention of Musculoskeletal (MSK) conditions.

Public Health England, jointly with NHS England, Versus Arthritis and partners, published the **Musculoskeletal Health: 5 Year Prevention Strategic Framework**, setting out a clear statement of commitments to promote good MSK health to prevent MSK conditions across the life course. The MSKH-CAU resource will provide evidence and knowledge to support the decisions made by health and social care professionals, the wider public health workforce and employers.

To receive these Current Awareness Updates regularly, sign-up [here](#).

Please note that not all the articles and resources referred to in this alert are freely available. Some articles may require an Athens username and password, and for PHE and NHS staff, these can be obtained [here](#). If you do not work for PHE or the NHS, you may want to approach your **local health library service** to discuss how you may have access to library services.

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- **Prevention of MSK conditions across the life course**
- **Living well with MSK conditions**
- **MSK in child and adolescent health**
- **MSK and multi-morbidity**
- **MSK Health and inequalities**
- **MSK Health and nutrition**
- **MSK Health and workplace wellbeing**
- **Outcomes and Cost Effectiveness**

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## **Prevention of MSK Conditions Across the Life Course**

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### **Time and Repetitions Needed to Train Patients with Knee Pain on a Home Exercise Program: Are Learning Styles Important?**

24 Mar 2020

Related Articles Time and Repetitions Needed to Train Patients with Knee Pain on a Home Exercise Program: Are Learning Styles Important? Cureus. 2020 Feb 14;12(2):e6988 Authors: Satiş S, Erdem C  
Abstract Objective This study was designed to identify the amount of time and number of repetitions needed to explain a home exercise program recommended for most of our patients, as well as to gauge how

**The addition of blood flow restriction to resistance exercise in individuals with knee pain: a systematic review and meta-analysis.**

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22 Mar 2020

The addition of blood flow restriction to resistance exercise in individuals with knee pain: a systematic review and meta-analysis. *Braz J Phys Ther.* 2020 Mar 12;; Authors: Cuyul-Vásquez I, Leiva-Sepúlveda A, Catalán-Medalla O, Araya-Quintanilla F, Gutiérrez-Espinoza H Abstract BACKGROUND: Blood flow restriction (BFR) is an effective clinical intervention used to increase strength in healthy

### **Neighborhood built and social environment and meeting physical activity recommendations among mid to older adults with joint pain.**

08 Mar 2020

Related Articles Neighborhood built and social environment and meeting physical activity recommendations among mid to older adults with joint pain. *Prev Med Rep.* 2020 Jun;18:101063 Authors: Gebauer S, Schootman M, Xian H, Xaverius P Abstract Arthritis is a leading cause of disability in the United States, with the most efficacious treatments being physical activity (PA)

### **Osteoporosis: assessing the risk of fragility fracture**

19 Mar 2020

Osteoporosis: assessing the risk of fragility fracture Book. 2017 02 Authors: Abstract Osteoporosis is a disease characterised by low bone mass and structural deterioration of bone tissue, with a consequent increase in bone fragility and susceptibility to fracture

### **Smoking-induced risk of osteoporosis is partly mediated by cadmium from tobacco smoke: The MrOS Sweden Study.**

20 Mar 2020

Related Articles Smoking-induced risk of osteoporosis is partly mediated by cadmium from tobacco smoke: The MrOS Sweden Study. *J Bone Miner Res.* 2020 Mar 19;; Authors: Li H, Wallin M, Barregard L, Sallsten G, Lundh T, Ohlsson C, Mellström D, Andersson EM Abstract Cigarette smoking is a risk factor for osteoporosis and bone fracture

### **Reduced strength, poor balance and concern about falls mediate the relationship between knee pain and fall risk in older people.**

08 Mar 2020

Related Articles Reduced strength, poor balance and concern about falls mediate the relationship between knee pain and fall risk in older people. *BMC Geriatr.* 2020 Mar 06;20(1):94 Authors: Hicks C, Levinger P, Menant JC, Lord SR, Sachdev PS, Brodaty H, Sturnieks DL Abstract BACKGROUND: Pain is an independent risk factor for falling

### **Exercise programs to reduce the risk of musculoskeletal injuries in military personnel: A systematic review and meta-analysis.**

13 Mar 2020

Related Articles Exercise programs to reduce the risk of musculoskeletal injuries in military personnel: A systematic review and meta-analysis. *PM R.* 2020 Mar 11;; Authors: Dijkma I, Arslan IG, van Etten-Jamaludin FS, Elbers RG, Lucas C, Stuiver MM Abstract OBJECTIVE: To evaluate the effect of exercise programs on reduction of musculoskeletal injury (MSI) risk in military populations

### **Psychosocial Interventions Help Facilitate Recovery Following Musculoskeletal Sports Injuries: A Systematic Review.**

19 Mar 2020

Psychosocial Interventions Help Facilitate Recovery Following Musculoskeletal Sports Injuries: A Systematic Review. *Phys Sportsmed.* 2020 Mar 18;; Authors: Gennarelli SM, Brown SM, Mulcahey MK

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Abstract Context: Recent research demonstrates a connection between psychological factors and return to play following a musculoskeletal sports injury

## **Pain Education With Therapeutic Exercise in Chronic Nonspecific Low Back Pain Rehabilitation: A Critically Appraised Topic.**

28 Feb 2020

Pain Education With Therapeutic Exercise in Chronic Nonspecific Low Back Pain Rehabilitation: A Critically Appraised Topic. J Sport Rehabil. 2020 Feb 27;:1-6 Authors: Jones KC, Tocco EC, Marshall AN, Valovich McLeod TC, Welch Bacon CE Abstract Clinical Scenario: Low back pain is widely prevalent in the general population as well as in athletes

## **Generating alpha: can we prevent a back pain bubble?**

03 Mar 2020

Related Articles Generating alpha: can we prevent a back pain bubble? J Neurosurg Spine. 2020 Mar 06;:1-3 Authors: Kolcun JPG, Basil GW, Ghogawala Z, Wang MY PMID: 32114532 [PubMed - as supplied by publisher]

## **Musculoskeletal adaptations to strength training in frail elderly: a matter of quantity or quality?**

25 Feb 2020

Musculoskeletal adaptations to strength training in frail elderly: a matter of quantity or quality? J Cachexia Sarcopenia Muscle. 2020 Feb 24;: Authors: Aas SN, Breit M, Karsrud S, Aase OJ, Rognlien SH, Cumming KT, Reggiani C, Seynnes O, Rossi AP, Toniolo L, Raastad T Abstract BACKGROUND: The improvement in muscle strength generally exceeds the increase in muscle size following strength training

## **A comparison of bone-targeted exercise strategies to reduce fracture risk in middle-aged and older men with osteopenia and osteoporosis: LIFTMOR-M semi-randomized controlled trial.**

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Related Articles A comparison of bone-targeted exercise strategies to reduce fracture risk in middle-aged and older men with osteopenia and osteoporosis: LIFTMOR-M semi-randomized controlled trial. J Bone Miner Res

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## **Living well with MSK conditions**

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### **Persons in remission from recurrent low back pain alter trunk coupling under dual-task interference during a dynamic balance task.**

19 Mar 2020

Related Articles Persons in remission from recurrent low back pain alter trunk coupling under dual-task interference during a dynamic balance task. Exp Brain Res. 2020 Mar 17;: Authors: Rowley KM, Winstein CJ, Kulig K Abstract This study investigated effects of cognitive dual-task interference and task prioritization instructions on task performance and trunk control during a dynamic balance task

### **Are weather conditions associated with chronic musculoskeletal pain? Review of results and methodologies.**

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Related Articles Are weather conditions associated with chronic musculoskeletal pain? Review of results and methodologies. Pain. 2020 Apr;161(4):668-683 Authors: Beukenhorst AL, Schultz DM,

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McBeth J, Sergeant JC, Dixon WG Abstract Many people believe that weather influences chronic musculoskeletal pain

### **Long-term rates of change in musculoskeletal aging and body composition: findings from the Health, Aging and Body Composition Study.**

04 Mar 2020

Related Articles Long-term rates of change in musculoskeletal aging and body composition: findings from the Health, Aging and Body Composition Study. *Calcif Tissue Int.* 2020 Mar 03;: Authors: Westbury LD, Syddall HE, Fuggle NR, Dennison EM, Cauley JA, Shiroma EJ, Fielding RA, Newman AB, Cooper C Abstract Musculoskeletal disorders are common among older people

### **The role of pain and disability changes after physiotherapy treatment on global perception of improvement in patients with chronic low back pain.**

10 Mar 2020

The role of pain and disability changes after physiotherapy treatment on global perception of improvement in patients with chronic low back pain. *Musculoskelet Sci Pract.* 2020 Feb 28;47:102139 Authors: Pires DADF, Brazete Cruz EJC, Canhão HCM, Nunes CDRD Abstract BACKGROUND: The effectiveness of physiotherapy in patients with chronic low back pain is usually measured through changes in pain and

### **Pain-related fear in adolescents with chronic musculoskeletal pain: process evaluation of an interdisciplinary graded exposure program.**

17 Mar 2020

Related Articles Pain-related fear in adolescents with chronic musculoskeletal pain: process evaluation of an interdisciplinary graded exposure program. *BMC Health Serv Res.* 2020 Mar 14;20(1):213 Authors: Dekker C, van Haastregt JCM, Verbunt JAMCF, de Jong JR, van Meulenbroek T, Pernot HFM, van Velzen AD, Bastiaenen CHG, Goossens MEJB Abstract BACKGROUND: For studying the effectiveness of

### **What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review.**

28 Feb 2020

Related Articles What does best practice care for musculoskeletal pain look like? Eleven consistent recommendations from high-quality clinical practice guidelines: systematic review. *Br J Sports Med.* 2020 Jan;54(2):79-86 Authors: Lin I, Wiles L, Waller R, Goucke R, Nagree Y, Gibberd M, Straker L, Maher CG, O'Sullivan PPB Abstract OBJECTIVES: To identify common recommendations for high-quality

### **Lower limb kinematics in individuals with chronic low back pain during walking.**

03 Mar 2020

Lower limb kinematics in individuals with chronic low back pain during walking. *J Electromyogr Kinesiol.* 2020 Feb 17;51:102404 Authors: Rahimi A, Arab AM, Nourbakhsh MR, Hosseini SM, Forghany S Abstract Several investigators have suggested the presence of a link between Chronic Low Back Pain (CLBP) and lower limbs kinematics that can contribute to functional limitations and disability

### **Trunk-Pelvis Kinematics Variability During Gait and Its Association With Trunk Muscle Endurance in Patients With Chronic Low Back Pain.**

17 Mar 2020

Related Articles Trunk-Pelvis Kinematics Variability During Gait and Its Association With Trunk Muscle Endurance in Patients With Chronic Low Back Pain. *J Appl Biomech.* 2020 Mar 16;:1-9 Authors: Bagheri R, Ebrahimi Takamjani I, Pourahmadi MR, Jannati E, Fazeli SH, Hedayati R, Akbari M Abstract The first purpose was to investigate the trunk muscle endurance, the second aim was to evaluate the

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## Effects of mind-body exercises for osteoporosis in older adults: Protocol for systematic review and Bayesian network meta-analysis of randomized controlled trials.

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Related Articles Effects of mind-body exercises for osteoporosis in older adults: Protocol for systematic review and Bayesian network meta-analysis of randomized controlled trials. *Medicine (Baltimore)*

## Pain assessment for chronic lower back pain: performance of the PAL-S and PAL-I patient-reported measures for symptoms and impacts.

17 Mar 2020

Related Articles Pain assessment for chronic lower back pain: performance of the PAL-S and PAL-I patient-reported measures for symptoms and impacts. *Curr Med Res Opin.* 2020 Mar 16;:1 Authors: Bushnell DM, Martin ML, Eerdeken M, Christoph A, Kralidis G, Liedgens H Abstract Objective: The Pain Assessment for Lower Back-Symptoms (PAL-S) and Impacts (PAL-I) were developed to incorporate patient

## What are the effects of photographic self-assessment on students risk for musculoskeletal disorders using Rapid Upper Limb Assessment.

22 Mar 2020

What are the effects of photographic self-assessment on students risk for musculoskeletal disorders using Rapid Upper Limb Assessment. *J Dent Educ.* 2020 Mar 21;: Authors: Mills ME, Smilyanski I, Giblin-Scanlon L, Vineyard J Abstract PURPOSES/OBJECTIVES: Musculoskeletal disorders (MSD) affect the careers of dental professionals. Research suggests symptoms of MSD begin during educational careers

## Validation of the Behavioural Regulation in Exercise Questionnaire-2 for adults with chronic musculoskeletal pain.

08 Mar 2020

Related Articles Validation of the Behavioural Regulation in Exercise Questionnaire-2 for adults with chronic musculoskeletal pain. *Int J Ther Rehabil.* 2018 Aug 02;25(8):395-404 Authors: Brooks JM, Kaya C, Chan F, Thompson K, Cotton BP, Sánchez J, Fortuna K Abstract Background/Aims: The Behavioural Regulation in Exercise Questionnaire-2 (BREQ-2) has demonstrated reliability and validity in the

## Relationship between healthcare seeking and pain expansion in patients with nonspecific chronic low back pain.

22 Mar 2020

Related Articles Relationship between healthcare seeking and pain expansion in patients with nonspecific chronic low back pain. *PeerJ.* 2020;8:e8756 Authors: Grande-Alonso M, Muñoz-García D, Cuenca-Martínez F, Delgado-Sanz L, Prieto-Aldana M, La Touche R, Gil-Martínez A Abstract Objectives: Low back pain (LBP) is the most prevalent musculoskeletal problem, which implies a high rate of chronicity

## Behavioural activation and inhibition systems in relation to pain intensity and duration in a sample of people experiencing chronic musculoskeletal pain.

10 Mar 2020

Behavioural activation and inhibition systems in relation to pain intensity and duration in a sample of people experiencing chronic musculoskeletal pain. *Musculoskelet Sci Pract.* 2020 Feb 05;47:102129 Authors: Sanson N, Hach S, Moran R, Mason J Abstract BACKGROUND: There is potential clinical utility in tailoring patients' pain management based on behavioural tendencies

## A systematic review of the role of inflammatory biomarkers in acute, subacute and chronic non-specific low back pain.

05 Mar 2020

Related Articles A systematic review of the role of inflammatory biomarkers in acute, subacute and chronic non-specific low back pain. *BMC Musculoskelet Disord.* 2020 Mar 03;21(1):142 Authors: Morris

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P, Ali K, Merritt M, Pelletier J, Macedo LG Abstract BACKGROUND: Low back pain (LBP) is one of the greatest contributors to disability in the world and there is growing interest on the role of

### **Association between objectively measured physical behaviour and neck- And/or low back pain: A systematic review.**

26 Feb 2020

Related Articles Association between objectively measured physical behaviour and neck- And/or low back pain: A systematic review. Eur J Pain. 2020 Feb 24;: Authors: Øverås CK, Villumsen M, Axén I, Cabrita M, Leboeuf-Yde C, Hartvigsen J, Mork PJ Abstract BACKGROUND AND OBJECTIVE: Clinical guidelines recommend physical activity to manage neck pain (NP) and low back pain (LBP)

[\[back to top\]](#)

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## **MSK in Child and Adolescent Health**

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### **The Burden of Pediatric Musculoskeletal Diseases Worldwide.**

08 Mar 2020

Related Articles The Burden of Pediatric Musculoskeletal Diseases Worldwide. Orthop Clin North Am. 2020 Apr;51(2):207-217 Authors: Schwend RM Abstract Global burden of disease (GBD) refers to the economic and human costs resulting from poor health. The disability-adjusted life year is a measure of life lost from premature death and life not lived at 100% health

### **Beat osteoporosis - nourish and exercise skeletons (BONES): a group randomized controlled trial in children.**

26 Feb 2020

Related Articles Beat osteoporosis - nourish and exercise skeletons (BONES): a group randomized controlled trial in children. BMC Pediatr. 2020 Feb 21;20(1):83 Authors: Economos CD, Hennessy E, Chui K, Dwyer J, Marcotte L, Must A, Naumova EN, Goldberg J Abstract BACKGROUND: Lifelong healthy habits developed during childhood may prevent chronic diseases in adulthood

### **Vitamin D levels in relation to low back pain during adolescence.**

27 Feb 2020

Related Articles Vitamin D levels in relation to low back pain during adolescence. Br J Nutr. 2020 Feb 26;:1-24 Authors: Al-Taiar A, Rahman A, Al-Sabah R, Shaban L, AlBaloul AH, Banaee S, Akpınar-Elci M Abstract This study aimed to investigate the association between 25-hydroxyvitamin D (25(OH)D) level and Low back pain (LBP) among adolescents while adjusting for potential confounders pertinent

### **Unusual Presentation of Galactosemia in a Child: Musculoskeletal Manifestations.**

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Related Articles Unusual Presentation of Galactosemia in a Child: Musculoskeletal Manifestations. Mediterr J Rheumatol. 2019 Jun;30(2):123-124 Authors: Gorial FI, Mohammed MJ Abstract Galactosemia is an autosomal recessive inherited disease of galactose metabolism. In this report, a galactosemia case with unusual presentation has been presented

### **A prospective longitudinal study of mobile touch screen device use and musculoskeletal symptoms and visual health in adolescents.**

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Related Articles A prospective longitudinal study of mobile touch screen device use and musculoskeletal symptoms and visual health in adolescents. Appl Ergon. 2020 May;85:103028 Authors: Toh SH, Coenen P, Howie EK, Smith AJ, Mukherjee S, Mackey DA, Straker LM Abstract This study aimed to examine prospective associations of mobile touch screen device (i.e

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## Knee pain in children with cerebral palsy.

03 Mar 2020

Related Articles Knee pain in children with cerebral palsy. Dev Med Child Neurol. 2020 Mar 02;; Authors: Chambers HG PMID: 32115684 [PubMed - as supplied by publisher]

## The Epidemiology of Back Pain in American Children and Adolescents.

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The Epidemiology of Back Pain in American Children and Adolescents. Spine (Phila Pa 1976). 2020 Feb 24;; Authors: Fabricant PD, Heath MR, Schachne JM, Doyle SM, Green DW, Widmann RF Abstract STUDY DESIGN: Cross-sectional survey

## Expert panel consensus recommendations for diagnosis and treatment of secondary osteoporosis in children.

26 Feb 2020

Related Articles Expert panel consensus recommendations for diagnosis and treatment of secondary osteoporosis in children. Pediatr Rheumatol Online J. 2020 Feb 24;18(1):20 Authors: Galindo-Zavala R, Bou-Torrent R, Magallares-López B, Mir-Perelló C, Palmou-Fontana N, Sevilla-Pérez B, Medrano-San Ildefonso M, González-Fernández MI, Román-Pascual A, Alcañiz-Rodríguez P, Nieto-Gonzalez JC,

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## MSK and Multi-morbidity

### Disability, kinesiophobia, perceived stress, and pain are not associated with trunk muscle strength or aerobic capacity in chronic nonspecific low back pain.

04 Mar 2020

Related Articles Disability, kinesiophobia, perceived stress, and pain are not associated with trunk muscle strength or aerobic capacity in chronic nonspecific low back pain. Phys Ther Sport. 2020 Feb 26;43:77-83 Authors: Verbrugghe J, Agten A, Stevens S, Eijnde BO, Vandenabeele F, Rousset N, De Baets L, Timmermans A Abstract OBJECTIVES: To investigate to which extent disability, psychological

### Osteoporosis in cirrhotics before and after liver transplantation: relation with malnutrition and inflammatory status.

18 Mar 2020

Osteoporosis in cirrhotics before and after liver transplantation: relation with malnutrition and inflammatory status. Scand J Gastroenterol. 2020 Mar 17;;1-8 Authors: Huldén E, Castedal M, Karlsson MK, Kalaitzakis E, Swärd P Abstract Background: Liver cirrhosis is associated with osteoporosis and liver transplantation (LT) with increased bone loss

### Comparing the Performance of Comorbidity Indices in Predicting Functional Status, Health-Related Quality of Life, and Total Health Care Use in Older Adults With Back Pain.

03 Mar 2020

Comparing the Performance of Comorbidity Indices in Predicting Functional Status, Health-Related Quality of Life, and Total Health Care Use in Older Adults With Back Pain. J Orthop Sports Phys Ther. 2020 Mar;50(3):143-148 Authors: Rundell SD, Resnik L, Heagerty PJ, Kumar A, Jarvik JG Abstract OBJECTIVE: To determine how well the functional comorbidity index (FCI) predicts outcomes in older adults

### Lower limb kinematics in individuals with chronic low back pain during walking.

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03 Mar 2020

Lower limb kinematics in individuals with chronic low back pain during walking. J Electromyogr Kinesiol. 2020 Feb 17;51:102404 Authors: Rahimi A, Arab AM, Nourbakhsh MR, Hosseini SM, Forghany S  
Abstract Several investigators have suggested the presence of a link between Chronic Low Back Pain (CLBP) and lower limbs kinematics that can contribute to functional limitations and disability

### **The influence of restless legs symptoms on musculoskeletal pain in depression.**

28 Feb 2020

The influence of restless legs symptoms on musculoskeletal pain in depression. Scand J Pain. 2020 Feb 27;: Authors: Auvinen P, Koponen H, Kautiainen H, Korniloff K, Ahonen T, Vanhala M, Mäntyselkä P  
Abstract Background and aims Restless legs syndrome is a sensorimotor disorder associated with mental health conditions notably depression

### **Association of musculoskeletal pain with poor sleep quality in public school teachers.**

03 Mar 2020

Association of musculoskeletal pain with poor sleep quality in public school teachers. Work. 2020 Feb 26;: Authors: de Souza JM, de A Pinto RZ, Tebar WR, Gil FCS, Delfino LD, Morelhão PK, da Silva CCM, Oliveira CBS, Christofaro DGD  
Abstract BACKGROUND: Teachers perform repetitive movements all day, which can cause pain in body regions

### **Gut microbiota and obesity: Impact of antibiotics and prebiotics and potential for musculoskeletal health.**

27 Feb 2020

Related Articles Gut microbiota and obesity: Impact of antibiotics and prebiotics and potential for musculoskeletal health. J Sport Health Sci. 2020 Mar;9(2):110-118 Authors: Klancic T, Reimer RA  
Abstract Obesity is a complex disease with multiple contributing factors

[\[back to top\]](#)

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## **MSK Health and Inequalities**

### **Gender Differences in Surgery for Work-Related Musculoskeletal Injury: A Population-Based Cohort Study.**

17 Mar 2020

Related Articles Gender Differences in Surgery for Work-Related Musculoskeletal Injury: A Population-Based Cohort Study. Healthc Policy. 2020 Feb;15(3):47-62 Authors: Jones AM, Koehoorn M, Mcleod CB  
Abstract OBJECTIVE: The objective of this study is to examine if women are less likely than men to receive surgery following work-related musculoskeletal injury in the Canadian province of British

### **Effects of obesity on breast size, thoracic spine structure and function, upper torso musculoskeletal pain and physical activity in women.**

27 Feb 2020

Related Articles Effects of obesity on breast size, thoracic spine structure and function, upper torso musculoskeletal pain and physical activity in women. J Sport Health Sci. 2020 Mar;9(2):140-148

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Authors: Steele JR, Coltman CE, McGhee DE Abstract Purpose: This study investigated the effects of obesity on breast size, thoracic spine structure and function, upper torso musculoskeletal pain and

### **Ultrasound of sports injuries of the musculoskeletal system: gender differences.**

05 Mar 2020

Ultrasound of sports injuries of the musculoskeletal system: gender differences. J Ultrasound. 2020 Mar 04;: Authors: Robotti G, Draghi F, Bortolotto C, Canepa MG Abstract In recent years, women and girls are increasing their sport participation, and female sports are becoming more challenging

### **Self-perceived Fracture Risk in the Global Longitudinal Study of Osteoporosis in Women: Its Correlates and Relationship with Bone Microarchitecture.**

08 Mar 2020

Related Articles Self-perceived Fracture Risk in the Global Longitudinal Study of Osteoporosis in Women: Its Correlates and Relationship with Bone Microarchitecture. Calcif Tissue Int. 2020 Mar 05;: Authors: Litwic AE, Westbury LD, Carter S, Ward KA, Cooper C, Dennison EM Abstract The purpose of this study is to examine correlates of self-perceived fracture risk (SPR) and relationships between

### **Understanding the musculoskeletal injury risk of women in combat: the effect of infantry training and sex on musculoskeletal injury incidence during British Army basic training.**

01 Mar 2020

Related Articles Understanding the musculoskeletal injury risk of women in combat: the effect of infantry training and sex on musculoskeletal injury incidence during British Army basic training. BMJ Mil Health. 2020 Feb 27;: Authors: O'Leary TJ, Wardle SL, Rawcliffe AJ, Chapman S, Mole J, Greeves JP Abstract INTRODUCTION: Until recently, women were excluded from British combat roles

[\[back to top\]](#)

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## **MSK Health and Nutrition**

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### **Influence of combined vitamin D3 supplementation and resistance exercise training on musculoskeletal health in older men and women (EXVITD): protocol for a randomised controlled trial.**

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### **Evidence-Based Role of Nutrients and Antioxidants for Chronic Pain Management in Musculoskeletal Frailty and Sarcopenia in Aging.**

12 Mar 2020

Related Articles Evidence-Based Role of Nutrients and Antioxidants for Chronic Pain Management in Musculoskeletal Frailty and Sarcopenia in Aging. Geriatrics (Basel). 2020 Mar 06;5(1): Authors: Perna S, Alalwan TA, Al-Thawadi S, Negro M, Parimbelli M, Cerullo G, Gasparri C, Guerriero F, Infantino V, Diana M, D'Antona G, Rondanelli M Abstract Musculoskeletal disorders in aging and pain are closely

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## Is a 'healthy diet' and a 'calcium-rich diet' the same thing? Qualitative study examining perceptions of a calcium-rich diet in individuals who have received bone health education.

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## Do Nutritional Factors Interact with Chronic Musculoskeletal Pain? A Systematic Review.

11 Mar 2020

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## The Influence of Maternal Levels of Vitamin D and Adiponectin on Anthropometrical Measures and Bone Health in Offspring.

01 Mar 2020

Related Articles The Influence of Maternal Levels of Vitamin D and Adiponectin on Anthropometrical Measures and Bone Health in Offspring. Pril (Makedon Akad Nauk Umet Odd Med Nauki). 2019 Dec 01;40(3):91-98 Authors: Velkavrh M, Paro-Panjan D, Benedik E, Mis NF, Godnov U, Salamon AS Abstract BACKGROUND: From the conception onward, certain parameters associated with maternal health may affect

## Seasonal variation in vitamin D status, bone health and athletic performance in competitive university student athletes: a longitudinal study.

15 Mar 2020

Related Articles Seasonal variation in vitamin D status, bone health and athletic performance in competitive university student athletes: a longitudinal study. J Nutr Sci. 2020 Feb 10;9:e8 Authors: Wilson-Barnes SL, Hunt JEA, Williams EL, Allison SJ, Wild JJ, Wainwright J, Lanham-New SA, Manders RJF Abstract Vitamin D deficiency has been commonly reported in elite athletes, but the vitamin D

## Healing of vitamin D deficiency rickets complicating hypophosphatasia suggests a role beyond circulating mineral sufficiency for vitamin D in musculoskeletal health.

23 Mar 2020

Healing of vitamin D deficiency rickets complicating hypophosphatasia suggests a role beyond circulating mineral sufficiency for vitamin D in musculoskeletal health. Bone. 2020 Mar 18;;115322 Authors: Lin EL, Gottesman GS, McAlister WH, Bijanki VN, Mack KE, Griffin DM, Mumm S, Whyte MP Abstract Hypophosphatasia (HPP) is the metabolic bone disease caused by loss-of-function mutation(s) of the ALPL

[\[back to top\]](#)

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## MSK Health and Workplace Wellbeing

## Acute and chronic musculoskeletal pain situations among the working population and their pain education needs: an exploratory study.

01 Mar 2020

Related Articles Acute and chronic musculoskeletal pain situations among the working population and their pain education needs: an exploratory study. *Fam Pract.* 2020 Feb 28;; Authors: Tang SK, Tse MMY, Leung SF, Fotis T Abstract BACKGROUND: Pain affects a person's physical and psychological well-being, work performance and productivity

## The mediating effect of work-life interference on the relationship between work-time control and depressive and musculoskeletal symptoms.

03 Mar 2020

The mediating effect of work-life interference on the relationship between work-time control and depressive and musculoskeletal symptoms. *Scand J Work Environ Health.* 2020 Jan 30;; Authors: Albrecht SC, Kecklund G, Leineweber C Abstract Objectives Evidence shows that work-time control (WTC) affects health but underlying mechanisms are still unclear

## Work-related musculoskeletal disorders among clinical laboratory workers.

01 Mar 2020

Related Articles Work-related musculoskeletal disorders among clinical laboratory workers. *Avicenna J Med.* 2020 Jan-Mar;10(1):29-34 Authors: AlNekhlan AF, AlTamimi AM, AlAqeel BY, AlHawery AA, AlFadhel SF, Masuadi EM Abstract Aims and Objectives: The aim of this study was to estimate the prevalence and risk factors of work-related musculoskeletal disorders (WMSDs) among clinical laboratory

## Is Repetitive Workload a Risk Factor for Upper Extremity Musculoskeletal Disorders in Surgical Device Mechanics? A Cross-Sectional Analysis.

27 Feb 2020

Related Articles Is Repetitive Workload a Risk Factor for Upper Extremity Musculoskeletal Disorders in Surgical Device Mechanics? A Cross-Sectional Analysis. *Int J Environ Res Public Health.* 2020 Feb 21;17(4): Authors: Lotter O, Lieb T, Breul V, Molsner J Abstract To assess the prevalence of upper extremity work-related musculoskeletal disorders (WMSDs) among surgical device mechanics compared to

## Video-based learning versus traditional lecture-based learning for osteoporosis education: a randomized controlled trial.

08 Mar 2020

Related Articles Video-based learning versus traditional lecture-based learning for osteoporosis education: a randomized controlled trial. *Aging Clin Exp Res.* 2020 Mar 06;; Authors: Chotiyarnwong P, Boonnasa W, Chotiyarnwong C, Unnanuntana A Abstract BACKGROUND: Patient education about osteoporosis is an important component of osteoporosis treatment

## Collaborating with radiographers to address their work-related musculoskeletal discomfort.

17 Mar 2020

Related Articles Collaborating with radiographers to address their work-related musculoskeletal discomfort. *Appl Ergon.* 2020 May;85:103069 Authors: Sommerich CM, Lavender SA, Evans KD, Sanders EB, Joines S, Lamar S, Radin Umar RZ, Yen WT, Park S Abstract The prevalence of

musculoskeletal (MSK) symptoms in radiographers is high, similar to other healthcare occupations that involve high levels of

## **A Preventive Program for Work-related Musculoskeletal Disorders Among Surgeons: Outcomes of a Randomized Controlled Clinical Trial.**

22 Mar 2020

Related Articles A Preventive Program for Work-related Musculoskeletal Disorders Among Surgeons: Outcomes of a Randomized Controlled Clinical Trial. *Ann Surg.* 2019 12;270(6):969-975 Authors: Giagio S, Volpe G, Pillastrini P, Gasparre G, Frizziero A, Squizzato F Abstract OBJECTIVE: To evaluate the effectiveness of a program to reduce work-related musculoskeletal disorders (WRMSD) among surgeons

## **Association between physical work demands and work ability in workers with musculoskeletal pain: cross-sectional study.**

17 Mar 2020

Related Articles Association between physical work demands and work ability in workers with musculoskeletal pain: cross-sectional study. *BMC Musculoskelet Disord.* 2020 Mar 14;21(1):166 Authors: Skovlund SV, Bláfoss R, Sundstrup E, Andersen LL Abstract BACKGROUND: Musculoskeletal pain is common in the working population and may affect the work ability, especially among those with high physical

[\[back to top\]](#)

## **Outcomes and Cost Effectiveness**

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### **Cost-effectiveness of pain management services for chronic low back pain: a systematic review of published studies.**

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Related Articles Cost-effectiveness of pain management services for chronic low back pain: a systematic review of published studies. *BMC Health Serv Res.* 2020 Mar 12;20(1):194 Authors: AlMazrou SH, Elliott RA, Knaggs RD, AlAujan SS Abstract BACKGROUND: Chronic low back pain (CLBP) is a highly prevalent condition that has substantial impact on patients, the healthcare system and society

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