

Illness and injury among Norwegian Olympic athletes during preparation for five consecutive Summer and Winter Games

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Supplementary Material

Supplementary table 1. Pattern of 1439 injuries distributed among 441 Norwegian Olympic athletes between 2011 and 2020, presented by body region and tissue type. Specific OSIIIS-13 diagnoses are presented if five or more of the same diagnoses were recorded

| Region | Injuries | Incidence | Median time loss | Burden |
|--|------------|------------------------------------|------------------------------|--|
| Tissue type | n | Injuries per athlete year [95% CI] | Days (25th, 75th percentile) | Time loss days per athlete year [95% CI] |
| <i>OSIIIS-13 Diagnosis</i> | | | | |
| Head | 56 | 0.12 [0.09, 0.15] | 3 (1, 7) | 0.64 [0.58, 0.72] |
| Nervous | 26 | 0.05 [0.04, 0.08] | 6 (2, 10) | 0.40 [0.34, 0.46] |
| <i>Concussion</i> | 25 | 0.05 [0.03, 0.08] | 7 (3, 10) | 0.39 [0.34, 0.45] |
| Bone | 6 | 0.01 [0.01, 0.03] | 4 (2, 5) | 0.05 [0.04, 0.08] |
| Superficial tissues/skin | 2 | 0.00 [0, 0.01] | 2 (1, 2) | 0.01 [0, 0.02] |
| Vessels | 6 | 0.01 [0.01, 0.03] | 2 (1, 6) | 0.08 [0.06, 0.11] |
| <i>Head/facial contusion/haematoma</i> | 5 | 0.01 [0, 0.02] | 1 (1, 3) | 0.03 [0.01, 0.04] |
| Internal organs | 1 | 0.00 [0, 0.01] | 4 (4, 4) | 0.01 [0, 0.02] |
| Non-specific | 15 | 0.03 [0.02, 0.05] | 2 (1, 3) | 0.10 [0.07, 0.13] |
| Neck | 47 | 0.10 [0.07, 0.13] | 0 (0, 2) | 0.16 [0.13, 0.2] |
| Muscle/tendon | 14 | 0.03 [0.02, 0.05] | 1 (0, 3) | 0.05 [0.03, 0.08] |
| <i>Neck muscle strain</i> | 12 | 0.03 [0.01, 0.04] | 1 (0, 3) | 0.05 [0.03, 0.07] |
| Cartilage/synovium/bursa | 4 | 0.01 [0, 0.02] | 2 (0, 5) | 0.03 [0.02, 0.05] |
| Ligament/joint capsule | 2 | 0.00 [0, 0.01] | 0 (0, 1) | 0.00 [0, 0.01] |
| Non-specific | 27 | 0.06 [0.04, 0.08] | 0 (0, 2) | 0.08 [0.05, 0.1] |
| <i>Neck muscle and/or tendon strain/spasm/trigger points</i> | 7 | 0.01 [0.01, 0.03] | 0 (0, 1) | 0.02 [0.01, 0.04] |
| Shoulder | 113 | 0.24 [0.2, 0.28] | 0 (0, 3) | 1.03 [0.95, 1.13] |
| Muscle/tendon | 49 | 0.10 [0.08, 0.13] | 0 (0, 2) | 0.24 [0.2, 0.28] |
| <i>Shoulder contusion/haematoma</i> | 5 | 0.01 [0, 0.02] | 1 (0, 2) | 0.01 [0.01, 0.03] |
| <i>Rotator cuff tendon pathology</i> | 20 | 0.04 [0.03, 0.06] | 0 (0, 3) | 0.10 [0.08, 0.13] |
| <i>Subacromial impingement</i> | 7 | 0.01 [0.01, 0.03] | 0 (0, 0) | 0.01 [0, 0.02] |
| Nervous | 2 | 0.00 [0, 0.01] | 6 (5, 6) | 0.02 [0.01, 0.04] |
| Bone | 2 | 0.00 [0, 0.01] | 4 (3, 4) | 0.01 [0.01, 0.03] |
| Cartilage/synovium/bursa | 9 | 0.02 [0.01, 0.03] | 0 (0, 27) | 0.46 [0.4, 0.52] |
| Ligament/joint capsule | 10 | 0.02 [0.01, 0.04] | 6 (4, 12) | 0.19 [0.15, 0.23] |
| Vessels | 1 | 0.00 [0, 0.01] | 19 (19, 19) | 0.04 [0.02, 0.06] |
| Non-specific | 40 | 0.08 [0.06, 0.11] | 0 (0, 1) | 0.08 [0.06, 0.11] |
| Upper arm | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Muscle/tendon | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Elbow | 35 | 0.07 [0.05, 0.1] | 1 (0, 2) | 0.41 [0.36, 0.47] |
| Muscle/tendon | 8 | 0.02 [0.01, 0.03] | 0 (0, 2) | 0.01 [0.01, 0.03] |
| <i>Tennis elbow (lateral epicondyle pain)</i> | 5 | 0.01 [0, 0.02] | 2 (0, 2) | 0.01 [0.01, 0.03] |
| Bone | 2 | 0.00 [0, 0.01] | 2 (1, 4) | 0.01 [0, 0.02] |
| Cartilage/synovium/bursa | 2 | 0.00 [0, 0.01] | 2 (2, 3) | 0.01 [0, 0.02] |
| Ligament/joint capsule | 11 | 0.02 [0.01, 0.04] | 2 (1, 14) | 0.36 [0.31, 0.42] |
| Superficial tissues/skin | 3 | 0.01 [0, 0.02] | 0 (0, 1) | 0.00 [0, 0.01] |
| Vessels | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Non-specific | 7 | 0.01 [0.01, 0.03] | 1 (0, 2) | 0.01 [0.01, 0.03] |
| Forearm | 17 | 0.04 [0.02, 0.06] | 0 (0, 1) | 0.04 [0.03, 0.07] |
| Muscle/tendon | 9 | 0.02 [0.01, 0.03] | 0 (0, 0) | 0.02 [0.01, 0.03] |

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| Bone | 2 | 0.00 [0, 0.01] | 6 (4, 7) | 0.02 [0.01, 0.04] |
| Non-specific | 6 | 0.01 [0.01, 0.03] | 0 (0, 1) | 0.00 [0, 0.01] |
| Wrist | 39 | 0.08 [0.06, 0.11] | 0 (0, 2) | 0.92 [0.83, 1.01] |
| Muscle/tendon | 8 | 0.02 [0.01, 0.03] | 2 (0, 9) | 0.36 [0.31, 0.42] |
| Bone | 1 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Cartilage/synovium/bursa | 2 | 0.00 [0, 0.01] | 76 (38, 114) | 0.32 [0.27, 0.37] |
| Ligament/joint capsule | 6 | 0.01 [0.01, 0.03] | 2 (1, 3) | 0.20 [0.16, 0.25] |
| <i>Sprained/jarred wrist joint</i> | 6 | <i>0.01 [0.01, 0.03]</i> | <i>2 (1, 3)</i> | <i>0.20 [0.16, 0.25]</i> |
| Superficial tissues/skin | 4 | 0.01 [0, 0.02] | 1 (1, 2) | 0.01 [0, 0.02] |
| Vessels | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Non-specific | 16 | 0.03 [0.02, 0.05] | 0 (0, 1) | 0.03 [0.01, 0.04] |
| Hand | 47 | 0.10 [0.07, 0.13] | 0 (0, 2) | 0.36 [0.31, 0.41] |
| Muscle/tendon | 6 | 0.01 [0.01, 0.03] | 0 (0, 2) | 0.03 [0.02, 0.05] |
| <i>Hand muscle bruising/haematoma</i> | 5 | <i>0.01 [0, 0.02]</i> | <i>0 (0, 0)</i> | <i>0.00 [0, 0.01]</i> |
| Bone | 15 | 0.03 [0.02, 0.05] | 2 (0, 12) | 0.26 [0.21, 0.3] |
| <i>Avulsion fracture phalanx</i> | 5 | <i>0.01 [0, 0.02]</i> | <i>0 (0, 0)</i> | <i>0.00 [0, 0.01]</i> |
| Ligament/joint capsule | 12 | 0.03 [0.01, 0.04] | 0 (0, 1) | 0.03 [0.02, 0.05] |
| <i>Thumb sprain</i> | 5 | <i>0.01 [0, 0.02]</i> | <i>0 (0, 0)</i> | <i>0.00 [0, 0.01]</i> |
| Superficial tissues/skin | 3 | 0.01 [0, 0.02] | 0 (0, 2) | 0.01 [0, 0.02] |
| Non-specific | 11 | 0.02 [0.01, 0.04] | 0 (0, 2) | 0.04 [0.02, 0.06] |
| <i>Other finger pain</i> | 11 | <i>0.02 [0.01, 0.04]</i> | <i>0 (0, 2)</i> | <i>0.04 [0.02, 0.06]</i> |
| Chest | 17 | 0.04 [0.02, 0.06] | 2 (1, 9) | 0.20 [0.16, 0.24] |
| Muscle/tendon | 5 | 0.01 [0, 0.02] | 2 (1, 6) | 0.05 [0.03, 0.07] |
| Bone | 9 | 0.02 [0.01, 0.03] | 1 (1, 6) | 0.10 [0.08, 0.14] |
| <i>Fractured rib(s)</i> | 6 | <i>0.01 [0.01, 0.03]</i> | <i>1 (0, 2)</i> | <i>0.04 [0.02, 0.06]</i> |
| Cartilage/synovium/bursa | 1 | 0.00 [0, 0.01] | 1 (1, 1) | 0.00 [0, 0.01] |
| Internal organs | 1 | 0.00 [0, 0.01] | 9 (9, 9) | 0.02 [0.01, 0.03] |
| Non-specific | 1 | 0.00 [0, 0.01] | 11 (11, 11) | 0.02 [0.01, 0.04] |
| Thoracic spine | 35 | 0.07 [0.05, 0.1] | 0 (0, 0) | 0.04 [0.02, 0.06] |
| Muscle/tendon | 11 | 0.02 [0.01, 0.04] | 0 (0, 0) | 0.01 [0.01, 0.03] |
| <i>Thoracic muscle strain/spasm/trigger points</i> | 9 | <i>0.02 [0.01, 0.03]</i> | <i>0 (0, 0)</i> | <i>0.01 [0.01, 0.03]</i> |
| Ligament/joint capsule | 3 | 0.01 [0, 0.02] | 0 (0, 0) | 0.00 [0, 0.01] |
| Non-specific | 21 | 0.04 [0.03, 0.07] | 0 (0, 1) | 0.02 [0.01, 0.04] |
| Lumbosacral | 177 | 0.37 [0.32, 0.43] | 0 (0, 3) | 1.60 [1.49, 1.72] |
| Muscle/tendon | 17 | 0.04 [0.02, 0.06] | 1 (0, 4) | 0.13 [0.1, 0.17] |
| <i>Gluteal muscle strain</i> | 10 | <i>0.02 [0.01, 0.04]</i> | <i>0 (0, 3)</i> | <i>0.07 [0.05, 0.1]</i> |
| Nervous | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Bone | 5 | 0.01 [0, 0.02] | 5 (0, 31) | 0.16 [0.12, 0.19] |
| Cartilage/synovium/bursa | 17 | 0.04 [0.02, 0.06] | 2 (0, 11) | 0.25 [0.21, 0.3] |
| <i>Disc degeneration</i> | 12 | <i>0.03 [0.01, 0.04]</i> | <i>0 (0, 4)</i> | <i>0.08 [0.06, 0.11]</i> |
| Ligament/joint capsule | 3 | 0.01 [0, 0.02] | 3 (2, 6) | 0.03 [0.01, 0.04] |
| Superficial tissues/skin | 1 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Non-specific | 132 | 0.28 [0.23, 0.33] | 0 (0, 2) | 1.03 [0.95, 1.13] |
| Abdomen | 25 | 0.05 [0.03, 0.08] | 1 (0, 4) | 0.20 [0.16, 0.24] |
| Muscle/tendon | 10 | 0.02 [0.01, 0.04] | 2 (0, 6) | 0.15 [0.11, 0.18] |
| Internal organs | 5 | 0.01 [0, 0.02] | 1 (1, 5) | 0.03 [0.02, 0.05] |

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| <i>Trunk and abdominal injury</i> | 5 | 0.01 [0, 0.02] | 1 (1, 5) | 0.03 [0.02, 0.05] |
| Non-specific | 10 | 0.02 [0.01, 0.04] | 0 (0, 2) | 0.02 [0.01, 0.04] |
| Hip/groin | 114 | 0.24 [0.2, 0.28] | 0 (0, 3) | 1.19 [1.1, 1.3] |
| Muscle/tendon | 53 | 0.11 [0.08, 0.14] | 0 (0, 3) | 0.29 [0.24, 0.34] |
| <i>Hip and groin muscle strain/tear</i> | 13 | 0.03 [0.02, 0.05] | 0 (0, 1) | 0.03 [0.01, 0.04] |
| <i>Iliopsoas muscle strain/tear</i> | 17 | 0.04 [0.02, 0.06] | 1 (0, 3) | 0.08 [0.06, 0.11] |
| <i>contusion/haematoma, hip region</i> | 5 | 0.01 [0, 0.02] | 2 (0, 3) | 0.02 [0.01, 0.03] |
| <i>Unspecified or multiple adductor tendon injury</i> | 5 | 0.01 [0, 0.02] | 3 (0, 8) | 0.10 [0.07, 0.13] |
| <i>Adductor longus tendon strain</i> | 7 | 0.01 [0.01, 0.03] | 2 (0, 8) | 0.06 [0.04, 0.09] |
| Bone | 6 | 0.01 [0.01, 0.03] | 46 (13, 69) | 0.67 [0.6, 0.74] |
| Cartilage/synovium/bursa | 3 | 0.01 [0, 0.02] | 0 (0, 0) | 0.00 [0, 0.01] |
| Ligament/joint capsule | 4 | 0.01 [0, 0.02] | 0 (0, 0) | 0.00 [0, 0.01] |
| Non-specific | 48 | 0.10 [0.07, 0.13] | 1 (0, 2) | 0.24 [0.2, 0.28] |
| Thigh | 126 | 0.26 [0.22, 0.31] | 1 (0, 3) | 0.67 [0.6, 0.75] |
| Muscle/tendon | 90 | 0.19 [0.15, 0.23] | 1 (0, 3) | 0.48 [0.42, 0.54] |
| <i>Hamstring strain/tear</i> | 19 | 0.04 [0.02, 0.06] | 1 (0, 4) | 0.19 [0.16, 0.23] |
| <i>Gluteus medius/minimus strain</i> | 8 | 0.02 [0.01, 0.03] | 2 (0, 4) | 0.04 [0.02, 0.06] |
| <i>Thigh muscle strain/spasm/trigger points</i> | 25 | 0.05 [0.03, 0.08] | 0 (0, 1) | 0.09 [0.07, 0.12] |
| <i>Contusion/haematoma of thigh</i> | 8 | 0.02 [0.01, 0.03] | 1 (1, 2) | 0.03 [0.02, 0.05] |
| <i>Gluteus med/min tendinopathy</i> | 5 | 0.01 [0, 0.02] | 1 (1, 3) | 0.03 [0.02, 0.05] |
| Bone | 2 | 0.00 [0, 0.01] | 7 (7, 7) | 0.03 [0.02, 0.05] |
| Superficial tissues/skin | 1 | 0.00 [0, 0.01] | 5 (5, 5) | 0.01 [0, 0.02] |
| Non-specific | 33 | 0.07 [0.05, 0.1] | 1 (0, 2) | 0.15 [0.12, 0.19] |
| Knee | 262 | 0.55 [0.48, 0.62] | 1 (0, 5) | 12.37 [12.06, 12.69] |
| Muscle/tendon | 61 | 0.13 [0.1, 0.16] | 1 (0, 3) | 1.08 [0.99, 1.18] |
| <i>Quadriceps tendinopathy +/- suprapatellar bursitis</i> | 8 | 0.02 [0.01, 0.03] | 1 (0, 1) | 0.02 [0.01, 0.04] |
| <i>Patellar tendinopathy</i> | 32 | 0.07 [0.05, 0.09] | 2 (0, 6) | 0.93 [0.85, 1.02] |
| <i>Iliotibial band syndrome</i> | 13 | 0.03 [0.02, 0.05] | 1 (0, 1) | 0.12 [0.09, 0.15] |
| Bone | 5 | 0.01 [0, 0.02] | 1 (1, 2) | 0.02 [0.01, 0.03] |
| Cartilage/synovium/bursa | 58 | 0.12 [0.09, 0.16] | 1 (0, 4) | 0.79 [0.71, 0.87] |
| <i>Medial meniscal tear</i> | 8 | 0.02 [0.01, 0.03] | 2 (1, 5) | 0.27 [0.22, 0.32] |
| <i>Patellofemoral joint chondral pain</i> | 25 | 0.05 [0.03, 0.08] | 0 (0, 2) | 0.11 [0.09, 0.15] |
| <i>Infrapatella fat pad contusion/haematoma +/- bursitis</i> | 7 | 0.01 [0.01, 0.03] | 0 (0, 21) | 0.20 [0.16, 0.24] |
| Ligament/joint capsule | 51 | 0.11 [0.08, 0.14] | 16 (1, 266) | 10.13 [9.85, 10.42] |
| <i>ACL rupture</i> | 16 | 0.03 [0.02, 0.05] | 266 (266, 266) | 8.86 [8.6, 9.13] |
| <i>Grade 1 MCL tear knee</i> | 16 | 0.03 [0.02, 0.05] | 1 (0, 6) | 0.18 [0.14, 0.22] |
| <i>Grade 2 MCL tear knee</i> | 7 | 0.01 [0.01, 0.03] | 31 (8, 52) | 0.45 [0.39, 0.51] |
| Vessels | 14 | 0.03 [0.02, 0.05] | 1 (0, 4) | 0.09 [0.06, 0.12] |
| <i>Knee contusion/haematoma (extraarticular)</i> | 14 | 0.03 [0.02, 0.05] | 1 (0, 4) | 0.09 [0.06, 0.12] |
| Non-specific | 73 | 0.15 [0.12, 0.19] | 0 (0, 1) | 0.26 [0.22, 0.31] |
| Lower leg | 93 | 0.19 [0.16, 0.24] | 1 (0, 3) | 0.83 [0.75, 0.92] |
| Muscle/tendon | 65 | 0.14 [0.11, 0.17] | 1 (0, 3) | 0.39 [0.33, 0.45] |
| <i>Gastrocnemius muscle injury/strain</i> | 9 | 0.02 [0.01, 0.03] | 2 (1, 2) | 0.05 [0.03, 0.07] |
| <i>Lower leg muscle Injury</i> | 8 | 0.02 [0.01, 0.03] | 2 (1, 3) | 0.03 [0.02, 0.05] |

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| <i>Tenoperiostitis of lower leg</i> | 8 | 0.02 [0.01, 0.03] | 2 (0, 4) | 0.05 [0.04, 0.08] |
| <i>Medial tibial stress syndrome</i> | 5 | 0.01 [0, 0.02] | 0 (0, 0) | 0.00 [0, 0.01] |
| <i>Achilles tendinopathy</i> | 22 | 0.05 [0.03, 0.07] | 0 (0, 3) | 0.12 [0.09, 0.15] |
| Bone | 3 | 0.01 [0, 0.02] | 12 (8, 78) | 0.33 [0.28, 0.39] |
| Cartilage/synovium/bursa | 1 | 0.00 [0, 0.01] | 2 (2, 2) | 0.00 [0, 0.01] |
| Superficial tissues/skin | 2 | 0.00 [0, 0.01] | 10 (6, 14) | 0.04 [0.03, 0.06] |
| Non-specific | 22 | 0.05 [0.03, 0.07] | 0 (0, 2) | 0.07 [0.05, 0.09] |
| Ankle | 93 | 0.19 [0.16, 0.24] | 1 (0, 3) | 0.92 [0.84, 1.01] |
| Muscle/tendon | 6 | 0.01 [0.01, 0.03] | 2 (1, 3) | 0.04 [0.02, 0.06] |
| Bone | 1 | 0.00 [0, 0.01] | 26 (26, 26) | 0.05 [0.04, 0.08] |
| Cartilage/synovium/bursa | 7 | 0.01 [0.01, 0.03] | 1 (0, 26) | 0.23 [0.19, 0.27] |
| <i>Ankle synovitis/impingement/bursitis</i> | 5 | 0.01 [0, 0.02] | 0 (0, 1) | 0.01 [0, 0.02] |
| Ligament/joint capsule | 39 | 0.08 [0.06, 0.11] | 1 (0, 4) | 0.32 [0.27, 0.37] |
| <i>Sprain lateral collateral ligament ankle</i> | 6 | 0.01 [0.01, 0.03] | 0 (0, 1) | 0.01 [0, 0.02] |
| <i>Lateral ligaments rupture (grade 3 injury)</i> | 14 | 0.03 [0.02, 0.05] | 2 (0, 6) | 0.19 [0.16, 0.24] |
| <i>Anterior talofibular ligament sprain</i> | 11 | 0.02 [0.01, 0.04] | 1 (0, 2) | 0.05 [0.03, 0.07] |
| Superficial tissues/skin | 2 | 0.00 [0, 0.01] | 2 (1, 2) | 0.01 [0, 0.02] |
| Vessels | 7 | 0.01 [0.01, 0.03] | 3 (1, 3) | 0.03 [0.02, 0.05] |
| <i>Ankle contusion/haematoma</i> | 7 | 0.01 [0.01, 0.03] | 3 (1, 3) | 0.03 [0.02, 0.05] |
| Non-specific | 31 | 0.06 [0.04, 0.09] | 0 (0, 2) | 0.24 [0.2, 0.29] |
| Foot | 101 | 0.21 [0.17, 0.25] | 1 (0, 4) | 0.87 [0.79, 0.96] |
| Muscle/tendon | 14 | 0.03 [0.02, 0.05] | 1 (0, 2) | 0.06 [0.04, 0.09] |
| <i>Plantar heel pain (fasciitis/strain/calcaneal spur)</i> | 7 | 0.01 [0.01, 0.03] | 0 (0, 4) | 0.04 [0.02, 0.06] |
| Nervous | 1 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Bone | 10 | 0.02 [0.01, 0.04] | 6 (1, 26) | 0.35 [0.3, 0.41] |
| Cartilage/synovium/bursa | 3 | 0.01 [0, 0.02] | 10 (8, 20) | 0.10 [0.07, 0.13] |
| Ligament/joint capsule | 4 | 0.01 [0, 0.02] | 2 (1, 2) | 0.01 [0.01, 0.03] |
| Superficial tissues/skin | 2 | 0.00 [0, 0.01] | 1 (0, 2) | 0.00 [0, 0.01] |
| Vessels | 13 | 0.03 [0.02, 0.05] | 1 (0, 2) | 0.05 [0.03, 0.07] |
| <i>Heel bruising/haematoma incl. fat pad contusion</i> | 5 | 0.01 [0, 0.02] | 3 (0, 4) | 0.04 [0.02, 0.06] |
| <i>Foot contusion/haematoma</i> | 7 | 0.01 [0.01, 0.03] | 1 (0, 1) | 0.01 [0, 0.02] |
| Non-specific | 54 | 0.11 [0.09, 0.15] | 1 (0, 4) | 0.30 [0.25, 0.35] |
| Region unspecified | 3 | 0.01 [0, 0.02] | 0 (0, 2) | 0.01 [0, 0.02] |
| Muscle/tendon | 3 | 0.01 [0, 0.02] | 0 (0, 2) | 0.01 [0, 0.02] |

OSIICS = Orchard Sports Injury and Illness Classification System; CI = Confidence interval

Supplementary table 2. Pattern of 1371 illnesses distributed among 381 Norwegian Olympic athletes between 2011 and 2020, presented by organ system and aetiology. Specific OSICS-13 diagnoses are presented if five or more of the same diagnoses were recorded

| Organ system | Illnesses | Incidence | Median time loss | Burden |
|-----------------------------------|------------|-------------------------------------|------------------------------|--|
| Aetiology | n | Illnesses per athlete year [95% CI] | Days (25th, 75th percentile) | Time loss days per athlete year [95% CI] |
| <i>OSICS-13 Diagnosis</i> | | | | |
| Cardiovascular | 9 | 0.02 [0.01, 0.03] | 3 (1, 7) | 0.13 [0.1, 0.17] |
| Thrombotic/haemorrhagic | 1 | 0.00 [0, 0.01] | 3 (3, 3) | 0.01 [0, 0.02] |
| Degenerative or chronic condition | 2 | 0.00 [0, 0.01] | 5 (4, 6) | 0.02 [0.01, 0.04] |
| Unknown, or not specified | 6 | 0.01 [0.01, 0.03] | 2 (0, 6) | 0.11 [0.08, 0.14] |
| Dermatological | 16 | 0.03 [0.02, 0.05] | 2 (0, 3) | 0.07 [0.05, 0.09] |
| Immunological/inflammatory | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Infection | 6 | 0.01 [0.01, 0.03] | 4 (2, 5) | 0.04 [0.03, 0.06] |
| Neoplasm | 1 | 0.00 [0, 0.01] | 1 (1, 1) | 0.00 [0, 0.01] |
| Unknown, or not specified | 7 | 0.01 [0.01, 0.03] | 2 (0, 2) | 0.02 [0.01, 0.04] |
| Endocrinological | 13 | 0.03 [0.02, 0.05] | 1 (0, 3) | 0.21 [0.17, 0.25] |
| Immunological/inflammatory | 13 | 0.03 [0.02, 0.05] | 1 (0, 3) | 0.21 [0.17, 0.25] |
| <i>Chronic fatigue syndrome</i> | 11 | 0.02 [0.01, 0.04] | 1 (0, 4) | 0.21 [0.17, 0.25] |
| Gastrointestinal | 148 | 0.31 [0.26, 0.36] | 2 (1, 3) | 0.83 [0.76, 0.92] |
| Immunological/inflammatory | 4 | 0.01 [0, 0.02] | 3 (2, 5) | 0.03 [0.02, 0.05] |
| Infection | 68 | 0.14 [0.11, 0.18] | 2 (1, 4) | 0.53 [0.46, 0.59] |
| <i>Gastrointestinal infection</i> | 66 | 0.14 [0.11, 0.17] | 2 (1, 4) | 0.39 [0.34, 0.45] |
| Multiple | 76 | 0.16 [0.13, 0.2] | 1 (0, 2) | 0.28 [0.24, 0.33] |
| <i>Gastrointestinal illness</i> | 59 | 0.12 [0.09, 0.16] | 1 (0, 2) | 0.20 [0.16, 0.24] |
| <i>Diarrhoea</i> | 17 | 0.04 [0.02, 0.06] | 2 (1, 3) | 0.09 [0.06, 0.11] |
| Genitourinary | 3 | 0.01 [0, 0.02] | 2 (2, 13) | 0.06 [0.04, 0.08] |
| Immunological/inflammatory | 1 | 0.00 [0, 0.01] | 2 (2, 2) | 0.00 [0, 0.01] |
| Infection | 2 | 0.00 [0, 0.01] | 12 (7, 18) | 0.05 [0.03, 0.08] |
| Musculoskeletal | 3 | 0.01 [0, 0.02] | 0 (0, 1) | 0.00 [0, 0.01] |
| Immunological/inflammatory | 2 | 0.00 [0, 0.01] | 0 (0, 0) | 0.00 [0, 0.01] |
| Unknown, or not specified | 1 | 0.00 [0, 0.01] | 2 (2, 2) | 0.00 [0, 0.01] |
| Neurological | 39 | 0.08 [0.06, 0.11] | 1 (1, 2) | 0.16 [0.13, 0.2] |
| Immunological/inflammatory | 6 | 0.01 [0.01, 0.03] | 0 (0, 2) | 0.01 [0.01, 0.03] |
| <i>Migraine</i> | 6 | 0.01 [0.01, 0.03] | 0 (0, 2) | 0.01 [0.01, 0.03] |
| Developmental anomaly | 1 | 0.00 [0, 0.01] | 3 (3, 3) | 0.01 [0, 0.02] |
| Unknown, or not specified | 32 | 0.07 [0.05, 0.09] | 1 (1, 2) | 0.14 [0.11, 0.18] |
| Ophthalmological | 5 | 0.01 [0, 0.02] | 0 (0, 0) | 0.00 [0, 0.01] |
| Unknown, or not specified | 5 | 0.01 [0, 0.02] | 0 (0, 0) | 0.00 [0, 0.01] |
| Otological | 2 | 0.00 [0, 0.01] | 2 (1, 4) | 0.01 [0, 0.02] |
| Infection | 2 | 0.00 [0, 0.01] | 2 (1, 4) | 0.01 [0, 0.02] |
| Psychiatric/psychological | 15 | 0.03 [0.02, 0.05] | 1 (1, 4) | 0.18 [0.15, 0.22] |
| Environmental – non-exercise | 3 | 0.01 [0, 0.02] | 6 (4, 6) | 0.03 [0.02, 0.05] |
| Multiple | 10 | 0.02 [0.01, 0.04] | 2 (1, 4) | 0.15 [0.12, 0.19] |
| <i>Depression</i> | 8 | 0.02 [0.01, 0.03] | 1 (1, 2) | 0.14 [0.11, 0.17] |
| Unknown, or not specified | 2 | 0.00 [0, 0.01] | 1 (1, 1) | 0.00 [0, 0.01] |

| | | | | |
|--|------------|--------------------------|-----------------|--------------------------|
| Respiratory | 914 | 1.91 [1.78, 2.03] | 2 (0, 4) | 5.76 [5.54, 5.97] |
| Allergic | 13 | 0.03 [0.02, 0.05] | 0 (0, 2) | 0.03 [0.01, 0.04] |
| <i>Allergy - rhinitis/sinusitis/hayfever</i> | 9 | 0.02 [0.01, 0.03] | 0 (0, 2) | 0.01 [0.01, 0.03] |
| Environmental – exercise-related | 4 | 0.01 [0, 0.02] | 2 (2, 4) | 0.02 [0.01, 0.04] |
| Infection | 889 | 1.85 [1.73, 1.98] | 2 (0, 4) | 5.67 [5.46, 5.89] |
| <i>Respiratory infection</i> | 876 | 1.83 [1.71, 1.95] | 2 (0, 4) | 5.60 [5.39, 5.81] |
| <i>Pneumonia/bronchitis/lower RTI</i> | 11 | 0.02 [0.01, 0.04] | 3 (0, 4) | 0.06 [0.04, 0.09] |
| Multiple | 5 | 0.01 [0, 0.02] | 2 (2, 2) | 0.02 [0.01, 0.03] |
| <i>Respiratory disease</i> | 5 | 0.01 [0, 0.02] | 2 (2, 2) | 0.02 [0.01, 0.03] |
| Unknown, or not specified | 3 | 0.01 [0, 0.02] | 3 (2, 3) | 0.02 [0.01, 0.03] |
| Multiple systems | 138 | 0.29 [0.24, 0.34] | 2 (0, 4) | 1.20 [1.11, 1.3] |
| Environmental – non-exercise | 1 | 0.00 [0, 0.01] | 3 (3, 3) | 0.01 [0, 0.02] |
| Infection | 113 | 0.24 [0.2, 0.28] | 3 (0, 5) | 1.09 [1, 1.19] |
| <i>Glandular fever</i> | 9 | 0.02 [0.01, 0.03] | 4 (2, 40) | 0.39 [0.33, 0.45] |
| <i>Virus proven by serology</i> | 67 | 0.14 [0.11, 0.18] | 3 (0, 4) | 0.41 [0.35, 0.47] |
| <i>Infection, other</i> | 37 | 0.08 [0.06, 0.11] | 2 (0, 4) | 0.30 [0.25, 0.35] |
| Metabolic/nutritional | 24 | 0.05 [0.03, 0.07] | 1 (0, 3) | 0.10 [0.08, 0.13] |
| <i>Tired athlete undiagnosed</i> | 22 | 0.05 [0.03, 0.07] | 1 (0, 3) | 0.10 [0.08, 0.13] |
| Unknown or not specified | 10 | 0.02 [0.01, 0.04] | 0 (0, 2) | 0.04 [0.02, 0.06] |
| Multiple | 10 | 0.02 [0.01, 0.04] | 0 (0, 2) | 0.04 [0.02, 0.06] |
| <i>Medical illness undiagnosed/other</i> | 10 | 0.02 [0.01, 0.04] | 0 (0, 2) | 0.04 [0.02, 0.06] |

OSIICS = Orchard Sports Injury and Illness Classification System; CI = Confidence interval