

## FACTSHEET #14

# JOINT ISSUES & CHRONIC PAIN

Noonan Syndrome  
Association



***Musculoskeletal pain is a frequent and under-recognized clinical feature of Noonan syndrome.***

A 2021 study found that 25% of people with Noonan syndrome suffered from musculoskeletal pain, and 14% had joint stiffness in the wrists, elbows, ankles, knees and hips.

A separate study, also in 2021, found that 62% of people with Noonan syndrome experienced chronic pain. This pain was present among both adults and children – in this study, 50% of the people with chronic pain were children, less than 16 years old – and was linked to hypermobile joints.

Joint laxity is more common in people with Noonan syndrome – a 2012 study reported that it affected 49% of people with Noonan syndrome, a portion of whom had chronic pain. If joints are hypermobile, the abnormal

range of motion can increase stress on adjacent muscles and tendons, causing pain.

Although hypermobility may be an important factor the pattern of joint involvement is different from that seen with hypermobility alone and it is not clear what other mechanisms may be involved with Noonan syndrome. On investigation there are no abnormalities of the inflammatory markers seen in other forms of arthritis and fortunately although the pain may be distressing there is no progressive joint damage.

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## REFERENCES/FURTHER READING

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Factsheet created: Aug 2022