## Sleep Series for Individuals with 22q11.2 Differences

## Restless Legs Syndrome (RLS) & Periodic Limb Movement Disorder (PLMD)

Many individuals with 22q differences experience sleep problems. These problems can negatively affect their mental health, which then in turn cause more sleep issues. This sheet describes **restless legs syndrome** (**RLS**; also called Willis-Ekbom disease) and **periodic limb movement disorder** (**PLMD**). These are separate conditions, but sometimes these terms are used interchangeably. Some people have both conditions.

## Restless Legs Syndrome (RLS) & Periodic Limb Movement Disorder (PLMD)

	Restless Legs Syndrome (RLS)	Periodic Limb Movement Disorder (PLMD)
What	Crawling/tingling sensation in the legs and/or arms plus an irresistible urge to move them	Repetitive twitches and jerks of legs and/or arms that interfere with deep sleep and disturb the bedpartner's sleep
When	Any time - Sitting/lying still, relaxing, trying to fall asleep	During sleep (PLMD does not prevent the person from falling asleep)
Awareness	The person is aware of the strange feelings and movements.	The person is <u>not</u> aware of movements. Often the bedpartner is the person who notices.
Implications	The sensations and movements make it difficult to relax and fall asleep, and the person does not get enough sleep.	The <b>interrupted sleep</b> leads to sleep deprivation, resulting in daytime sleepiness, poor concentration, behavioral issues, and can also worsen mental health.
Causes	<ul> <li>Problems in the nerves – may run in the family</li> <li>Children with 22q11.2 deletions had more limb movements during sleep than those with 22q11.2 duplications</li> <li>Low iron, low calcium, low vitamin B12, use of caffeine, certain illnesses and medications</li> </ul>	
Diagnosis	Based on clinical history. Your healthcare provider may take your medical history and do a physical exam to rule out other issues	Via Polysomnography (overnight sleep study). Your healthcare provider may also take your medical history and do a physical exam.
Treatment	<ul> <li>Manage low iron, stomach reflux, anxiety, and other medical/social issues that affect sleep</li> <li>Avoid caffeine, alcohol, and tobacco</li> <li>Exercise during the day</li> <li>Only lie down on the bed when ready to sleep to reduce RLS before sleep</li> <li>Warm bath and massage may relieve RLS sensations</li> <li>Medications may be recommended by your healthcare professional</li> <li>Don't use sleep medications unless instructed by your healthcare provider.</li> <li>Don't stop using your regular medications unless instructed by your healthcare provider.</li> </ul>	

## Resources

- Restless Legs Syndrome Mayo Clinic
- Restless Legs Syndrome Cleveland Clinic
- Restless Legs Syndrome AASM
- <u>Periodic Limb Movements</u> AASM
- Periodic Limb Movement Disorder (PLMD) and Restless Legs Syndrome (RLS) Merck Manual
- Sleep difficulties related to psychopathology and neurocognition in people with 22q11.2 deletion syndrome
   [Summary] 2025
- Polysomnographic findings in children with 22q deletion & duplication syndrome: relationship to genetic diagnosis, parent-reported symptoms, and calcium levels – 2024
- Updated clinical practice recommendations for managing [children | adults] with 22q11.2 deletion syndrome 2023



The mission of the <u>International 22q11.2 Foundation</u> is to improve the quality of life for individuals affected by chromosome 22q11.2 differences through family and professional partnerships.

This information is brought to you by the Foundation for educational purposes only. It is <u>not</u> intended to be taken as medical advice. If you have concerns, please talk to your healthcare provider.