

= LW4 (classification) =

LW4 is a para @-@ Alpine and para @-@ Nordic standing skiing sport class defined by the International Paralympic Committee (IPC) for skiers who may have a disability in one lower extremity , which may be a result of a leg amputation below the knee , knee arthrodesis or a hip arthrodesis . For international skiing competitions , classification is done through IPC Alpine Skiing or IPC Nordic Skiing . A national federation such as Alpine Canada handles classification for domestic competitions .

Skiers in this classification compete with one or two skis and two ski poles , except in para @-@ Nordic skiing where the skier must use two skis and two ski poles . Skiers in this sport class may have a specially made ski boot with a prosthetic built into it . Cerebral palsy skiers in this class may have better balance while using skis than they would otherwise . This presents challenges for coaches who are working with the skier . Compared to other skiers in the class , the skier with cerebral palsy may tire more quickly .

A factoring system is used in the sport to allow different classes to compete against each other when there are too few individual competitors in one class in a competition . The factoring for LW4 alpine skiing classification during the 2011 / 2012 skiing season was 0 @-@ 9961 for slalom , 0 @-@ 995 for giant slalom , 0 @-@ 9901 for Super @-@ G and 0 @-@ 9949 for downhill . In para @-@ Nordic skiing , the percentage for the 2012 / 2013 ski season was 96 % for classic and 96 % for free . While LW4 was not grouped with others classes at an event in the 1980s , it became grouped with other classifications during the 1990s and 2000s . Eligible events for this classification included 1986 World Disabled Ski Championships , 1988 World Winter Games for the Disabled , 1990 Disabled Alpine World Championships , 1992 Winter Paralympics , 1994 Winter Paralympics , 1996 Disabled Alpine World Championships in Lech , Austria , 1998 Winter Paralympics and 2002 Winter Paralympics . Skiers in this classification include Australian Scott Adams and New Zealanders Steve Bayley and Patrick Cooper .

= = Definition = =

This classification is used in para @-@ Alpine and para @-@ Nordic standing skiing , where LW stands for Locomotor Winter . Skiers in this class have a disability in one lower extremity , which may be a result of a leg amputation below the knee , knee arthrodesis or a hip arthrodesis . If there are functional problems on the leg , the strength of the leg will be 30 or less , where a fully functional leg normally has a strength of 40 . Lower limb monoplegia is a type disability that is comparable to knee amputation for this class . Skiers may be in this class as a result of an amputation , or polio .

The International Paralympic Committee (IPC) defined this classification for para @-@ Alpine as " Competitors with disabilities in a lower limb skiing with two normal skis and two poles ... Typical disability profile of the class is single below @-@ knee amputation . " While skiers with a fused knee and hip are eligible for this classification , skiers with fused ankles are not . In 2002 , the Australian Paralympic Committee described this classification as a standing skiing classification with " Two skis , two poles , disability in one leg below the knee . " For para @-@ Nordic skiing , the IPC defines this classification as " those with impairment in one lower limb below the knee . " Cross Country Canada described this classification as " Impairment in one lower limb below the knee . "

For international para @-@ Alpine skiing competitions , classification is done through IPC Alpine Skiing . A national federation such as Alpine Canada handles classification for domestic competitions . For para @-@ Nordic skiing events , classification is handled by IPC Nordic Skiing Technical Committee on the international level and by the national sports federation such as Cross @-@ Country Canada on a country by country level . When being assessed into this classification , a number of things are considered including reviewing the skiers medical history and medical information on the skier 's disability , having a physical and an in person assessment of the skier training or competing .

= = Equipment = =

Skiers in this classification compete with one or two skis and two ski poles , except in para @-@ Nordic skiing where the skier must use two skis and two ski poles . Skiers use skis that would be slightly longer than if they were able bodied . Skiing with a prosthesis is allowed in this classification in international competitions . In training , skiers can also use cants , wedges and prostheses with a special skiing prosthesis having been developed for use . The prosthetic may be built into the ski boot for below knee amputees , though FIS rules for ski boots and binding heights are enforced for everyone in this class .

Some skiers with amputations may require the use of outriggers , a forearm crutches with a miniature ski on a rocker at the base which are fitted for the skier based the height of the skier 's hip joint when the skier is standing . Cants are wedges that sit under the binding that are intended to more evenly distribute weight . They are customised for the specific needs of the skier . Skiers in this class may have a specially made ski boot with a prosthetic built into it . In the Biathlon , athletes with amputations can use a rifle support while shooting .

= = Technique = =

Outriggers are used to stop using a technique that involves bringing the skiers elbows from their raised position down to their hips while pushing the outriggers down . When using the outrigger , skiers do not rotate their arms as this changes the location of the ski on the snow . Skiers with below the knee amputations get on and off the ski lift using the same technique as able @-@ bodied skiers . Cerebral palsy skiers in this class may have better balance while using skis than they would otherwise . This presents challenges for coaches who are working with the skier . Compared to other skiers in the class , the skier with cerebral palsy may tire more quickly .

One of the skiing techniques used by this class is called the three track method , and was developed as part of the American Training System . One of the first skills learned using this technique is how to walk with the ski so the skier can learn how to flex the ankle , knee and hip . This allows the skier to determine their centre of gravity . The skier is then taught how hop turn in order to understand arm and leg coordination while on skis . This technique is only used while stationary and is not a competition skill . The skier next learns how to fall down and get back up again . The next skill learned is climbing gentle terrain , followed by learning to go down a straight run and learning to stop . After this , the skier learns how to get on and off a ski lift . This is followed by learning how to traverse the fall line , which teaches the skier how to maintain the ski edge . Other skills are then taught including the Uphill Christie , beginning turns , parallel turns , short swings and moguls .

In the Biathlon , all Paralympic athletes shoot from a prone position .

= = Sport = =

A factoring system is used in the sport to allow different classes to compete against each other when there are too few individual competitors in one class in a competition . The factoring system works by having a number for each class based on their functional mobility or vision levels , where the results are calculated by multiplying the finish time by the factored number . The resulting number is the one used to determine the winner in events where the factor system is used .

In para @-@ Nordic skiing , which includes cross @-@ country skiing and biathlon events , this classification is grouped with other standing classes . For the 2003 / 2004 para @-@ Nordic skiing season , the percentage for the classic technique was 94 or 96 % and percentage for free was 96 % . The percentage for the 2008 / 2009 and 2009 / 2010 ski seasons was 96 % for classic and 96 % for free technique . The factoring for LW4 alpine skiing classification during the 2011 / 2012 skiing season was 0 @. @ 9961 for slalom , 0 @. @ 995 for giant slalom , 0 @. @ 9901 for Super @-@ G and 0 @. @ 9949 for downhill . The percentage for the 2012 / 2013 ski season was 96 % for classic and 96 % for free .

In para @-@ Alpine skiing events , this classification is grouped with standing classes who are

seeded to start after visually impaired classes and before sitting classes in the slalom and giant slalom . In downhill , Super @-@ G and Super Combined , this same group competes after the visually impaired classes and sitting classes . A skier is required to have their ski poles or equivalent equipment planted in the snow in front of the starting position before the start of the race . The IPC advises event organisers to run the men 's standing ski group after the blind men 's group and before the blind women 's group . Women 's standing classes are advised to go last .

= = Events = =

While LW4 was not grouped with others classes at an event in the 1980s , it became grouped with other classifications during the 1990s and 2000s . At the 1986 World Disabled Ski Championships , 1988 World Winter Games for the Disabled , 1990 Disabled Alpine World Championships , 1992 Winter Paralympics , 1994 Winter Paralympics , 1996 Disabled Alpine World Championships in Lech , Austria , 1998 Winter Paralympics and 2002 Winter Paralympics , the men 's LW4 skiers were not grouped with others classes for medal events . For women at the 1998 Winter Paralympics , the LW1 , LW3 , LW4 , LW5 and LW6 classes competed in one group . At the 2002 Winter Paralympics in alpine @-@ skiing , women 's LW3 , LW4 , LW6 / 8 and LW9 were grouped for the women 's Super @-@ G and downhill events , and LW3 , LW4 , and LW9 were grouped for the Slalom and Giant Slalom events . At the 2005 IPC Nordic Skiing World Championships , this class was grouped with other standing skiing classifications . In cross country , this class was eligible to compete in the men and women 's 5 km , 10 km and 20 km individual race . In the men and women 's biathlon , this classification was again grouped with standing classes in the 7 @.@ 4 km race with 2 shooting stages 12 @.@ 5 km race which had four shooting stages . At the 2009 World Championships , there were no women from this class competing in the standing downhill event . In the men 's standing downhill , there were five skiers from this class .

= = Competitors = =

Skiers in this classification include Australian Scott Adams and New Zealanders Steve Bayley and Patrick Cooper .