

Grandes Jorasses  
4208 m

dent du Géant  
4013 m

aiguille du Midi  
3842 m

mont Blanc du Tacul  
4248 m

mont Maudit  
4465 m

mont Blanc  
4810 m

dôme du Goûter  
4304 m

aiguilles de Bionnassay  
4052 m

refuge des  
Cosmiques  
3613 m

refuge des Grands Mulets  
3051 m

refuge du Goûter  
3835 m

refuge de Tête Rousse  
3167 m



Plan de l'aiguille

la Jonction

Arête du Dôme

## Reaching the top of Mont Blanc A concern for climbers

For us climbers, who sometimes travel thousands of kilometres to climb this summit, Mont Blanc is far more than just another peak to climb. It is a dream, a legend even. The amazing history of our passion has been written on these slopes. The intense efforts, unspoiled landscapes and elegant peaks, the fraternity of the roped party and the confrontation with high altitude all contribute to making this a unique experience. We all want to share it.

However, this symbol of mountaineering sometimes also conveys a negative image of our sport. The number of people on certain days, the lack of respect for the site and for other people, failures and tragedies all contribute to this deteriorating image. If we are not careful, this deterioration could result in the free access to this summit being limited. The mountain community can use its many talents to show the way to making sure that the highest point in the Alps remains exemplary and freely attainable place, by enhancing the Mont Blanc experience.

Standing 4,810m high, this summit is obviously for experienced mountaineers. Such an extraordinary climb is not for just anyone. Good preparation, information and equipment are fundamental pre-requisites. It takes time to acquire expertise in mountaineering techniques and knowledge of the mountain environment. If you want access to the untamed, wilder side of nature, you must accept the risk that comes with it. In fact, the art of climbing mountains resides in knowing how to reduce this risk. The first thing to do is therefore understand nature and identify the particular dangers you will be facing in order to create suitable solutions. Such magnificent places are also fragile.

We must leave this classified site pure, respect the rules and the recommendations applicable in the refuges, take all waste home with us and use the toilets provided.

The success of your Mont Blanc experience is more than just adding this peak to your list of climbs: it also means getting back down again safely, with a head full of exceptional memories. Faced with a climb that is harder than anticipated, mediocre conditions or an insufficiently prepared or untrained group, turning back at the right moment can be a form of group success. Perhaps another climb would be a better option for that particular day.

**Freedom**  
means giving yourself the chance to try again.

## 7 routes to the top of the Alps

There is more than one way to reach the top of Mont Blanc.



### 1. The normal route via Goûter.

Alpine grade: PD (somewhat difficult). Ascent: 1450 + 1000m or 800 + 1650 (overnight stop at Tête Rousse)

With an overnight stay at Tête Rousse, the altitude gain is higher (1650m), but you will be crossing the couloir at the right time and you can stop at the Goûter refuge on the way back.

### 2. The three summits. (Tacul, mont Maudit, mont Blanc).

Alpine grade: PD+ (somewhat difficult+). Ascent: 1200m

More technical and physically demanding than the normal route, this itinerary is attracting increasing numbers of climbers. Descent via either Goûter or Grands Mulets.

### 3. Grands Mulets and the Dôme du Goûter ridge

Alpine grade: PD+ (somewhat difficult +). Ascent: 700 + 1800m.

A classic on skis and for descent, this historic route is not recommended on foot because it means being exposed for too long to the risk of serac falls from the Petit Plateau. The alternative is to climb the north ridge of the Dôme du Goûter from the Goûter refuge before reaching the Vallot hut.

### 4. Italian normal route (or Aiguilles Grises)

Alpine grade: PD+ (somewhat difficult +). Ascent: 1300 + 1800m (or 800 + 1000m)

The normal Italian route is a long and beautiful snowy itinerary on a glacier that can be complicated. Possibility of an intermediate night stop at the Goûter refuge.

### 5. The Royal Traverse: Miage, Bionnassay, Mont Blanc

Alpine grade: AD (fairly difficult) (exposed). Ascent: 1450+1100 +1650m

Long expedition with sharp ridge passages that are very tricky.

### 6. Tournette spur

Alpine grade: AD (fairly difficult). Ascent: 1700 + 1400m.

Long, exposed expedition in wild terrain; involves committed climbing with traditional protection.

### 7. Innominate ridge

Alpine grade: D+ (difficult +). Ascent: 900+1500+800m.

Long, exposed expedition along a complicated route.



## Being aware of the dangers

Do not confuse difficulty with danger. The busiest routes to Mont Blanc are not particularly demanding technically speaking. However, they involve all the dangers inherent to this environment. To limit risks, start by identifying the hazards of the terrain, finding out current conditions and the capabilities of your party.

### Altitude

The higher you go, the less oxygen there is. **FMS** (acute mountain sickness) is a constant threat. Headaches, insomnia, breathlessness, loss of appetite, nausea, vomiting... the main symptoms can appear even at 3,500m. There is nothing to do but turn back. Proper acclimatisation can help prevent AMS.

### Cold

At high altitude, close to 5,000m, the weather can change very quickly, bringing all kinds of problems: fog, cold made worse by violent winds, snow, frost, storms, lightning. It is important to be able to recognise the warning signs and to know when to retreat.

### Getting lost

One of the main dangers of Mont Blanc is getting lost in sudden fog, particularly close to the summit or between the Aiguille and the Dôme du Goûter. Never set out without a map, navigation instruments and the knowledge of how to use them. Know precisely where you are during your entire itinerary.

### Falling

The danger of falling increases with the steepness of the slope and the steepest areas include the Goûter ridge, below the Mont Maudit pass or the Bosses ridge. Although fresh snow offers serene landscapes of beautiful slopes, these same slopes become treacherous when the snow is hard. Good technique and suitable roping methods are essential.

### Busy periods

The presence of other groups is reassuring, often too much so, particularly along the normal routes. The presence of other people offers a false sense of security. You happily follow in their footsteps, perhaps losing your own concentration. During the busiest periods, having to slow down and even stop for others adds further difficulties to crossings and can increase exposure to hazards.

### Extreme Fatigue

Altitude, cold, height gain and lack of preparation can result in profound fatigue. It is important that group members look out for one another.

### Crevasse

Glaciers are very broken up in parts, particularly at the Jonction. Appropriate roping techniques and crevasse rescue equipment on each harness are essential.

### Seracs Falls

Glaciers move at their own, imperceptible pace. Balanced seracs can fall at any time, without warning, particularly under the Mont Blanc du Tacul, around the Petit Plateau and the Grand Plateau. Avoid these areas or if not, at least do not linger there.

### Avalanches

At altitudes like these, there is no season for snow. After a period of bad weather, extra care should be taken on gradients of more than 30°, particularly in the Goûter couloir or below Mont Blanc du Tacul. In summer, the snow cover generally stabilises more quickly. Remember to take an avalanche transceiver, shovel and probe and know when it is best to wait.

### Rock falls

Rock falls, whether natural or caused by other climbers, demand the greatest care, particularly whilst within the Goûter couloir (see over).



Ok, enough!  
We're going home!  
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www.coordination-montagne.fr  
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3, rue Raoul Blanchard, 38000 Grenoble.  
La Coordination Montagne  
Fondation.

En Passant par la Montagne, Sportsstructure.org research network, the Mountain Biker's Association of mountain and cross country ski centres), CIPRA, the Petzl Foundation, ANCEF sports centres), GTA (Grande Traversée des Alpes), SNAM (Union of mountain monitors), UCPA (Union of outdoor climbing professionals), SMAG (Union of mountain guides), SNGM (Union of climbing and mountaineering guides), SNGM (high mountain group), SNGM (Union of mountain guides), FFEP (French hiking federation), FFME (French mountaineering and climbing federation), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs).

The national coordination committee for the development of mountain and climbing activities (Coordination Montagne), created in January 2012, comprises: FFAM (French federation of mountain climbing clubs), FFME (French mountaineering and climbing federation), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs), FFAM (French federation of mountain climbing clubs).

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**This document was devised and produced by the national coordination committee for the development of mountain and climbing activities.**

# Reaching the top of MONT BLANC

## a concern for climbers

Preparation  
Equipment  
Information  
Freedom  
Respect

## 1 Preparation

To attempt Mont Blanc with a good chance of success, experience of high mountains, regular training and preparation are essential. Good guides are also a decisive factor.



In terms of physical preparation for this summit, you should not only be in good physical condition, but also have tested your level of fitness at altitude. A first experience of an easier "4,000" and at least one night spent recently at more than 3,000m will give you a better idea of your real condition.

The techniques you will need to know include knowing how to use crampons, how to climb in varied terrain and cross ridges, and being able to adjust your rope (long on the glacier, short along the ridges, etc.).

Psychologically, you must be prepared for bad nights and long days in a fabulous, but hostile, different and changing environment.

Preparing your expedition means studying the terrain by reading maps, topoguides and expedition reports.

A club can help you to find a partner for your expedition, an initial experience and training courses.

A professional guide can advise, prepare and supervise you, taking on responsibility for the expedition.



- Finding a club:**  
[www.thebmc.co.uk](http://www.thebmc.co.uk); [www.alpine-club.org.uk](http://www.alpine-club.org.uk); [www.americanalpineclub.org](http://www.americanalpineclub.org)
- Finding a professional guide:**  
In France: [www.sngm.fr](http://www.sngm.fr)  
In Aosta Valley: [www.guidedaltamontagna.com](http://www.guidedaltamontagna.com)  
In Switzerland: [www.4000plus-vs.ch](http://www.4000plus-vs.ch)

## 2 Equipment

Part of the expedition means finding the right equipment, remembering the essentials without weighing yourself down with the superfluous.

As well as clothing suitable for high altitude conditions and extremely cold temperatures (including spare gloves), the equipment is that of a mountaineer on a glacier (ice axe, crampons, harness, rope, etc.).

Remember that you must be prepared:

- To protect yourself: helmet, glasses, sun-cream (avalanche transceiver, shovel and probe, depending on your route and local conditions).
- To find your way: map, topo, compass, altimeter, whistle, headlamp (GPS).
- To eat and drink: food rations, hot drinks.
- For rescue operations: crevasse rescue kit (5 karabiners, 3 ice screws, self-locking pulley, 2 rope clamps, sling, cordelette), telephone or radio, appropriate first aid kit.



**Risk aggravating factors:**

- Temperatures above zero.
- Dry air: nice, sunny weather.

The most critical time is between 11am and 1.30pm.

**Risk reducing factors:**

- Temperatures below zero.
- Cloudy weather, with little sun. The presence of snow in the couloir has no influence on the regularity of rock falls. However, it does help to prevent other blocks being pulled down and rocks rebounding along the couloir.

## 3 Information

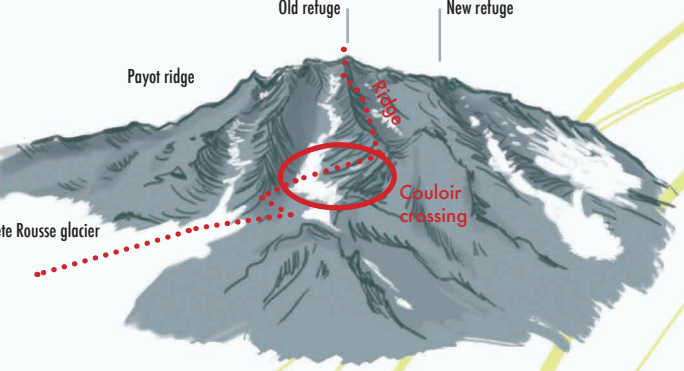
Conditions change quickly in the mountains and the weather changes even faster. To make the right decisions, you have to have the right information and know how to interpret it with a critical mind.

- Weather and mountain conditions:**  
High mountain office: +33 (0)4 50 53 22 08; [www.chamoniarde.com](http://www.chamoniarde.com); [www.chamonix-meteo.com](http://www.chamonix-meteo.com)  
Meteo France weather forecast: (France only) 08 99 71 02 74; [www.meteofrance.com](http://www.meteofrance.com)  
Aosta Valley weather forecast: (+39) 0165 272 333; [www.regionevda.it](http://www.regionevda.it)  
Swiss mountain bulletin: (+41) 0900900 162 168; [www.meteosuisse.admin.ch](http://www.meteosuisse.admin.ch)  
Chamonix mountain gendarmes: +33 (0)4 50 53 16 89
- Refuges and huts:**  
Tête Rousse: +33 (0)4 50 58 24 97; **booking is compulsory:** [refugeteterousse.ffcam.fr](http://refugeteterousse.ffcam.fr)  
Goûter: +33 (0)4 50 54 40 93; **booking is compulsory:** [refugedugouter.ffcam.fr](http://refugedugouter.ffcam.fr)  
Tré la tête: +33 (0)4 50 47 01 68; [www.trelatete.com](http://www.trelatete.com)  
Gonella: (+39) 0165 885 101; [www.rifugiogonella.com](http://www.rifugiogonella.com)  
Montzina: (+39) 0165 809 553  
Cosmiques: +33 (0)4 50 54 40 16  
Grands Mulets: +33 (0)4 50 53 57 10  
Concrist: +33 (0)4 79 89 09 03  
Durier: +33 (0)6 89 53 25 10
- Lifts:**  
Aiguille du Midi cable car, Bellevue cable car, Mont-Blanc tramway: +33 (0)4 50 53 22 75  
Opening hours: [www.compagniedumontblanc.fr](http://www.compagniedumontblanc.fr)
- Tourist information:**  
Chamonix: +33 (0)4 50 53 00 24; [www.chamonix.com](http://www.chamonix.com)  
Les Houches-Servoz: +33 (0)4 50 55 50 62; [www.leshouches.com](http://www.leshouches.com)  
Saint-Gervais-les-Bains: +33 (0)4 50 47 76 08; [www.saintgervais.com](http://www.saintgervais.com)  
Val Montjoie: +33 (0)4 50 47 01 58; [www.lescontamines.com](http://www.lescontamines.com)  
Vallée d'Aoste: (+39) 0165 842 060; [www.lovevda.it](http://www.lovevda.it)  
Valais: (+41) 27 783 2717; [www.st-bernard.ch](http://www.st-bernard.ch)



## The hazards of the normal route

The Goûter couloir is where most of the more serious accidents occur.



From 1990 to 2011, 74 people died and 180 were injured along this route, between the Tête Rousse and Goûter refuges. Studies are underway to attempt to limit the high risk presented by rock falls.

In its current state, mountaineers must be aware of the dangers of this itinerary and be prepared to face them.

Approximately half of all accidents occur along the 100m couloir crossing, and one third along the ridge.

Most are caused by a climber falling, often directly or indirectly related to a rock fall. In relation to traffic, there are at least as many accidents on the way down, particularly along the ridge. We also know that two thirds of all casualties were not roped, and that fewer accidents involve people accompanied by a professional guide. A study carried out in summer 2011 concerning the couloir alone estimated that one thousand of the estimated 17,000 crossings of the couloir were affected by rock fall. While rock falls can occur at any time of day or season, certain factors can aggravate or reduce the risk.

For more information: [www.petzl-foundation.org](http://www.petzl-foundation.org)

**How to cross the Goûter couloir?**  
As with all the other parts of the routes, assessing the current conditions remains an essential factor when choosing the techniques to be implemented. The main principles to be remembered include:

- Always wear a helmet and stay roped together.
- Prepare your equipment a good distance before crossing the couloir and not close to its edges, which are highly exposed.
- Check current conditions before deciding whether or not to cross the couloir.
- If possible, keep a lookout from a sheltered position for the roped party before you.
- Do not waste time in the couloir, but do not hurry unnecessarily either.

If the snow means your crampons hold well, you may not need the cable. Otherwise, use the cable according to recommendations (attached with a suitable technique, using a "floating" karabiner between two members of the roped party).

Along the ridge, use the cables and their anchors for belaying – but beware, this is not a via ferrata.

## If an accident occurs

If you see an accident, you must take the usual emergency precautions:

### PROTECT

Before doing anything else, prevent further accidents by protecting others. Never move a casualty unless he/she is in direct, imminent danger, in which case, be careful to keep the torso/neck/ head aligned and protect against the cold.

### ALERT

Telephone network and radio coverage (150MHz) is generally good in the Mont Blanc area. If neither work, send a messenger (not alone if possible) to inform the nearest refuge or find an alert area. A single emergency number: **112**

### FIRST AID

While waiting for the rescue team to arrive, you may have to take action quickly to open the casualty's airway, stop bleeding, give CPR if the heart is not beating, secure a conscious or unconscious casualty. These are reactions that must be learned. All mountaineers should have appropriate first aid training. Guide the emergency team by forming a "Y" (yes) with raised arms or by signalling SOS with a torch or mobile phone screen at night. Depending on the terrain, try to clear a landing area. When the helicopter arrives, stay where you are and wait for further instructions.

### Useful phone numbers:

Italy: 118 and (+39) 800 800 319 (valdotains alpine rescue)  
Switzerland: 144 and 1414 (Rega) or from abroad (+41) 333 333 333

