

And again.....

The ABS Backpack proves to be THE rescue system.

The numerous avalanche deaths of this past winter have shown us once again how great avalanche danger really is. Fourteen deaths in Canada, several deaths in the Steiermark, in Salzburg, in Tirol, etc. Too many!

At least in Austria most of the skiers off the piste or while ski touring are using avalanche rescue transceivers. Despite this precaution the white death took its victims. On the one hand this proves the frequent avalanche risk, but on the other hand it shows the limitations of this kind of avalanche rescue device. The newspaper report of the tragic death of a couple in Lungau read: *“It was very careless to carry the device in the backpack and to not have it turned on”*. This could lead to a false conclusion: if they had carried the avalanche rescue transceivers on their bodies the locating and rescue of the victims may have been possible. Both persons were buried and no one was there to rescue them in time.

Even if in the case at hand a rescue by friends would have been possible it would hardly have improved the chance of survival: The burial depth was too deep! Doesn't this make one thing absolutely clear: Avoid getting buried! Why doesn't one pose this question to oneself: Should I buy myself an ABS Avalanche Airbag? For: The likelihood to survive is much higher with this rescue system!

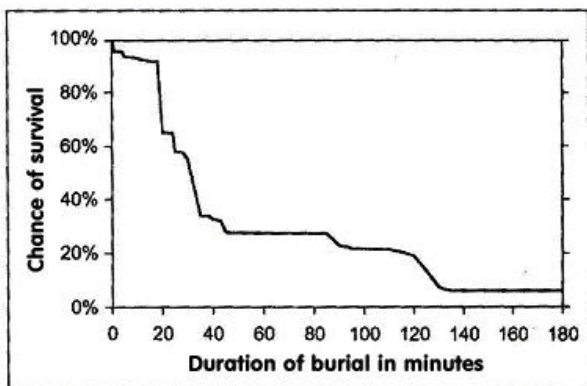
I then hear the argument that one still has to inform oneself about the weather,

avalanche conditions, that experience and mountaineering skills are needed etc., even knowing the recent improvements in defensive strategies for back country travellers or off-piste skiers (Munter, Larcher, Engler etc.). I agree that this knowledge is very important and that one has to take preventative measures in order not to get into a potentially dangerous situation. But it is not always in our hands whether or not something bad is going to happen once in a while. Why not use the currently most successful (and not only most promising one as we know now!) rescue system - just in case if it happens!

Why the most successful? A reliable analysis, conducted by the Federal Institute for Avalanche Research in Switzerland, of the documented avalanche accidents where avalanche airbags were used, showed the following results: of the 40 persons involved 97.5% survived the accident. Therefore the ABS-Avalanche Airbag reduces the likeliness of a total burial very significantly from 39% to 16.2% and lowers the death rate from 23.0% to 2.5%. Why are the avalanche rescue transceivers for buried victims successful in affecting the duration of the burial but don't lower the death rate in the same way? The duration of being buried was reduced from 2 hours (!) to 35 minutes. The mortality rate was 76% before the use of avalanche transceivers and only dropped to 66% with the avalanche transceiver, which is not even a 10% decrease.

What is the reason for this? The well-known Brugger-Falk graph illustrates the survival chance relative to the length of burial and shows that after 18 minutes under the snow the chance of a live rescue drops significantly – I would say this is the “death kink”, the curve – and that after 35 minutes the chance for survival has dropped drastically. After 18 minutes

19 out of 20 victims will be alive, after 35 minutes only 1 out of 3 victims will survive, or every third one.



Chance of survival of completely buried persons in relation to the burial time in minutes. (H. Brugger and M. Falk, 2002). The “death kink” after 18 minutes with a steep drop in the curve shows a fast rise in the mortality rate. The prevention of burial with the ABS Avalanche Airbag offers the best chance for survival.

The surche to locate the buried person and the additional time to dig the victim out of the hard compressed avalanche snow is the limiting factor for the success of avalanche rescue transceivers. This emergency system has reached its limits; even with 8 out of 10 backcountry travellers wearing the transceiver, and in the best case scenario when 100% are using the device no significant change in the numbers can be expected.

Avalanche Transceiver

Without transceiver 8 out of 10 dead
 With transceiver 8 out of 12 dead

Avalanche Airbag

Mortality without airbag 1 out of 4 dead
 Mortality with airbag 1 out of 40 dead

With the use of the avalanche transceiver only 4 out of 12 backcountry travellers will survive, eight are dead – **with the ABS**

Avalanche Airbag system almost everybody will survive.

The result is clear: the ABS avalanche airbag is highly likely to prevent total burial and the person to approach in the statistic the “death kink” of the Falk-Brugger graph. All other emergency devices, avalanche rescue transceivers, avalanche ball and Avalung have to accept total burial. The time to find the buried person faster using the avalanche ball reduces the locating time whereby the more critical factor time, namely the time it takes to dig the victim out, will remain a crucial disadvantage.

A critical wait and see attitude towards the ABS Backpack technique has been prevalent amongst the backcountry travellers who use arguments like the success has not been proven. Now there is strong evidence, which eliminates this kind of thinking.

However, there are still the usual arguments like price, weight, “ never putting oneself in such a high risk situation anyway”. Everybody can and should evaluate the pros and cons for themselves. But please do not forget: How are you ranking ? **How much worth is my live to me?**

On a personal note, The ABS Avalanche System has me fully convinced.

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