After The Avalanche's Data Triad: One way to debrief.

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<u>How to use these materials:</u>

The following document is designed to offer discussion questions to you and your backcountry partners to review avalanche accidents in a systematic and thoughtful approach. NO judgment, just interpretation of the known objective data and how our own decision-making process would have taken place.

Below we introduce the avalanche data triad, a simple memory aid to consider how each component of an avalanche accident occurred.

Go through the questions below with the accident reports, weather reports, and any other date or information you might have of the accident you are reviewing.

Remember don't be a Monday morning quarter back! You weren't there, you weren't a part of the conversations, or the decision-making processes. So don't judge, don't be critical, don't be cruel and insensitive. Be insightful and curious, aim to sort through your own decision-making biases.

Our hopes are that these questions will allow you to think about all the inputs and dynamic changes of the day considering the heuristic factors present that could have contributed to the accident.

Try to reflect on how you would interpret the changes, how you would act amongst the group, how your own decision making, and conversation would have occurred.

We hope that this encourages a thoughtful consideration of the events of the day, the weather changes, the snowpack, the terrain, and the human factors that could have contributed to an accident.

This document is meant to be a tool to invoke conversation and to make observations, this is in no way comprehensive or complete. There will always be new questions to ask and new understandings to seek. We just hope this gets the conversation going, in a constructive way. On that note we are always open to suggestions and are always considering revisions and updates.

Terrain: often one of the only controllable factors as it relates to an avalanche. Can't be in an avalanche if you are truly not in avalanche terrain.

What slope angle, aspect, and elevation did the avalanche occur?
Were there rocks, cliffs, trees, glades, cornices, gullies, terrain traps, etc involved that could have contributed to the accident?
Were there red flags present? Flagging on trees, downed trees, deposition?
Was there an unknown overhead hazard?
Was there travel through steeper more prone avalanche terrain?
Sympathetic releases? Remote Triggering? Awareness of adjacent terrain?

Snowpack

Snowpack: The hidden and difficult assessment. To understand the snowpack one must study it for the season, not just for the tour.

What did the avalanche report from the day signify the hazards to be?

What were the dangerous elevations and aspects based upon season long avalanche reports and observations?

What were the strong over weak layers that were responsible for the avalanche?

☐ Were there weather changes that would impact the stability in the snowpack? Ie rising temps, significant wind loading?

☐ Were members of the party personally aware of the snowpack? Did they dig a pit? Did they study the season and reports?

☐ What evaluation of snowpack stability was done during the tour?

Weather: Constantly impacting the avalanche hazard and snowpack visibly and covertly.

Has the sun been constantly shining?
Time of year? Amount of direct sun?
New snowfall? Increasing loading of fresh snow onto weak layers?
Winds blowing? Which direction? What changes occurred throughout the day for intensity?
Warming Temps throughout the day?
Cooling temps?
Dynamics for large temperature swings throughout the day into night?

Heuristics: Mental short cuts and common ways people problems solve and enact decision making.

   What is the familiarity of terrain for the group?
   Was there a goal or objective that the group wasn't keen on abandoning?
   Was there level of a need to be accepted? Was there the kodak courage?
   Was there an expert in the group? What was the level of training? Could this effect decision making dynamics?
   Was it a feast or famine season with low snow and high stoke with limited good snow days?
   Was the team nourished?
   Was the group well rested?
   Was there any division in the group?

What are the group take aways? Does this change how you will discuss and plan?