**Toolkit - Quick Reference Root Cause Analysis**

Root cause analysis is the core of problem solving and identifying corrective actions. Various models have been developed to assist in the process of "finding" the problem and then "fixing" the cause of the problem and any model can be applied as part of an investigation subsequent to an incident of violence.

The following information presents some general elements that are consistent in root cause analysis models:

1. **Define the problem:** The problem statement includes: **WHAT** - a description of what happened; **WHERE** - where specifically the problem was found; **WHO** -if the problem directed affected an individual or a group of people; **WHEN** -when the problem was first found or began; **HOW MUCH** – the frequency and/or magnitude of the problem

2. **Understanding the process:** This is about stepping back and taking a broad view of the problem before jumping to possible causes.

3. **Identify possible causes:** Use a logic tree (5 whys) to identify possible causes. See image.

4. **Collect the data:** Know what form the data will be in and when and how they should be gathered.

5. **Analyze the data:** Predict what the data would look like if the theory were true. Analyze and interpret the data to see whether they support or deny the theory being tested.

6. **Identify possible solutions:** Techniques to do this may include: scale up or scale down, mind maps, what would X do?, no limits (brain storming), mistake proofing, benchmarking.
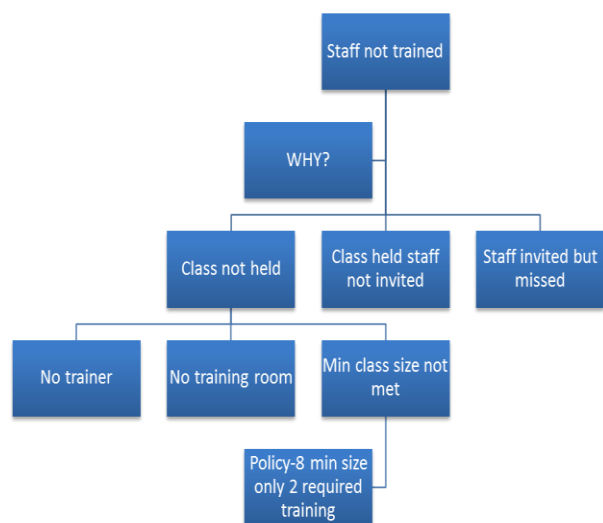
7. **Select solution:** Two major issues to be considered – WHO should make the decision and WHAT criteria should be used to make it? (e.g. best opportunity to reduce the likelihood of reoccurrence, technical gains to be achieved, financial return, time to implement, fit with the organization)

8. **Implement the solution**: Implementation calls for management of 3 knowledge areas: technology, project management and organizational change management

9. **Evaluate the effect:** During the follow-up you need to check two things: (i) see whether performance of the process is back to normal / expected; (ii) check to ensure that the changes have been properly implemented

10. **Institutionalize the change:** make it impossible to do it the old way; include the adoption as a component of personnel evaluation; pilot the changed process then assess success, difficulties and perceived barriers.