HAL
open science

Use of tabletop exercise in industrial training disaster.

Alexis Descatha, Thomas Loeb, François Dolveck, Nathalie-Sybille Goddet, Valerie Poirier, Michel Baer

To cite this version:

Alexis Descatha, Thomas Loeb, François Dolveck, Nathalie-Sybille Goddet, Valerie Poirier, et al.. Use of tabletop exercise in industrial training disaster.. J Occup Environ Med, 2009, 51 (9), pp.990-1. 10.1097/JOM.0b013e3181b3265f . inserm-00452814

HAL Id: inserm-00452814

https://inserm.hal.science/inserm-00452814v1

Submitted on 2 Sep 2010

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Use of tabletop exercise in industrial training disaster

Alexis Descatha [1,2] , Thomas Loeb [1], François Dolveck [1], Nathalie-Sybille Goddet [1], Valerie Poirier [1], Michel Baer [1].

1. AP-HP, Prehospital Emergency Medical System of Paris'West suburban ("SAMU 92"), Raymond Poincare University Hospital, F-92380 Garches, France
2. UVSQ, Occupational health unit/ INSERM U687, Raymond Poincare University Hospital, F-92380 Garches, France

Address for reprints:

Dr. Alexis Descatha, SAMU92/Unité de pathologie professionnelle, CHU Poincaré, 104 bd Poincaré, 92380 Garches, France

alexis.descatha@rpc.aphp.fr

Tél. +33 1 47 10 77 54 Fax. +33 1 47 10 77 68

Acknowledgments

The authors would like to thank the participants of our Master and Olivia Laborde, an English Supervisor in our University, who helps us to improve our English.

Letter to editor

Words 440

Training exercises are now frequently used in health disaster and emergency medicine to train first responders,[1] including the use of tabletops' exercises.[2-4] However, these kinds of drill are barely described in occupational and industrial safety and health. They represent an interesting alternative to real life disaster plans, considering the enormous human and technical resources that are required, and the disruptance of company's daily business. We aimed at developing a special training for professionals of health and safety (occupational physicians, hygienists…) in case of health disaster in industrial settings, using a tabletop exercise.

We organized a one day-session about disaster fundamentals for 28 occupational physicians included in a Master degree in emergency medicine training. A tabletop exercise was made based on a scenario of a fire in a plant with risk of chemical explosion - 22 victims and one dead (person). Three groups of 9/10 participants had 1h15 to discuss and « play » rescue operations from the initial accident to the discharge of the last victims from the triage centre. They were supervised by a physician and a nurse who are specialized in disaster training. We used a large tabletop representing the industrial plant and the figurines/vehicles (patients, industrial and emergency responders, firemen and police officers, journalist...). Satisfaction and cost were evaluated such as repeatability.

The participants were largely satisfied by the training and believe, such as the teachers, that the exercise well illustrates the roles of occupational physicians, the triage centre, and intricate logistics during a health disaster. The direct cost was $1,285 (975 euros), namely $646 for the figurines and $639 for the supervisors for the first year ($46 per participant). At the opposite of a real life exercise, we didn't notice any impact on daily activities of the company/plant. One year later, the tabletop was performed again with other 28 participants

with similar satisfaction and reduced cost (only $639 for the supervisors, $23 per participants).

Tabletop exercises simulating industrial disasters appear to be a cost-effective way to train professionals of health and safety. Similar experiences are reported in other contexts: airport disasters,[2] biological threats in a public health preparedness,[5;6] training of medical technicians for emergency.[3] Tabletop exercises could also be used to train different categories of participants in similar drill. Considering the purpose of training participants to organise the prevention and the management of industrial disasters in their own company, it was seen as easier and as cheaper than real life disaster plans.

To conclude, although real life exercise remains essential (especially in order to challenge emergency responders) effectiveness should be studied in depth. We think these kinds of exercises should be developed in the industrial settings.

References

1. Rutherford WH. The place of exercises in disaster management. *Injury* 1990;21:58-60.

2. Idrose AM, Adnan WA, Villa GF, Abdullah AH. The use of classroom training and simulation in the training of medical responders for airport disaster. *Emerg Med J* 2007;24:7-11.

3. Chi CH, Chao WH, Chuang CC, Tsai MC, Tsai LM. Emergency medical technicians' disaster training by tabletop exercise. *Am J Emerg Med* 2001;19:433-436.

4. Silenas R, Akins R, Parrish AR, Edwards JC. Developing disaster preparedness competence: an experiential learning exercise for multiprofessional education. *Teach Learn Med* 2008;20:62-68.

5. Dausey DJ, Buehler JW, Lurie N. Designing and conducting tabletop exercises to assess public health preparedness for manmade and naturally occurring biological threats. *BMC Public Health* 2007;7:92.

6. Steward D, Wan TT. The role of simulation and modeling in disaster management. *J Med Syst* 2007;31:125-130.