ABSTRACT

In this game, we focus on the concept of simulation supported tabletop exercise and its application to risk management for bio-terrorism by smallpox. For the purpose we have developed the simulation model of the infection process by smallpox on a virtual city. The simulation supported tabletop exercise has designed on our simulation model for risk management by evaluating several types of policy scenarios against bio-terrorism by smallpox. The simulation supported tabletop exercise was executed by some professionals against bio-terrorism at Global Security Center, Keio University. We clarify the model structure of the simulation against bio-terrorism and its countermeasure policies. We also show the result executed at Global Security Center.

Each player in this game becomes the decision-maker of policies in the virtual city against smallpox. Each player has to select one policy from each category and there are several categories. Players are required to consider the combination of policies. After deciding policies, player’s policies are represented in the simulation model and player will get simulation results, and player’s will know the effect of player’s policies in a town.

Many people do not matter the concept of this game, risk management – anti bio-terrorism. But people in the government, in the public health service, in the hospital and so on, do matter this concept. It is obviously impossible to test policies against bio-terrorism by smallpox in the real world but it is possible to test them in the virtual simulation model. From playing our game, we hope that our game will help people who do matter the game concept to review or reconsider some policies against –anti bio-terrorism in the real world.

What lessons are to be learned by the participants when playing the game?
- Main lesson of this game is the Risk Management as a policy decision-maker against infectious diseases.

How can the administrator determine if the lessons of the game have been learned by the participants?
- Debriefing, like discussions, with showing all other possible simulation results of this game.
- If the game is played in rounds, what is the minimum and maximum number of rounds that need to be played?
  - This game needs exactly six rounds by four people/groups.
- If played in rounds how much time should be allocated for the decision process for each round?
  - There are about 60-120sec. between decision processes.

What devices are needed by the players to play the game?
- Nothing.

What decisions need to be made by the players?
- Players choose one policy card from each category. There are six categories. So players have six chances to choose a card. Four people/groups compete for cards.

What information is provided to the players after each round?
- Nothing. But players can see what kinds of cards are still remained.