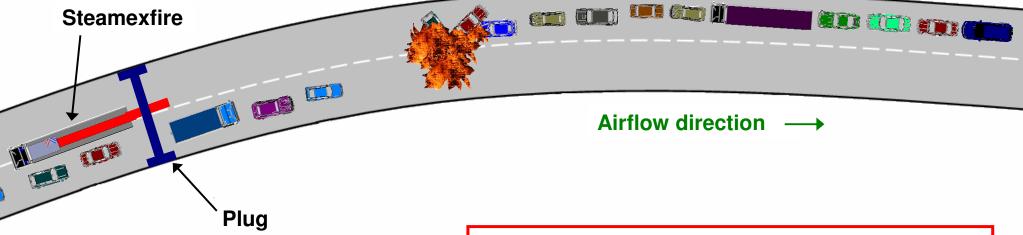


Scenario:

- > 2 tunnel tubes with escape connections at 250 metre.
- ➤ Fire power: 50MW+
- Substantial heat and smoke development
- Smoke: backlayering, plugholling.

- 1. Close both tubes for all traffic.
- 2. Maintain or activate ventilation to maximum in empty tube.
- 3. Stop ventilation in affected tube when the people are away.
- 4. Place Steamexfire at closest connection and deploy system.
- 5. Check on people, if possible.
- 6. Place plug at closest to fire.
- 7. Start Steamexfire.
- 8. Monitor outgoing air with portable gas chromatograph at tunnel end.

Scenario 2

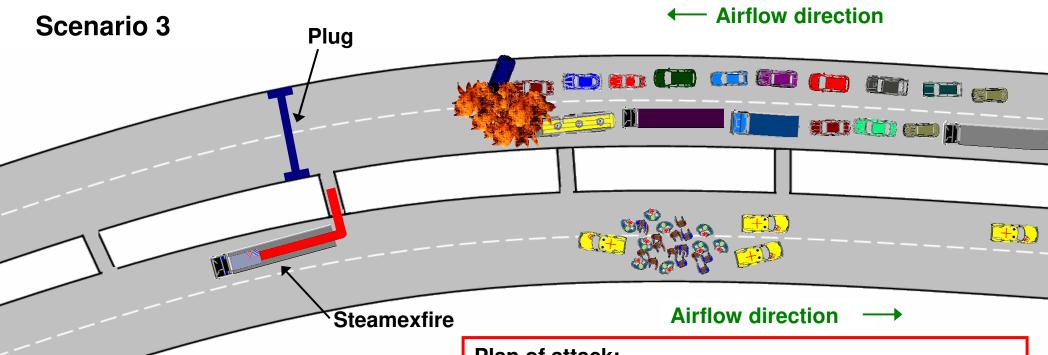


Scenario:

- ➤ Single tunnel tube
- > Fire power: 50MW+
- > Substantial heat and smoke development.
- Smoke: backlayering, plugholling

Plan of attack:

- 1. Close both tubes for all traffic.
- 2. Check presence of people.
- 3. Place plug and Steamexfire at closest to fire in fresh air flow.
- 4. Maintain or maximise ventilation in tube.
- 5. Start Steamexfire.
- 6. Monitor outgoing air with portable gas chromatograph at tunnel end.



Scenario:

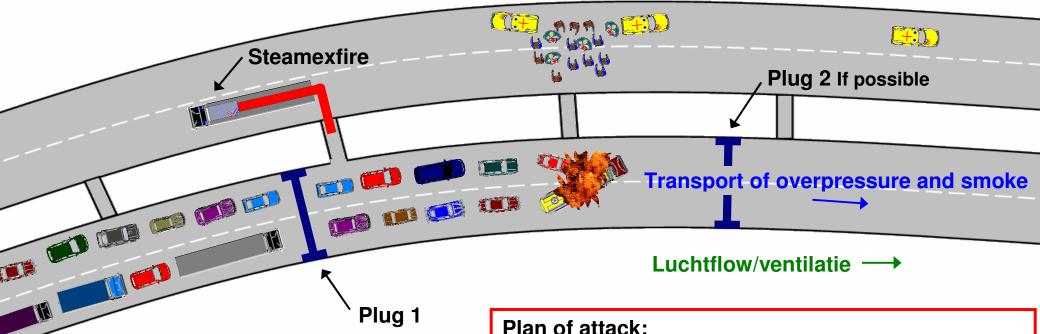
- 2 tunnel tubes with escape connections at 250 metre.
- > Fire power: 50MW+
- Substantial heat and smoke development
- Smoke: backlayering, plugholling.

Plan of attack:

- 1. Close both tubes for all traffic.
- 2. Maintain or maximise ventilation in empty tube.
- 3. Stop ventilation, if possible return air flow in affected tube.
- 4. Place Steamexfire at closest connection and deploy system.
- 5. Check presence of people.
- 6. Place plug in empty area of affected tube at closest to the fire as possible. Alternatively: place plug at tunnel and.
- 7. Start Steamexfire.
- 8. Monitor outgoing air with portable gas chromatograph at tunnel end.

Scenario 4





Scenario:

- > 2 tunnel tubes with escape connections at 250 metre.
- > Fire power: 50MW+
- > Substantial heat and smoke development
- > Smoke: backlayering, plugholling.

- 1. Stop ventilation in affected tube.
- 2. Seal the fire on two places by using two tunnel plugs which are placed as closest possible to the fire.
- 3. Check presence of people.
- 4. Open zip door of plug 2 to transport overpressure and smoke.
- 5. Start the Steamexfire.
- 6. Monitor outgoing air with portable gas chromatograph at tunnel end.