

“Concrete Pumping”

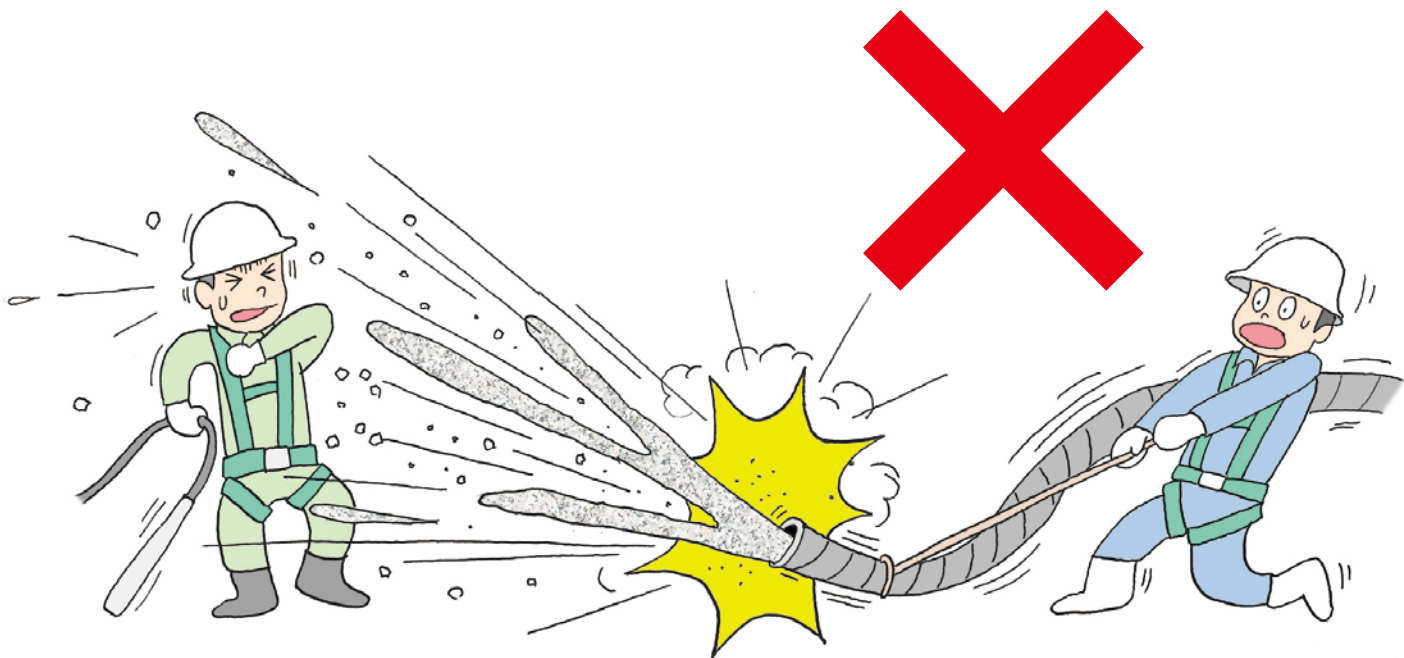
The important points for Safety and health

Precautions for pumping work and troubles at the tube tip

(1) Do not work in front of the pumping tube tip

When you are working in front of the hose tube tip, if concrete is blocked or foreign substances are mixed in concrete, the concrete may scatter and cause injury.

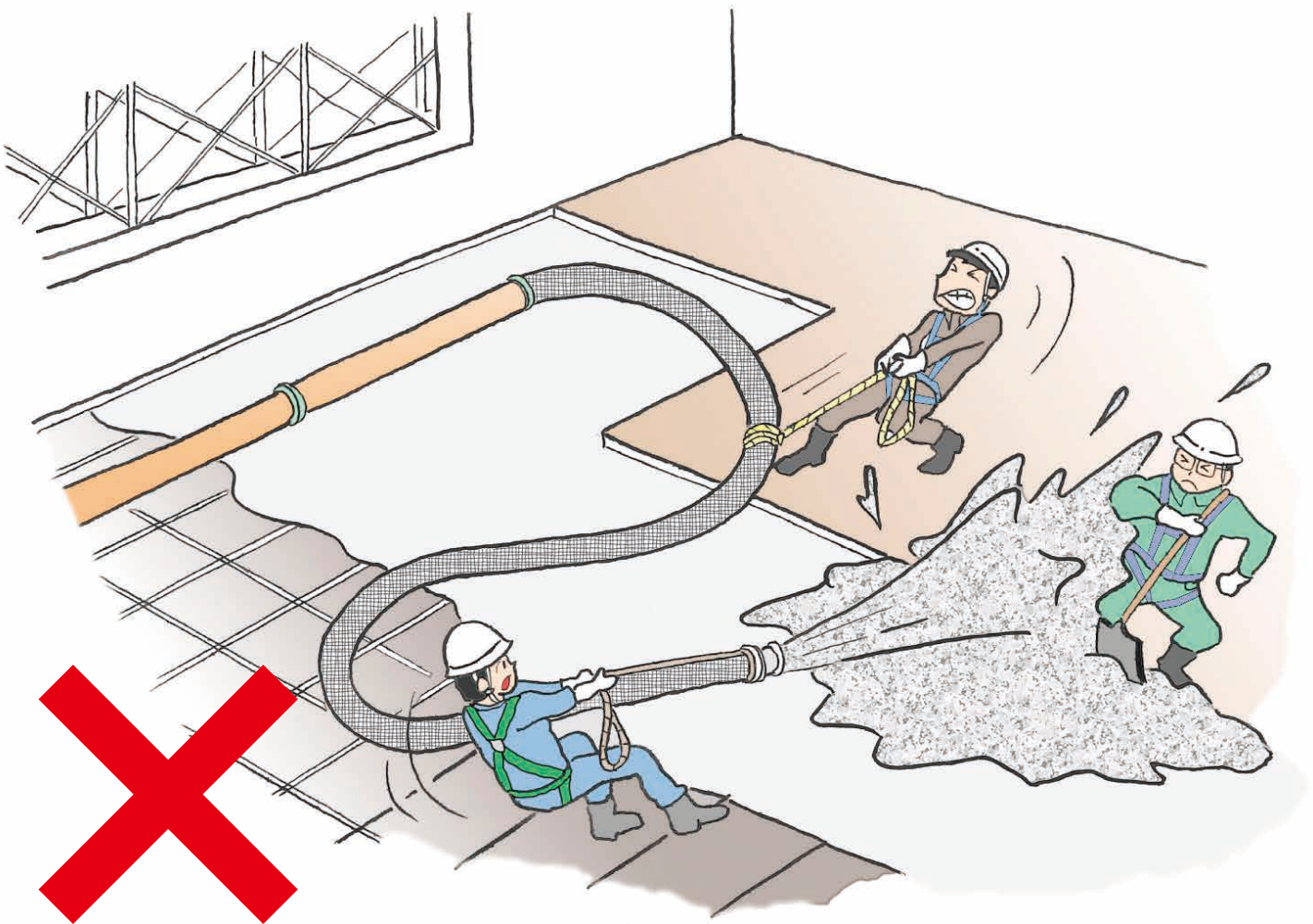
Be careful not to allow personnel to enter in front of the hose tube tip.



Prohibition of work in front of a hose tube tip

(2) Do not work by forcibly bending the hose

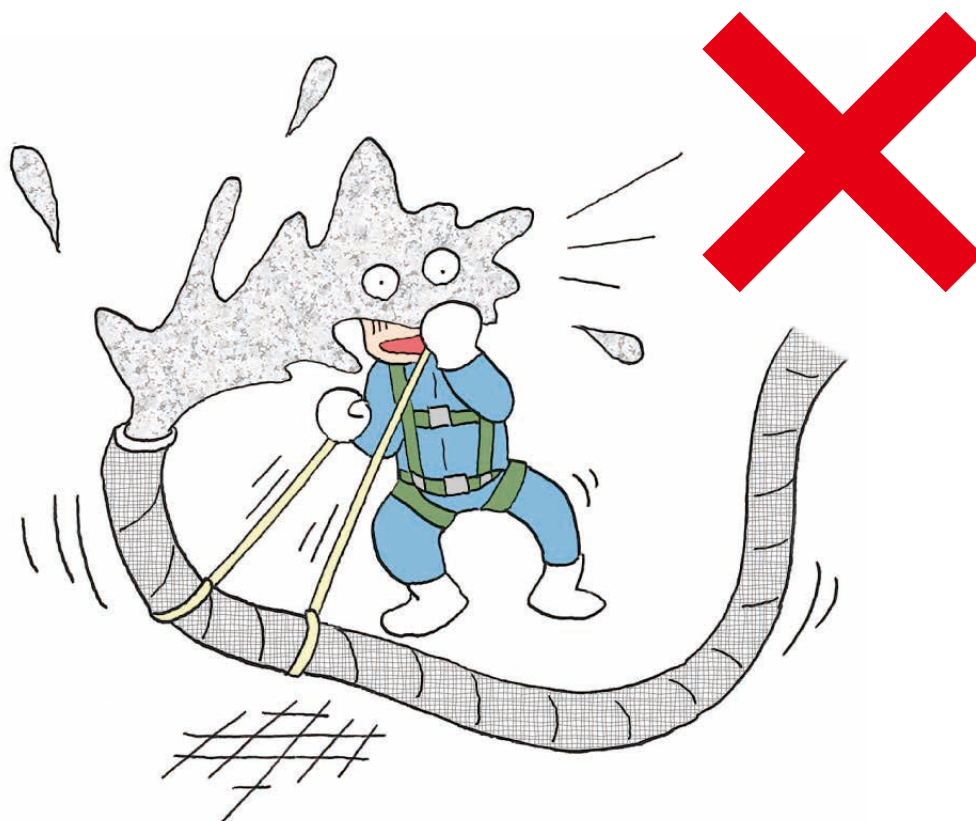
Be careful not to bend the hose forcibly that causes rupture of the hose and scattering of concrete if the tip hose is bended to an unreasonable angle, or working in front of the hose tip. These accidents may cause a risk to injure the people around you.



Example of an accident where the hose was bent forcibly and the concrete was scattered onto a passenger car

(3) Precautions when handling ready-mixed concrete

Take emergency measures such as washing your eyes immediately or rinsing your mouth if it gets into your eyes or mouth as ready-mixed concrete is strongly alkaline and includes dangerous and noxious chemical substances.



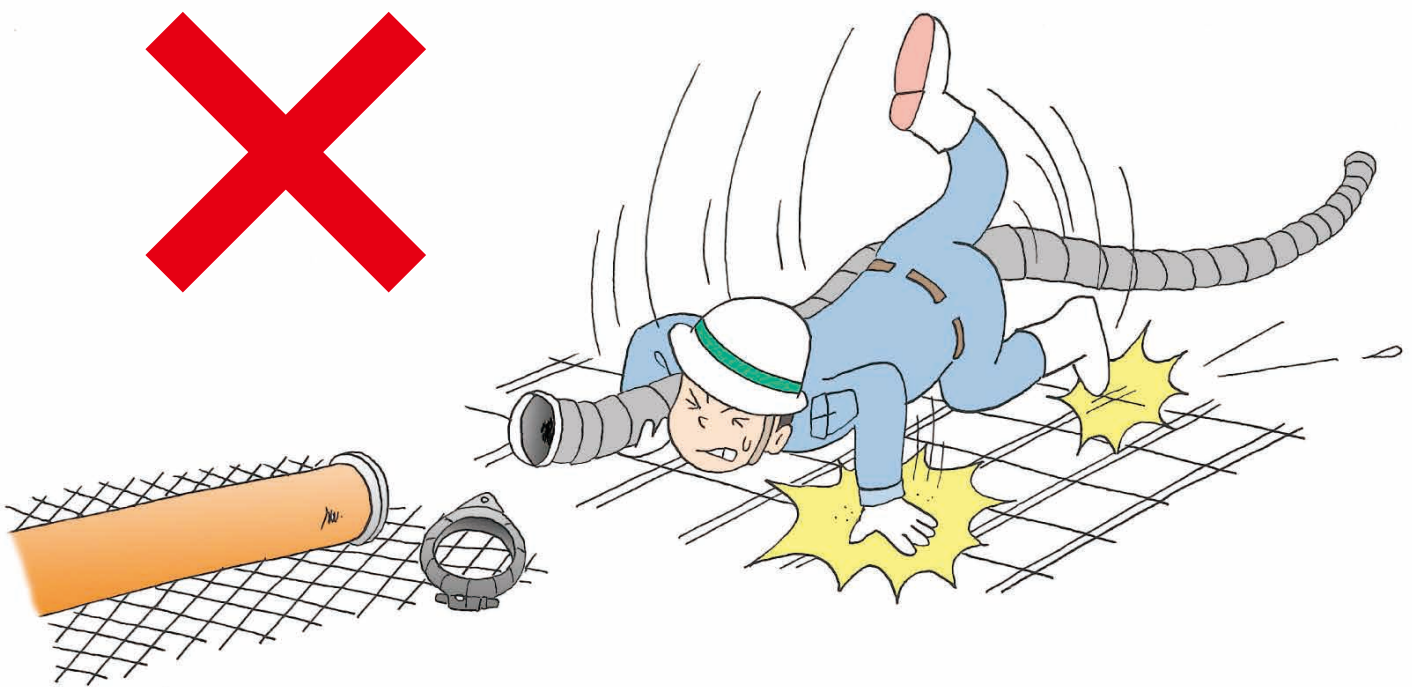
Precautions when handling ready-mixed concrete

First-aid measures in case of unexpected handling of ready-mixed concrete

In case of accident	Emergency measures
(1) If swallowed	Rinse mouth. Do not force vomiting
(2) If on skin or hair	Rinse skin with running water/shower. Laundry when contaminated clothing is reused.
(3) If in eyes	Wash carefully with water for several minutes.

(4) Be careful not to stumble over reinforcing bars

There is a risk of injury by stumbling over reinforcing bars on top of the slabs due to its muddle state. Let's work carefully by watching out for your feet.



Example of an accident that stumbled over slab rebars

(5) Do not enter restricted areas

In places where there is a risk of accidents, prohibited signboards, rope, or fence is installed. Be careful not to enter the place where no entry is allowed.



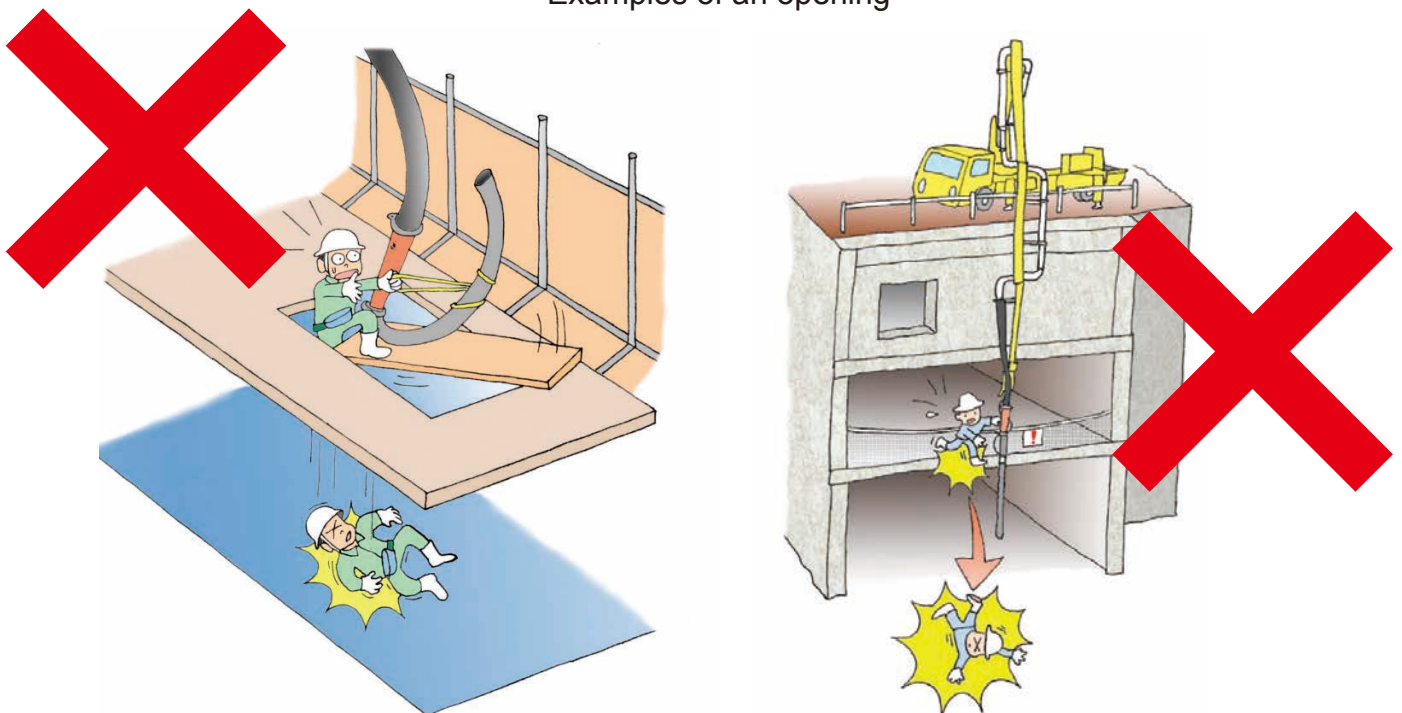
Example of off-limit signs

(6) Precautions when work near an opening and the edges of the working area

When working near the opening or the edge of the site, make sure to use safety devices to prevent from falling, and also make sure that safety measures are in place to prevent from falling.



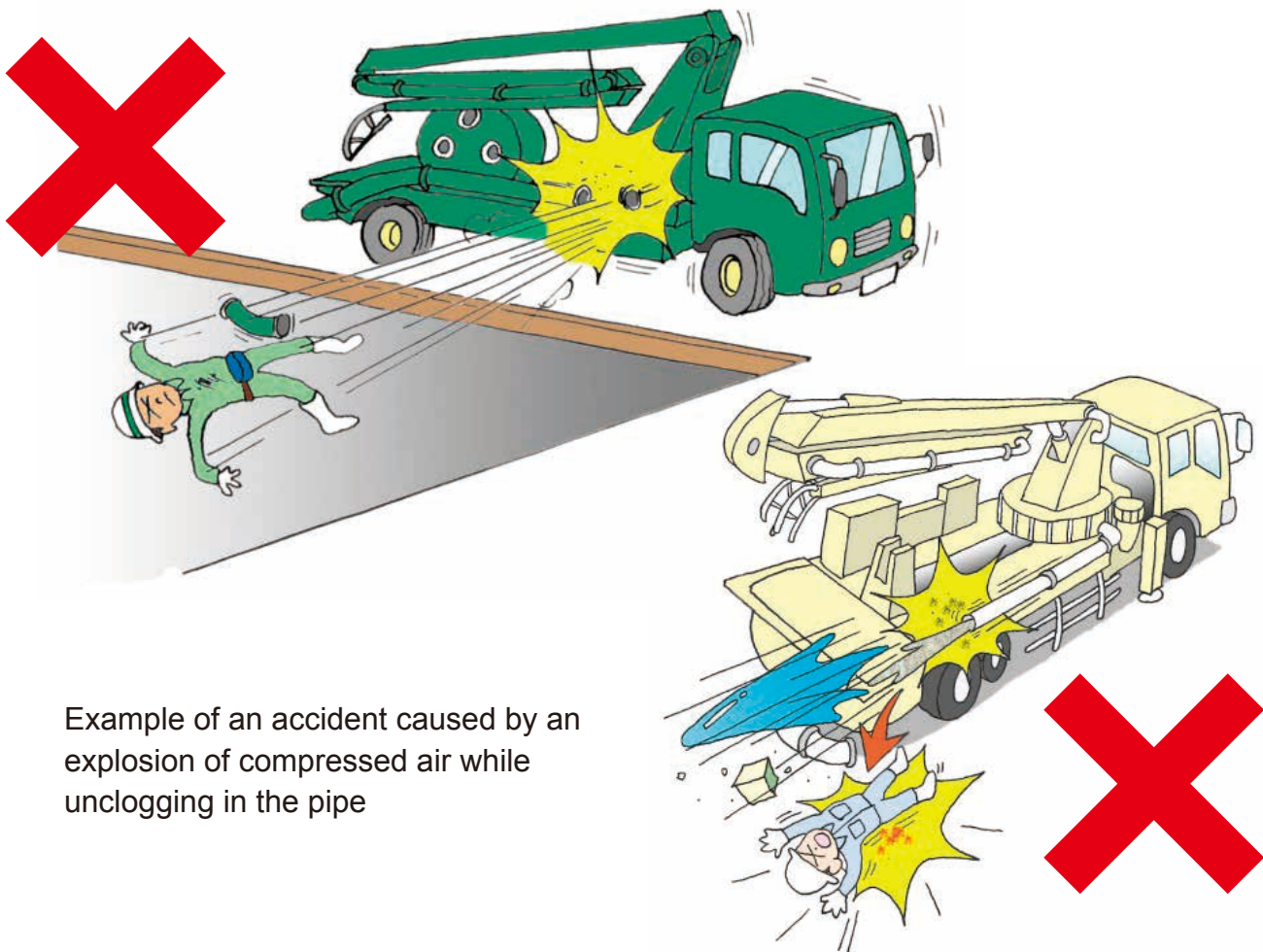
Examples of an opening



Example of an accident that crashed while working near an opening/end of a site

(7) Precautions when fresh concrete is clogged in a pipe

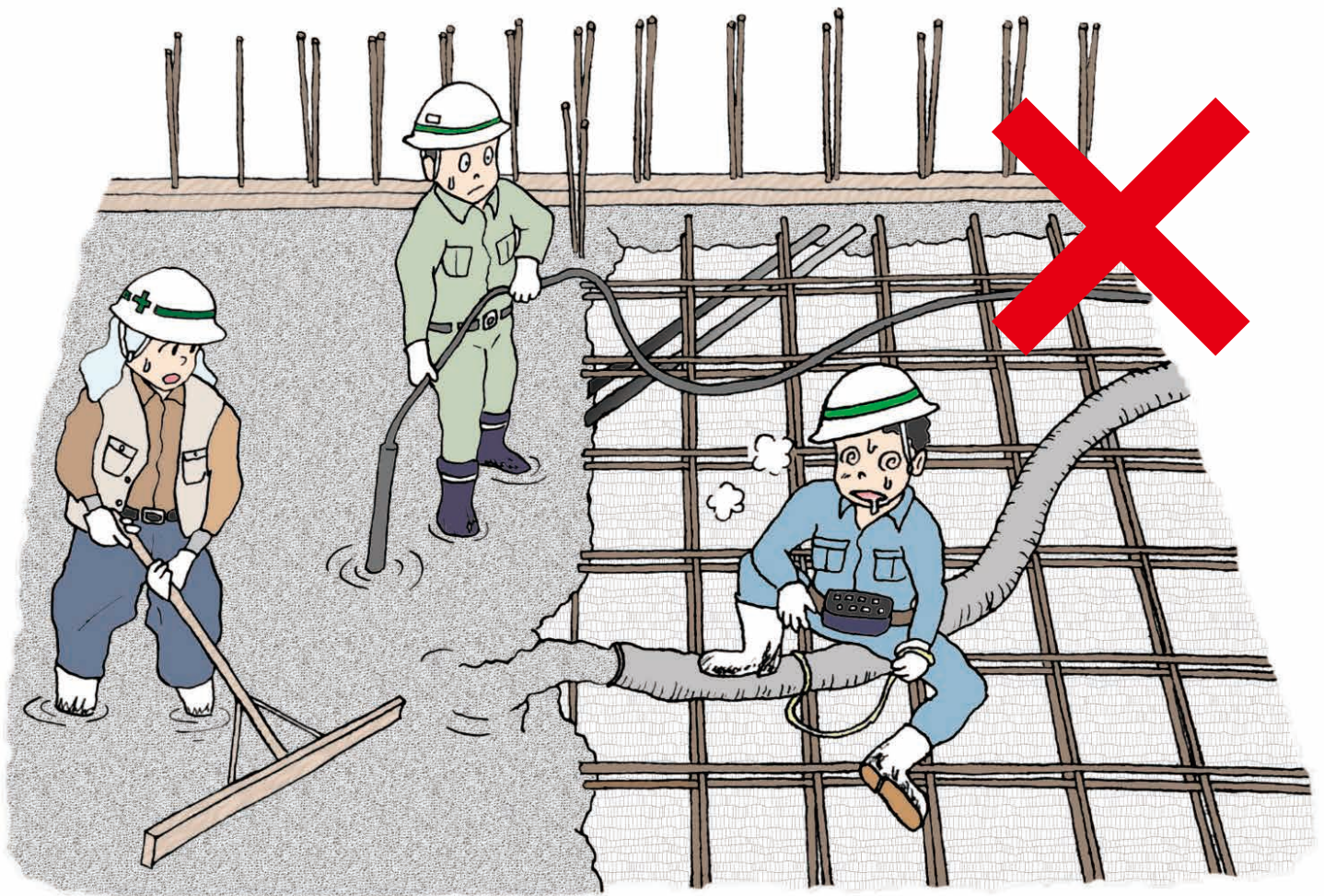
In such a case when concrete was clogged during pumping, stop the pumping immediately, confirm clogged location in the transport pipe by hitting it, desire the surrounding people to leave the clogged pipe, slowly loosen and remove the joint after heating while confirming that the air pressure is removed completely from the entire transport tube. If the air pressure in the transport pipe is not sufficiently relieved or the joint is loosened at once, the compressed air will cause an explosion, leading to a serious accident in which the concrete and transport pipes are scattered.



Example of an accident caused by an explosion of compressed air while unclogging in the pipe

(8) Manage your physical condition carefully

Pumping is a work that uses physical strength. Depending on the situation at the site, it may not be possible to take breaks properly, especially during summer, there is a risk of heatstroke. Let's regularly manage your physical condition.



Example of heatstroke during pumping work