

Gemeinnütziger Träger katholischer Tageseinrichtungen [Charitable institution for catholic day are] für Kinder der Regionen Aachen-Land und Aachen-Stadt GmbH

Guidance

for children at all pro futura daycare centers in the event of a serious accident at nuclear power plants in Tihange and Doel

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1. Preliminary remarks

The concern for the safety at the two Belgian nuclear power plants in Tihange and Doel and the dangers connected with them inevitably have led parents, staff, supervisors, and the management of pro futura to confront this problematic situation.

From the outset, it has been clear to everyone involved that it will not be possible to respond to all eventualities in the event of a serious accident at the nuclear power plants. There has been no experience in dealing with such a disaster. In addition, the conditions at the nuclear power plants are equally complex as they are non-transparent. This has resulted in a great deal of uncertainty and discomfort and been an occasion for concern and anxiety.

We know that parents and staff will deal in different ways with this situation. Some see the problem as not serious and others feel threatened every day by the situation. As one step, we would like to offer with this guidance sensible and prudent suggestions about how to respond to an emergency. On the one hand, we wish to be well prepared and not be paralyzed at the same time by an uncontrollable disaster. On the other hand, we don't want to have this topic on our minds constantly. This will not prevent us as an organization from also dealing politically with the issue.

The most important step and requirement is: The immediate shutdown of the reactors in Tihange and Doel.

In order to provide the same information to all those involved with pro futura, on June 20th of 2017, an information session was held with Dr. Duisberg and Dr. Klepper of the initiative "International Physicians for the Prevention of Nuclear War—Doctors for Social Responsibility e.V." The conclusions of the consultation process and the statements contained in this guidance document are essentially based on the statements made at that presentation. The slides from this presentation that we think are the most important can be found in Annex 1 of this guidance document. The entire presentation is available on our website in the downloads section under the heading "Eltern" [parents].

Parents, staff, supervisors, and management formed a working group that drew up this pro futura guidance document. This guidance document presents facts, recommendations, and general conditions set by management that must be strictly observed for all facilities.

The main point of this guidance document is that up till now and currently precautions must be taken to make certain that children are picked up in the event that disaster strikes. See section 5 for additional explanation. Long-term care for children at the daycare centers cannot be guaranteed. Also, please keep in mind that the staff members have their own children and families that they will need to be with. Nevertheless, we suggest that care be available at the facility for a small group of children and staff for a maximum of four hours. Additional explanation is available in section 8 "Children and staff remaining behind at the daycare center."

Protecting the health and safety of children and families in their private lives is the responsibility of each individual and of the government and far exceeds the competence and capabilities of profutura.

Summary:

We all hope that nuclear power plants will be shut down and responsible parties in politics and business will live up to their responsibilities. We wish to have a productive engagement in the facilities with the options available to us to prepare adequately for a catastrophe that cannot be ruled out. Even though we are not able to guarantee complete safety, at the same time we needn't think that we are utterly powerless.

I would like to take this opportunity to thank the parents, staff, and supervisors who have been involved in the working group.

For the parents: Ms. Born, Ms. Grob, Ms. Otten, and Mr. Le For the staff representatives: Ms. Beske and Ms. Dixtores

For the supervisors: Ms. Blankenheim, Ms. Brügge, and Ms. Liebmann-Krott

Heinz Zohren- Managing Director

M. 2L

2. What dangers are there for people?

In order to answer the question of how we might protect ourselves, it was important for us to be as knowledgeable as possible. We were able to consult with Dr. Wilfried Duisberg and Ms. Odette Klepper from the local branch of International Physicians for the Prevention of Nuclear War—Physicians for Social Responsibility e.V. They provided us with extensive information at an evening session on June 20th of 2017. Some slides from this presentation can be found in Annex 1 of this guidance document.

We were also able to refer to the "Information for the population in the vicinity of the nuclear power plant at Tihange" for various municipalities, including the city of Aachen and the surrounding area. Both slides from the presentation and the information from the municipalities are available on our website at: www.pro-futura-aachen.de under the heading Downloads/Links. We strongly recommend taking a look at this information.

3. How will we be warned?

The first thing to be aware of with these issues is that the warning period starts when a serious incident occurs at a nuclear power plant that makes the process of nuclear fusion uncontrollable and leads to a meltdown. In this respect, how the operators of a nuclear power plant and the Belgian authorities behave is crucial. Thus, considerable time may elapse between the incident and the time that the warning is given in Germany. If operators initially attempt to remedy the incident and do not inform the public or the designated locations, important and possibly life-saving time will be lost. We can only hope that this will be handled in a very responsible way.

The warning given to the German public will be made via official channels of civil protection authorities. In the event of a widespread warning of the population, sirens will sound and the public radio and television stations will warn the population. Still, sirens are not always available in all municipalities. There is, however, an app for smartphones that can be downloaded without charge. It is called **NINA** and issues warning for such events as inclement weather.

But since staff at the daycare centers do not use personal mobile phones as a rule and the radio is not usually playing, these two possibilities for giving warnings are ruled out for daycare centers. We must rely primarily on sirens. But in the event of a warning by siren, a battery-powered radio should be available at all daycare centers in case of an emergency. During opening hours at the daycare centers, cables can keep mobile phones in operation. Connecting cables can be attached, and the NINA app installed on mobile phones can also provide warnings. We assume that we will thus be informed quickly enough of a serious incident.

We should inform you that in the event of a incident, landline telephones will have a lower priority for use. The overall process and the execution of checklists to protect children will be given a higher priority. Thus, if you try to call the daycare center for information and find that no one is answering the phone, you can assume that staff members are already taking steps to protect the children.

4. Staff

Like the children and the parents, pro futura staff are also affected and need to take care of their health. They will need to rush home to their children and family just as the parents of the children we take care of. At the same time, they are responsible for the children at the daycare center.

They are not trained to cope with unexpected disasters. Pro futura and its staff members can make preparations only in a very limited way.

The employment contract that staff members have signed does not require them to remain at the daycare center after working hours, for instance. Pro futura neither wishes to nor is capable of creating a service obligation for its staff members. Among other matters, it will be clear at this point that, in the event of a serious incident at a nuclear power plant, very many rules and other procedures will be invalid or no longer apply.

Staff members will decide in the context of an internal clarification processes who will remain with the children if disaster strikes. This decision will not be communicated externally nor be discussed with committees of the daycare center. In addition, there will be no guidelines. The usual caseload will not be complied with in an emergency. We assume that a maximum of two to three employees will remain at the daycare center. No staff member should be left alone at the facility with the children. Taking care of the children who could not be picked up will not take place overnight.

Staff representatives of pro futura have given individual teams suggestions for discussion about how to solve the above issues internally.

In the event of a disaster, staff members will have "the booklet at hand." They will give clear instructions at the daycare center and then follow the house rules. They will not permit parents to enter the daycare center and not discuss whether such and such will be done in a specific case. There will be no individual special arrangements for individual children that employees should be aware of in these cases. Please understand that a clear understanding of what the requirements are is necessary.

5. Picking children up

We now come to the most important section in this guidance document. All children should be able to get back home as quickly as possible. For that to be possible, we need to take some precautions in advance so that we can be well prepared and able to respond on an ad hoc basis.

We must assume a worst-case scenario, namely that the emergency or warning might take place early in the morning, say at 10:00 a.m. At that time, all the children will be at the facility and parents who work will be at their workplace. Therefore, not all parents will be able to come to the daycare center in a short time to pick up their children. Some parents, due to work considerations, may not be able to come to the daycare center at all. This might include parents who are employed as firefighters or as police or as physicians in a hospital, for instance, or other parents who are on business trips in Germany or are traveling abroad. We also need to remember that there might be traffic jams. Thus, within a period of one hour after the warning, only a small percentage of parents who usually pick up their children will be able to do so. Therefore, other ways must be arranged for the children to get home.

Pro futura recommends that all parents and guardians make advance preparations for their children to be picked up by someone they know at the kindergarten as soon as

an incident becomes known. In an unusual emergency situation, it will be necessary to take unusual steps. Thus, we suggest that you ask retired neighbours or other parents in the area to pick up your children. If necessary, you should also look for alternative pick-up options. For instance, parents who live on the same street or in the same neighbourhood could pick up all the children who live there and take them home. Then, at least the children would be close to where they live. At a pre-arranged place at the kindergarten visible from the outside, information will be posted showing where the children will be after they are picked up by someone else.

The child should of course know and trust these people, and have been jointly picked up previously along with their parents.

It would be best not to rely on only one solution. If say a neighbour has agreed to pick up your child but is out of town or sick, this solution would not work.

Staff members will also be instructed in emergency situations to let children be picked up only by people authorized to do so by using the special pick-up authorization form found in Annex 2. This special pick-up authorization form can be found on the pro futura website. Without the completed and signed special pick-up authorization form, children will not be turned over to other people even in an emergency. The special pick-up authorization form will be valid only in the event of a serious incident at Tihange or Doel. People who are authorized to pick up children must identify themselves accordingly when they pick up children if they are not known to staff members. Please inform other people of this requirement.

Perhaps it goes without saying, but to avoid misunderstandings please note the following: Picking up children from the kindergarten should take place immediately after notification of a serious incident at any time the children are at the kindergarten. The usual pickup times are not applicable in this case.

As previously stated, the purpose of all these arrangements for picking up children is to take them home as quickly as possible. We assume that children will not still be at the kindergarten any longer than four hours after the warning has been given. As a last resort, it is also possible, by way of exception, that one of the remaining staff members at the daycare center will take your child home with them. For this purpose, there are no instructions or obligations for staff members. Also in these cases, information will be posted at the appointed place.

6. Locked areas

The impact and associated risks to health we will be dealing with will depend largely on the time elapsed between the serious incident and the time that the warning is given to the public. We need to expect that alpha, beta, and gamma radiation will reach us. Depending on the weather conditions, this can occur at different rates of speed. Depending on the situation, staff members will decide whether locking measures should be carried out. After a warning, staff members will make the building as "tight" as possible. Windows and doors will be closed. From this point in time, additional people will not be able to enter the building because contaminated air or dust particles might get into the daycare centre.

This can probably not be completely avoided, but we can try to minimize the problem.

Nevertheless, of course, it must still be possible for children to be turned over to their parents. For this purpose, some sort of locked area must be set up. This might be a porch of some sort or an entire group room or other possibilities that prove to be feasible on the spot. In the event of a incident, we will need to use existing facilities and resources that are available without a great deal of preparation. As a rule, in the event of a incident, the daycare centre's outdoor area will be unlocked (where possible), so that parents or other persons authorized to make pick-ups can be recognized from the outside when they pick up their children. We will also consider whether a wireless doorbell is an option to enable parents to make themselves known when they stand at the door; the children and staff indoors will possibly be in a separate room in the daycare centre. The children will be dressed in disposable overalls. These overalls s are designed to minimize the impact of dust particles on skin, hair, or clothing. The overalls and possibly also any remaining visible clothing should not be taken into the building after being worn outdoors.

As already described above, in the event of a disaster, no one may enter from the outside into the daycare centre. This means that when staff members are aware that parents or authorized people are picking up children, they will allow up to four children maximum into the locked area. Then the interior door will be closed, and an employee in protective clothing with a breathing mask will open the outside door and guide the children to the outside. The children will be given a cloth that they can put over their mouths so that, if possible, they will not inhale dust particles. Breathing masks for children under six years of age do not exist. Parents and authorized persons will not come into the locked area. Then the outer door will be closed again, and the process can begin all over again. It is important that the outer door be closed again. Parents or persons authorized to make pick-ups should keep the area in front of the entrance to the daycare centre clear after picking up the children. If parents wish to retrieve children's belongings from the daycare centre, this cannot be allowed. Our priority must be solely the safe evacuation of the daycare centre and protection of the remaining persons. In section 10 we will provide guidance on how we will dress the children and how staff members remaining inside the daycare centre will be provided for.

Procedures involving the locked area will be communicated to all parents in a memo and in the future be provided as an annex to the contract for daycare services.

7. Iodine tablets

Taking iodine tablets can help prevent the thyroid gland from absorbing radioactive substances. The function of iodine tablets is explained on the website of the City of Aachen and the Aachen region. We would like to call attention to the following passages:

"Function of iodine tablets

Iodine tablets are meant to prevent the accumulation of radioactive iodine in the thyroid gland in the event of leakage of radioactivity and thus avoid damage to health. Radioactive iodine has the same chemical and biological properties as dietary natural iodine and is therefore stored in the thyroid like normal, non-radioactive iodine.

If tablets with a high concentration of non-radioactive iodine are taken in time, the thyroid becomes saturated with this "healthy" iodine and can no longer absorb radioactive iodine (so-called "iodine blockade").

According to the recommendations of the Commission on Radiological Protection, persons up to and including 45 years of age as well as pregnant and breastfeeding women (regardless of age) are the target groups for taking iodine tablets.

Adults over 46 should not take iodine tablets because for them the health risks of severe thyroid disease as a result of taking the tablets is higher than the risk of disease by the absorption of radioactive iodine. However, this group can be individually medically examined to determine whether protection using iodine tablets or the drug Irenat is possible. Regardless of the results of the medical examination, this group will not, however, participate in the pre-distribution. If necessary, this group of people would need to provide medication at their own expense in the event of a positive result.

The iodine dosage is set precisely for each age group:

Newborns up to one month should receive 16.25 mg of potassium iodide (equivalent to one-quarter tablet). Infants from the first to the 36th month, 32.5 mg of potassium iodide (equivalent to half a tablet). Children and adolescents from three to twelve, 65 mg of potassium iodide (equivalent to a whole tablet). Adolescents aged 13 years and adults up to 45 years and pregnant and lactating women (regardless of age), 130 mg of potassium iodide (equivalent to 2 tablets).

The calculation of the number of iodine tablets to which you will be entitled is made based on the information provided in the application. The key factor is the age of the person listed in the application.

For practical reasons, the number of tablets distributed is as follows:

- up to and including 12 years of age = 1 tablet
- from age 13 up to and including 45 + pregnant and breastfeeding women = 2 tablets

Note: The number of iodine tablets to which you are entitled will be issued in the form of a tablet blister (1 tablet blister = 6 iodine tablets).

The appropriate time to take the iodine tablets will be announced by the Federal Emergency Management Agency. Iodine tablets should not be taken as a precaution, but taken only after being requested to do so by the Federal Emergency Management Agency."

We are going on the assumption that most parents have used the free delivery option of iodine tablets offered by the municipalities. That is both sensible and advantageous. You should not take the iodine with you when you leave home, but rather should leave it there. Since the appropriate time for taking the iodine tablets is extremely important, we believe that we need to keep a sufficient supply of iodine tablets on hand for all staff members and children. We must assume that the recommendation for taking the iodine tablets will be given when all children and staff are inside the daycare centre. Pro futura will have on hand about 2,500 iodine tablets and store them in the daycare centres. The supply of iodine tablets must be periodically replenished, depending on the expiration date.

In principle, the administration of drugs to children at the daycare centre is not intended. Without prior consent of the parents, staff members are not allowed to provide medication. For this reason, distributing iodine tablets to children without prior consent of both parents or legal guardians is not possible. In order not to have to check to see if consent has been given for every single child in case of an emergency, we request that all parents provide the daycare center with a

statement of authorization in which it should be stated whether or not the staff members should give the child iodine tablets. We have drafted such a statement and made it available as Annex 4 of this guidance document. It can also be downloaded from our website or obtained from the management of the daycare center.

At this point we would like to point out that neither pro futura nor the staff can be responsible if a child should refuse steadfastly to take iodine tablets or does not swallow them.

8. Children and staff remaining behind at the daycare centre

Our ultimate goal is, as already stated, that all children and staff members can go home as soon as possible. Nevertheless, although we cannot give an exact number, we assume that a certain number of children will remain behind at the daycare centre temporarily. We are of the opinion that it is unreasonable to expect staff members to extend indefinitely the period they should wait. The pro futura working group was of the opinion that the period for remaining behind at the daycare centre should not exceed a maximum of four hours after the first warning. For these four hours we will ensure adequate care available from the usual resources of the daycare centre. As recommended by physicians, a candy bar will be available to prevent low blood sugar levels. One candy bar per child will be provided in advance. Supplies will be checked every year for freshness. We can assume that there will be no problems arising from contamination of drinking water immediately following a serious accident.

Staff members will have some games and books that can be taken into the room to fill the waiting time as much as possible.

9. Individual adjustments and improvisation

The instructions given so far and the information provided have made it clear that we can or should be prepared for specific dangers, but at the same time it becomes clear that one cannot really completely protect oneself in the face of a catastrophe like a meltdown at a nuclear power plant. The interventions proposed will help to keep our exposure to radiation as low as possible. Nevertheless, some of the steps suggested must be individually tailored on the spot to fit the situation for each daycare centre. For instance, not every daycare centre has an area suitable for providing a locked space because there might not be an enclosed porch. Below is a list of issues that need to be determined locally. The other points that are not listed here have in our view already been decided and determined. We will leave adjustments to individual conditions up to the committees at the various facilities. Staff members can meet together with parents and representatives to make decisions for the daycare centre.

The following points require individual decisions:

- How and where can a locked area be set up?
- Where will important information be posted in an emergency?
- After an alarm is sounded, where should the staff members and children go?
- Where is the folder or a list of persons authorized to make special pick-ups?
- Where are the statements of the parents kept about whether children should take iodine tablets or not?
- Where are food and water supplies stored?
- Where are the iodine tablets stored?

In addition to individual decisions, a serious accident will also require those involved to have a willingness to improvise and to use their common sense.

As far as we know now, the daycare centre and the schools will remain closed after a serious accident until further notice. We have received no information, but we also assume that the general public will be informed via radio or television about how to organize public activities and in that connection also the operation of schools and daycare centres.

10. Miscellaneous

- The pro futura working group has decided not to prepare children for an emergency. There should be no drills resembling fire drills.
- If the alarm occurs at night, we are assuming at the moment that the daycare center will not open on the following morning. In this case, we will follow the information given on radio or TV.

Authorization to distribute iodine tablets for

(Please print your name in block letters)

Child's last name:	Given name:	Date of birth:		
In the event of a serious incident at one of the nuclear power plants in Tihange or Doel,				
•	my child named above may take iodine tablets at the request of civil protection authorities.			
0 my child named above civil protection author	e may not take iodine table rities.	ts at the request of		
iodine tablets may no	my child named above may not take iodine tablets because on a doctor's recommendation, iodine tablets may not be taken, but a substitute medication may be used. For this purpose, I attach a separate authorization to give this medication.			
(We request that all parents hand in a slip for each child individually, whether you agree to the distribution of iodine tablets or not.)				
In the event that you have agreed	to the distribution of iodin	e tablets, the following applies:		
 b) An alert given via a public protection authorities. c) If your child refuses to to staff member or the resp d) If there is a request to depend on the instruction follows: for children from one to 	ake the iodine tablets or ta consible party cannot accep listribute iodine tablets by ons from the City of Aache	will be treated the same as one from king them is not possible for other rest liability. the civil protection authorities, the control or the Aachen region, which are contassium iodide (half a tablet)	easons, the	
I confirm with my signature that the authorization to administer iodine tablets has been agreed with my paediatrician/physician, and there are no restrictions for my child to be given iodine tablets.				
-	Irugs. If you provide in this will apply. This can be foun			
Date:				
Signature of both guardians	Signatu	re of both guardians		

(Please print your name in block letters)

Special pick-up authorization 'Tihange'

Preliminary remarks:

In the event of a incident at nuclear power plants in Tihange and Doel, radioactive emissions or the escape of radioactive material is likely. Between the occurrence of a incident and the arrival of harmful radiation in the Aachen region, a period of time will elapse. This period is estimated by experts to be between two to six hours. The time during which you can move around outdoors without harm depends on the operator's crisis management and the weather conditions. The time remaining is important and must be used wisely. The pro futura working group has discussed these issues and regards the pick-up of children from the kindergarten as a top priority. The children should be taken as quickly as possible to their parents, or at least near their parents in familiar surroundings. They will feel safe here. Further questions, such as how to protect children in their families or the families themselves will not be discussed here. This is not the responsibility of pro futura, nor of daycare centers for children.

Pro futura recommends that all parents and guardians make advance preparations for their children to be picked up by someone they know at the kindergarten as soon as a incident becomes known. We must assume that many parents cannot immediately come to the kindergarten after notice of a incident is given; they may be working or simply stuck in traffic. In an unusual emergency situation, it will be necessary to take unusual steps. Thus, we suggest that you ask retired neighbors or other parents in the area to pick up your children or make other arrangements for pick-up. The child should know the person involved and of course they should be someone you can trust. We are aware that there are only a few children below age three. It would be best not to rely on only one solution. If say a neighbor has agreed to pick up your child but is out of town or sick, this solution would not work. We recommend that picking up children by others be "practiced" together with you in ordinary surroundings prior to an emergency.

Staff members will also be instructed in emergency situations to allow children to be picked up only by people authorized to do so by using the special pick-up authorization form below. People who are authorized to pick up children must identify themselves accordingly when they pick up children if they are not known to staff members. Please inform other people of this requirement.

Perhaps it goes without saying, but to avoid misunderstandings please note the following: Picking up children from the kindergarten should take place immediately after notification of a serious incident at any time the children are at the kindergarten. The usual pickup times are not applicable in this case.

Special pick-up authorization

This special pick-up authorization is intended to be used in the event that, because of a serious incident at the nuclear power plants in Tihange and Doel, radioactivity escapes and the public is warned. This special pick-up authorization is only intended in such an eventuality. It does not take the place of provisions made for the routine picking up of children at the kindergarten. Please also enter on this special pick-up authorization the names of any persons who are usually authorized to pick the children up in order that staff members can quickly tell the names of all of the authorized persons.

.....

First name	Last name	born on:		
In the event of a serious incident at the nuclear power stations in Tihange and Doel, my child may be picked up by the following persons.				
1				
First name	Last name	born on:		
2				
First name	Last name	born on:		
3First name	Last name	born on:		
4				
First name	Last name	born on:		
5First name	Last name	born on:		
6.	Last name	born on:		

Changes may be made for the persons authorized to make pick-ups, but only if a revised pick-up authorization is submitted. Verbal changes to the authorizations will not be accepted. This special pick-up authorization replaces all special pickup authorizations previously granted.