

# NASG CLEANING & FOLDING



## Cleaning & Folding the NASG

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## Cleaning & Folding the NASG

In this unit, trainers may be teaching cleaners directly to properly clean the NASG after use and to fold it after cleaning it. Trainers might be teaching midwives, nurses, or other facility staff, who will then in turn, train cleaning staff. Cleaning and folding are very important because when done properly the NASG can be safely re-used (after decontamination of viruses and bacteria) and be rapidly applied.

As the cleaners may only speak a local language, the trainer may need to translate the following material into the language best understood by the cleaners. Even if the cleaners speak the same language as the trainers, be sure that the explanations for each step are clear and at a language level the cleaners will understand.

In this unit it is important to emphasize that there are two sections: 1) NASG Cleaning and 2) NASG Folding. Both of these steps are crucial to make sure the NASG is both clean and easily accessible when needed. It is possible that one person will do both steps, or that one person will be cleaning the NASGs and another person folding.

An [interactive Excel chart](#) is included in this Unit to help decision makers and program managers decide how much bleach to mix with water. Once the decision is made, the cleaners can be informed how to make the proper solution. There is also a chart with water and bleach measurements listed for the most common bleach concentrates ([See Step 3 of the instructions below](#)).





## OBJECTIVES:

***By the end of this unit, trainees should be able to:***

1. Follow correct protocol to clean the NASG
2. Understand the locally determined proportion of bleach to water to create a 0.01% bleach solution
3. Follow correct method to fold the NASG

At the end of the unit, you will find a section called [Materials for Practice](#), which includes a list of things you will need for the practical session with trainees. You may also want to have:

- At least one NASG for demonstration purposes,
  - The [powerpoint presentations](#) for this unit
  - The [NASG Cleaning and Folding Job Aids](#)
  - A downloaded copy of [Saving Mother's Lives: The NASG Training Video](#)
  - Copies of the [Checklists for Trainers and Trainees](#)
  - And any other regular training materials you use
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# Cleaning and Folding the NASG

## Cleaning the NASG

After the NASG has been used and safely removed, it should be placed in a no-leak biohazard container until cleaning (See NASG Removal UNIT). It is important that the NASG is properly cleaned to kill bacteria or viruses that could spread infection.

### STEP 1

Anyone handling a soiled NASG must wear gloves. To clean the NASG wear heavy utility gloves.



**Wear heavy utility gloves when  
cleaning the NASG**





Remove the NASG from the biohazard container.

**Remove the NASG from the  
biohazard container**

## STEP 2

Rinse the NASG in cool water and use a brush to remove tissue and other material.



**Use a brush to remove tissue and  
other material**



## STEP 3

Prepare a 0.01% bleach solution. We suggest using at least 30 L of water, as that is the amount necessary to completely cover the NASG. The water can be put in a deep sink, a large bucket, barrel or other container.

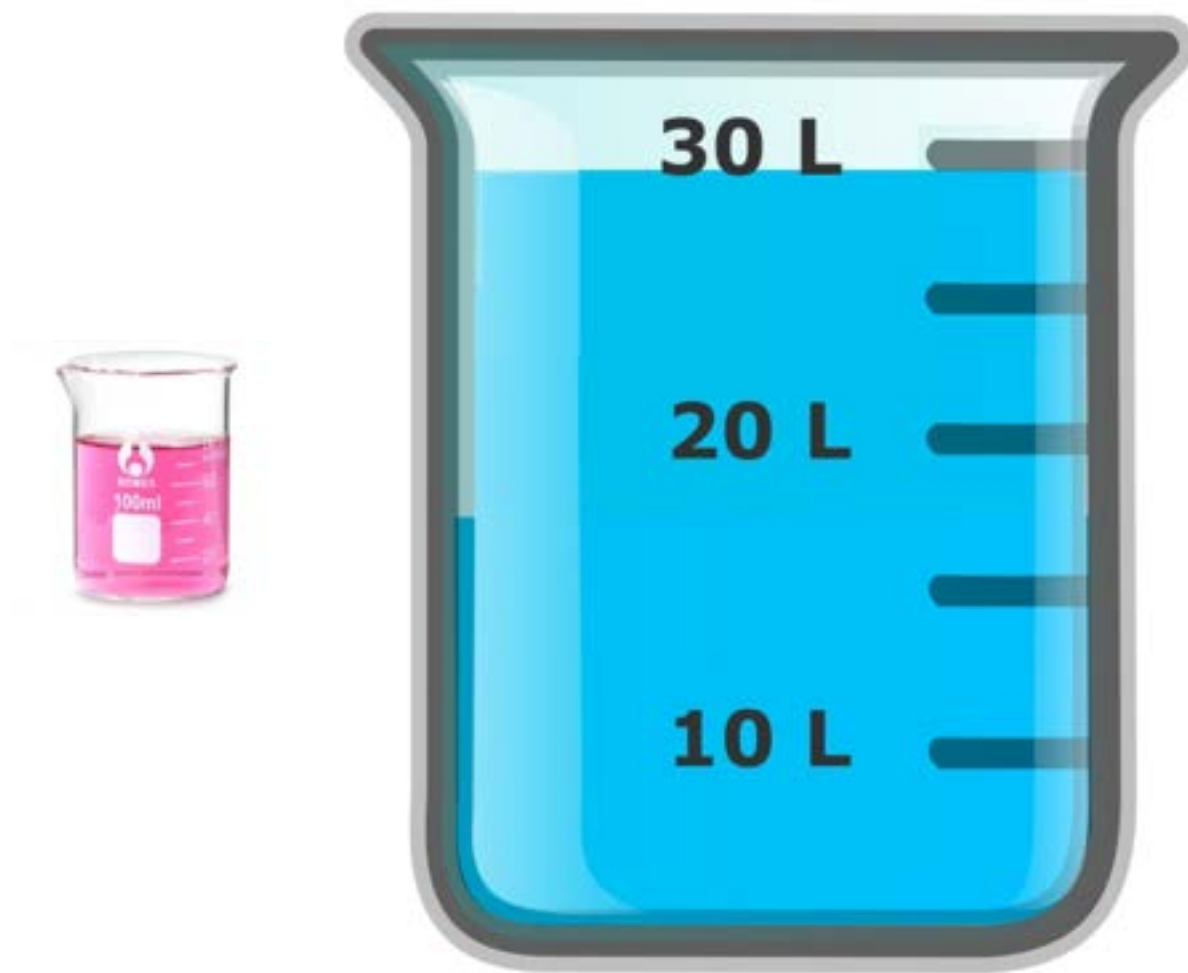
The amount of bleach product necessary to make a 0.01% bleach solution in 30 L of water will vary depending on the percent available chlorine (sodium hypochlorite) of the bleach product available.

To use this chart, find the name of the bleach product and/or the percent chlorine/sodium hypochlorite locally available. This will give the ratio of bleach to water and the volumes of bleach and volumes of water necessary to make a 0.01% solution. Notice that the amount of bleach is very small.

Brand of Bleach and Country/Region Where Used	Percent Available Chlorine/Sodium hypochlorite	Ratio Bleach : Water	Volume of Bleach in ml (L)	Volume of Water (L)
JIK (Africa)	3.5%	1:350	100mL (0.1L)	30L
Household bleach, Clorox (North America, Peru), Eau de Javel (France, Vietnam), Jif/Red & White (Haiti), Odex (Jordan)	5%	1:500	60mL (0.06L)	30L
Blanqueador/Cloro (Mexico)	6%	1:600	50mL (0.05L)	30L
Lavandina (Bolivia)	8%	1:800	40mL (0.04L)	30L
Chloros (UK)	10%	1:1000	30mL (0.03L)	30L
Extrait de Javel (France), Chloros (UK)	15%	1:1500	20mL (0.02L)	30L



For other bleach products with a percentage of chlorine/sodium hypochlorite not listed in the above table or for other bleach concentrations, please use our Interactive Bleach Concentration Worksheet available [here](#).



## STEP 4

Decontaminate the NASG by submerging it in the container of bleach and water for 10 minutes.



A brick, stone, or other heavy object may be placed on the NASG to keep it under water. Do not handle the NASG during this time.



**Decontaminate the NASG by submerging it in the container of bleach and water for 10 minutes**



**A brick, stone, or other heavy object may be placed on the NASG to keep it under water**

Stone



Do not leave the NASG in the solution for more than 10 minutes, because the bleach will damage the garment. Examples of NASGs that were decontaminated in very strong concentrations of bleach:



## STEP 5

Wash the NASG with detergent and cool water by hand or in a washing machine. Wash the NASGs alone; threads from other linen will stick to the Velcro.



**Wash the NASG with detergent and cool water by hand or in a washing machine**

If washing by hand, squeeze the NASG, especially the ball, to get rid of excess water before drying.



**Squeeze the NASG, especially the ball, to get rid of excess water**



## STEP 6

Untangle the NASG. The Velcro will have stuck to itself and stuck to other parts of the NASG. Separate all the Velcro and all the segments so that they can dry.



**Tangled NASG**



**NASG spread out and untangled**



## STEP 7

Hang the NASG to dry, preferably indoors. If you hang it outdoors, keep the NASG away from plants that could stick to the neoprene or Velcro.



**Hang the NASG to dry,  
preferably indoors**



**Keep the NASG away from plants that  
could stick to the neoprene or Velcro**

Once completely dry, fold and store the NASG. (See section on [Folding and Storing](#) the NASG in this Unit.)



## Folding and Storing the NASG



A folded NASG

Folding the NASG correctly is key to being able to unfold it and apply it quickly on the next patient in shock.

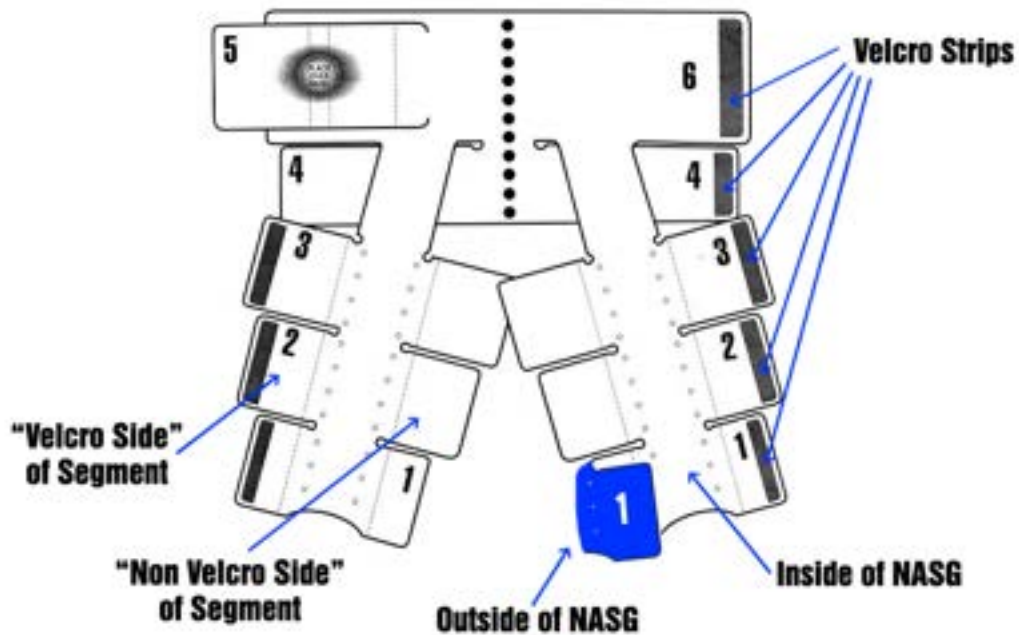
When the NASG is not folded correctly, unfolding the NASG becomes difficult and may waste time in an emergency. This is because the Velcro will be harder to unfasten if it has been closed incorrectly when folding.

If the NASG is folded correctly (with the Velcro folded inside), the Velcro closures will not stick as much when the NASG is unfolded.



## STEP 1

Spread the clean, dry NASG on a clean, flat surface.



Begin with segment #1 and fold the Velcro side so that the Velcro is placed on the inside (black in this picture), not closed on the outside (blue in this picture). Then fold the non-Velcro side on top. The Velcro strip will not be visible.





**Begin with segment #1**



**Fold the Velcro side so that the  
Velcro is placed on the inside**



**Fold the plain,  
non-Velcro side on top**



**The Velcro strip will not be visible**



## STEP 2

Fold segments #2 and #3 in the same way.



**Fold segments #2 and #3  
in the same way**



## STEP 3

Fold the lower leg segments onto the higher leg segments, like a map or a fan.



**Fold the lower leg segments onto the higher leg segments**



**Both legs folded**

## STEP 4



Fold the leg segments up onto the abdominal segment.

**Fold the leg segments up onto the abdominal segment**



## STEP 5

Fold segment #4 in the same way: close the side of the segment with the Velcro to the inside (black in this picture) and cover with non-Velcro side.



**Fold segment #4  
in the same way**



**Folded segment #4**

Then fold segment #4 up over the folded leg segments.



**Fold segment #4 up over the  
folded leg segments**



## STEP 6



Fold segment #5 (with the ball) across the pelvic and leg segments.

**Fold segment #5 (with the ball)  
across the pelvic and leg  
segments**



Wrap segment #6 tightly around segment #5 using the Velcro to securely fasten it.

**Wrap segment #6 tightly around  
segment #5 using the Velcro to  
securely fasten it**

The NASG is now ready to be applied quickly to the next patient.



**Folded NASG**



## Storing the NASG

Store the NASG in a clean dry place. Try to keep it in a clear plastic bag. It should be kept accessible for an emergency.



**Store the NASG in a clean dry place, where it is accessible**



## ***Materials for Practice***

1. NASG (1 NASG for every 6 trainees or at least 2 so that folding can be practiced on a dry NASG while one NASG is drying)
2. Large container (big enough to hold 30L of water plus NASG)
3. Water (30 liters)
4. Bleach (appropriate amount for your setting)
5. A measuring container which can hold at least 100mL and is marked with milliliters, or a container marked at the amount of bleach required in your setting
6. Large stone/heavy waterproof object
7. Cleaning brush
8. Heavy-duty, high cleaning gloves
9. Sink, basin or washing machine
10. Detergent
11. Flat, clean, dry surface for folding
12. A device for measuring time: watch, timer, cell phone, etc.
13. NASG Cleaning and Folding PowerPoint
14. NASG Video (washing/folding training is at the 10 minutes and 9 seconds mark( 10:09) in the NASG video)



## Checklists for Trainee and Trainer

It is important for the trainees to practice the skills learned in each unit so that they become comfortable enough to use these skills in real life settings. To ensure that trainees have learned the key steps to NASG cleaning and folding, they can practice cleaning and folding. They can use the checklists if they can read. After practicing cleaning and/or folding at least 3 times, they should demonstrate cleaning and folding without using the Trainee Checklist, while you or a peer observes and reviews their NASG cleaning and folding with the Trainer Checklist.

### Trainee Checklist for Learning & Skills Self-Assessment

**TO TRAINER:** if the trainees can read give them this checklist as a handout, otherwise, use your own checklist, or allow them to view the [job aid](#).

**To TRAINEE:** You can use this checklist to help you learn the steps. You can use the checklist to help you practice the steps. Once you feel you know how to clean and fold the NASG, you can try to clean and fold it (**without using the checklist**). Right after you clean and fold it, look at the checklist. Did you do all the steps? Did you do them in the right order? If not, practice until you can. Once you feel you know the steps, have your trainer or a peer observe you and assess you with the Trainer Checklist.



## TRAINEE CHECKLIST: NASG Cleaning and Folding

Steps to NASG Cleaning and Folding	✓ if Done
<b>Steps to Clean the NASG</b>	
1. Wear heavy utility gloves.	
2. Rinse the NASG and use brush to remove tissue and other material.	
3. Make a 0.01% bleach solution in 30L of water using the correct ratio of bleach to water.	
4. Immerse NASG in 0.01% bleach solution for 10 minutes.	
5. Wash the NASG with detergent and cool water (by hand or in washing machine).	
6. Squeeze the NASG, especially the ball, to get rid of excess water.	
7. Untangle the NASG.	
8. Hang the NASG to dry.	
<b>Steps to Fold the NASG</b>	
1. Spread a clean, dry NASG on a clean flat surface.	
2. Begin with segment #1 and fold the Velcro side first so that the Velcro is placed on the inside of the segment.	
3. Fold segments #2 and #3 in the same way.	
4. Fold the leg segments upward like a map or fan.	
5. Fold the leg segments up onto the abdominal segment.	
6. Fold segment #4 in the same way: close the side of the segment with the Velcro to the inside and cover with non-Velcro side. Then fold segment #4 up over the folded leg segments.	
7. Fold segment #5 (with the ball) across the pelvic and leg segments and wrap segment #6 tightly around segment #5 securing it with the Velcro fastening.	

*Review the checklist. If you left out two or more steps, or did them out of order, practice the NASG cleaning and/or folding again and then repeat with an observer.*



## Trainer Checklist: Skills Assessment



Use this checklist to assess the skill acquisition of the person you have trained. Tick “Yes” if the person did the step completely and in the right order. If there was anything incorrect, tick “No” and write what was incorrect in the comments box. Review with the trainee after completing the observations.

TRAINER CHECKLIST: NASG Cleaning and Folding			
Steps to NASG Cleaning and Folding	Yes	No	Comments
<b>Steps to Clean the NASG</b>			
1. Wears heavy utility gloves.			
2. Rinses the NASG and uses brush to remove tissue and other material.			
3. Makes a 0.01% bleach solution in 30L of water using the correct ratio of bleach to water.			
4. Immerses NASG in 0.01% bleach solution for 10 minutes.			
5. Washes the NASG with detergent and cool water (by hand or in washing machine).			
6. Squeezes the NASG, especially the foam ball, to get rid of excess water.			
7. Untangles the NASG.			
8. Hangs the NASG to dry.			
<b>Steps to Fold the NASG</b>			
1. Spreads the clean, dry NASG on a clean flat surface.			
2. Begins with segment #1 and folds the Velcro side first so that the Velcro is placed on the inside of the segment.			
3. Folds segments #2 and #3 in the same way.			
4. Folds the leg segments upward like a map or fan.			
5. Folds the leg segments up onto the abdominal segment.			
6. Folds segment #4 in the same way: closes the side of the segment with the Velcro to the inside and cover with non-Velcro side. Then folds segment #4 up over the folded leg segments.			
7. Folds segment #5 (with the ball) across the pelvic and leg segments and wraps segment #6 tightly around segment #5 securing it with the Velcro fastening.			



## *Knowledge Assessment*

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Trainees should be able to answer the following questions. See the next page for correct answers. Review any incorrect responses with trainees to ensure they have understood the material.

1. You should always wear heavy utility gloves when washing the NASG. **(True/False)**
  
2. You should soak the NASG in 30L of a 0.01% bleach solution for:
  - a. 1 minute
  - b. 5 minutes
  - c. 10 minutes
  - d. 15 minutes
  
3. The NASG can be washed by hand or in a washing machine. **(True/False)**
  
4. The NASG should be dried outside by placing it on grass or dirt. **(True/False)**
  
5. Folding the NASG correctly is key to ensuring that it is ready to be applied quickly on the next patient who needs it. **(True/False)**



## *Knowledge Answers*

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1. You should always wear heavy utility gloves when washing the NASG. **(True/False)**

**Answer: True**

2. You should soak the NASG in 30L of a 0.01% bleach solution for:

- a. 1 minute
- b. 5 minutes
- c. 10 minutes
- d. 15 minutes

**Answer: c. 10 minutes**

3. The NASG can be washed by hand or in a washing machine. **(True/False)**

**Answer: True**

4. The NASG should be dried outside by placing it on grass or dirt. **(True/False)**

**Answer: False. The NASG should be hung to dry away from grass or other things that will cling to the NASG Velcro and neoprene**

5. Folding the NASG correctly is key to ensuring that it is ready to be applied quickly on the next patient who needs it. **(True/False)**

**Answer: True**

