

**Cystic Fibrosis Educational Curriculum**

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**June 2015**

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# **Student Curriculum**

## **Objectives**

Teach children and faculty about cystic fibrosis.

Utilize audio-visual aids to demonstrate the impact of living with cystic fibrosis.

Elicit feedback from teachers and school nurses as to the effectiveness of the teaching methods.

## **Materials**

1. Power point presentation
2. Visual aids
3. Hands on demonstrations
4. Handouts & Videos
5. Assessment of presentation and educational materials

## **Methods**

1. Begin presentation by playing One Republic Video.
2. Presentation on the basics of cystic fibrosis utilizing a power point. Included in the presentation will be the discussion of medications and airway clearance. If available, utilize other medical trained personnel (respiratory therapist, dietician, and pharmacist) to discuss and

demonstrate airway clearance and use of enzymes in digestion. An oral quiz to be given following the presentation. Small prizes will be used to reward correct answers.

2. Utilize visual aids such as models of respiratory airways with and without mucus, medication (nebulizer, pill box with medications) and airway clearance (vest or other airway clearance) to facilitate learning.

3. Utilize age appropriate hands on activity/demonstration.

4. Provide age appropriate handouts and videos for students to facilitate learning of cystic fibrosis.

5. Depending on time allotment for education, utilize other personnel for activities.

6. Provide faculty with an assessment tool to evaluate the presentation and educational materials to determine if changes need to be made to future presentations.

## **Outcome**

Students and faculty will gain an understanding of what cystic fibrosis is and what is required of someone with cystic fibrosis to stay healthy.

## Presentation Resources

### Power Point Presentation Link

[CF\\_comic 2015.pptx](#)

[Germ Seminar PPT \(1\).pptx](#)

### Demonstration Directions

Straw Exercise: Handout a straw to each student. Have students breathe in and out through straw.

Have children plug nose to show greater effect of breathing through clogged airways.

### Visual Aids

Vest Demonstration: If available, have the child with CF demonstrate how to use their vest

Medication Demonstration: If medication samples are available, set up table with medications for children to view.

If available, utilize airway models.

### Student Handout Links

[..\Pictures\CF Information Sheet20150503\\_18164361.pdf](#)

[..\Pictures\CF Digestive Worksheet20150503\\_17521492.pdf](#)

[..\Pictures\CF Respiratory Worksheet20150503\\_18002537.pdf](#)

[..\Pictures\CF Puzzle Worksheets20150503\\_18070743.pdf](..\Pictures\CF Puzzle Worksheets20150503_18070743.pdf)

[..\Pictures\CF Puzzle Worksheets20150503\\_18111481.pdf](..\Pictures\CF Puzzle Worksheets20150503_18111481.pdf)

[..\Pictures\CF Puzzle Worksheets20150503\\_18142209.pdf](..\Pictures\CF Puzzle Worksheets20150503_18142209.pdf)

<E:\Cystic Fibrosis.pdf>

[E:\Cystic Fibrosis\(1\).pdf](E:\Cystic Fibrosis(1).pdf)

### **Teacher Resources**

*CF in the classroom* (2007), booklets from Cystic Fibrosis Research, Inc.

CF Comic Books for use in classrooms

### **Video & Game Links**

<http://www.hopkinscf.org/game-room-kids/>

<http://kidshealth.org/kid/closet/movies/htbw-classic.html#cat20918>

### **One Republic CF Music Video Link**

[www.youtube.com/watch?v=z0rxydSolwU](http://www.youtube.com/watch?v=z0rxydSolwU)



# **Teacher/Faculty Curriculum**

## **Objectives**

1. To facilitate students comprehension of cystic fibrosis.
2. Evaluate students' comprehension of cystic fibrosis.
3. Gain an understanding of what cystic fibrosis is and how to help students in the classroom affected by the disease.

## **Materials**

1. Cystic Fibrosis in the Classroom
2. Cystic Fibrosis Comic Books
2. Videos & Games
3. Activities & Materials
4. Assessment of presentation and educational materials

## **Methods**

1. Read cystic fibrosis in the classroom to become familiar with the disease.
2. Utilize any of the provided resources (videos, materials, activities) to facilitate student learning of cystic fibrosis.



3. Ensure that children with cystic fibrosis have a 504 plan in place.
4. Communicate with families of children with cystic fibrosis for any special accommodations the children may need.

## **Outcomes**

1. Students and faculty will gain an understanding of what cystic fibrosis is and what is required of someone with cystic fibrosis to stay healthy.
2. Teachers and faculty will become familiar with the needs of children affected by cystic fibrosis in the classroom.

## Teacher/Faculty Resources

1. *Cystic fibrosis in the Classroom* (2007).

2. *Cystic fibrosis*. (2015), Kidshealth.org.

[CF Information Sheet20150503\\_18164361.pdf](#)

3. *What's up with Beth* (2011), comic book.

4. *What's up with Justin* (2011), comic book.

5. *The amazing story of huxi: a panda with cystic fibrosis* (2012), coloring book.

Order from [www.FoundCare.com](http://www.FoundCare.com)

6. Educational Resources on preceding pages.

## **K-2<sup>nd</sup> Grade Activities/Handouts**

<https://www.youtube.com/watch?v=FMAOEOMLoUE>

<https://www.youtube.com/watch?v=WuI72eMrIQI>

<http://www.hopkinscf.org/game-room-kids/>

<http://www.lovemyscience.com/balloonlung.html>

<http://www.sciencekids.co.nz/experiments/lungvolume.html>

[CF Puzzle Worksheets20150503\\_18111481.pdf](#)

[CF Puzzle Worksheets20150503\\_18070743.pdf](#)

[PC - Germ Bingo Cards Set 1 2012 \(1\).docx](#)

[PC - Germ Bingo Questions \(1\).docx](#)

## **3<sup>rd</sup>-5<sup>th</sup> Grade Activities**

<https://www.youtube.com/watch?v=FMAOEOMLoUE>

<https://www.youtube.com/watch?v=WuI72eMrIQI>

<http://www.hopkinscf.org/game-room-kids/>

<http://www.lovemyscience.com/balloonlung.html>

<http://www.sciencekids.co.nz/experiments/lungvolume.html>

<http://kidshealth.org/kid/closet/movies/htbw-classic.html#cat20918>

[CF Digestive Worksheet20150503\\_17521492.pdf](#)

[CF Respiratory Worksheet20150503\\_18002537.pdf](#)

[Cystic Fibrosis \(2\).pdf](#)

[Cystic Fibrosis \(3\).pdf](#)

[Cystic Fibrosis.pdf](#)

[Cystic Fibrosis \(1\).pdf](#)

[PC - Germ Bingo Cards Set 1 2012 \(1\).docx](#)

[PC - Germ Bingo Questions \(1\).docx](#)

## **6<sup>th</sup>-8<sup>th</sup> Grade Activities**

<http://www.hopkinscf.org/game-room-kids/>

<http://www.lovemyscience.com/balloonlung.html>

<http://www.sciencekids.co.nz/experiments/lungvolume.html>

<http://www.hometrainingtools.com/lung-volume-kit>

<http://kidshealth.org/kid/closet/movies/htbw-classic.html#cat20918>

[CF Digestive Worksheet20150503\\_17521492.pdf](#)

[CF Respiratory Worksheet20150503\\_18002537.pdf](#)

## **9<sup>th</sup>-12<sup>th</sup> Grade Activities**

<http://www.sciencekids.co.nz/experiments/lungvolume.html>

<http://www.hometrainingtools.com/lung-volume-kit>

<http://www.education.com/science-fair/article/lipase-bile-relationship/>

<http://kidshealth.org/kid/closet/movies/htbw-classic.html#cat20918>

[CF Digestive Worksheet20150503\\_17521492.pdf](#)

[Cystic Fibrosis worksheet.ppt](#)

[Cystic Fibrosis worksheet\\_Answers.ppt](#)

[CF Respiratory Worksheet20150503\\_18002537.pdf](#)

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- **Kids Science Experiments. (2015).** Retrieved from <http://www.lovemyscience.com/balloonlung.html>



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<http://www.sciencekids.co.nz/experiments/lungvolume.html>
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**Retrieved from**  
<http://www.youtube.com/watch?v=z0rxydSolwU>
- **The Teachers Corner. (2015). Retrieved from**  
<http://www.theteacherscorner.net/>
- ***What is cystic fibrosis?* (2011). Retrieved from**  
<http://www.youtube.com/watch?v=FMAOEOMLoUE>