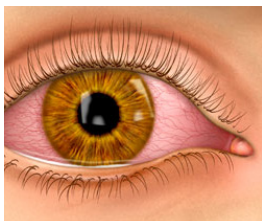


Conjunctivitis Information



Conjunctivitis, or pink eye, is the irritation of the inner eyelid membranes and the membranes covering the whites of the eyes (conjunctiva).

Non-infectious pink eye is caused by allergic reactions. It typically affects both eyes and is characterized by itching, tearing, and swollen eyelids. Treatment for allergy conjunctivitis includes cool compresses and artificial tears for the eyes and oral non-steroidal anti-inflammatory medication or antihistamines. In severe cases, steroid eye drops may be prescribed.

Infectious pink eye may be caused by viruses or bacteria.

Viral infection is the leading cause of pink eye. It typically affects a single eye first and easily spreads to the second eye. A clear, watery discharge, red eyes, and swollen eyelids are the most common symptoms of viral conjunctivitis. Sometimes looking at bright lights is painful. Occasional corneal infections occur unless treated by a doctor. Viral pink eye is highly contagious but usually resolves in one to three weeks after symptoms appear. Antibiotics will not clear viral pink eye.

The bacteria that most commonly cause infectious pink eye are *staphylococci*, *pneumococci*, and *streptococci*. Bacterial pink eye symptoms are eye pain, swelling, red gritty eyes, and yellow or green discharge. The first symptom to appear is usually one eye that is stuck shut because the discharge accumulates during sleep. Eyes may be unstuck using warm washcloths applied to the closed eyelid. Bacterial pink eye easily spreads to the second eye. Treatment requires prescribed antibiotic eye drops or ointment. The doctor may culture the discharge to determine the pathogen responsible. When treated, bacterial conjunctivitis will clear up in two to three days. As with all antibiotics, continue to use the medicine for the prescribed time. The risk of infecting others decreases after using an antibiotic for 24–48 hours.

Infectious conjunctivitis is easily spread. The following activities increase the likelihood of contracting the illness from an infected person: sharing towels or washcloths, touching eyes with contaminated fingers, reusing handkerchiefs, swimming, sharing eye makeup, using contaminated makeup, wearing infected contact lenses, sharing eye drops, and infrequent hand washing. Because of this, most schools require a doctor's note before a student with pink eye will be readmitted to school.

Supplemental Demographic Information

The following supplemental information is important to note:

1. Student names are confidential so each student has been given a number.
2. It is a small school so class choice is limited.
3. Each grade has 100 students. A sample of 25 students is presented. The remaining 75 students are not infected and were not exposed.
4. Siblings are noted by matching letters in the sibling column
5. The boys' basketball (Bball) team had a home game on Friday night. It was not homecoming.
6. The girls' basketball team had an away game on Friday night.
7. The wrestling team had a six-school tournament on Saturday. It was away.
8. The girls' swim team had a six school tournament at home on Saturday.
9. All six schools involved in extracurricular sports over the weekend are reporting pink eye outbreaks this week.
10. Teachers were asked to report what topic they are currently teaching for each class.
 - a. Science department
 - i. Integrated science (Int Sci) – forces
 - ii. Biology – bacteria
 - iii. Chemistry – chromatography
 - iv. Physics – centripetal force
 - b. Music department
 - i. Music – preparing for a concert in six weeks

Table of Student Data

Student Demographic Information — Grade 9

Student #	Grade	Gender	Sibling	Infected	Music	Science	Sport
1	9th	Male	b	no	yes	Int Sci	Bball
2	9th	Male	c	no	no	Int Sci	Bball
3	9th	Male	a	yes	yes	Int Sci	Bball
4	9th	Female	a	yes	yes	Int Sci	Swim
5	9th	Female		yes	yes	Int Sci	Swim
6	9th	Female		no	no	Int Sci	no
7	9th	Male	g	yes	no	Int Sci	Wrestling
8	9th	Female		yes	no	Int Sci	Bball
9	9th	Male		yes	no	Int Sci	Wrestling
10	9th	Female		yes	yes	Int Sci	Swim
11	9th	Female		no	yes	Int Sci	Bball
12	9th	Male		yes	no	Int Sci	Wrestling
13	9th	Male		yes	yes	Int Sci	Wrestling
14	9th	Male		no	no	Int Sci	Bball
15	9th	Female		no	no	Int Sci	no
16	9th	Female	d	no	no	Int Sci	no
17	9th	Male		no	no	Int Sci	Bball
18	9th	Female	h	yes	no	Int Sci	Swim
19	9th	Female		no	yes	Int Sci	Swim
20	9th	Female		no	yes	Int Sci	Bball
21	9th	Female		no	no	Int Sci	no
22	9th	Male		no	no	Int Sci	Bball
23	9th	Male		no	no	Int Sci	Bball
24	9th	Male		no	yes	Int Sci	Bball
25	9th	Female		no	no	Int Sci	no

Student Demographic Information — Grade 10

Student #	Grade	Gender	Sibling	Infected	Music	Science	Sport
26	10th	Female	f	yes	yes	Biology	Swim
27	10th	Female		yes	no	Biology	no
28	10th	Female		yes	yes	Biology	Bball
29	10th	Female		yes	no	Biology	no
30	10th	Male		yes	yes	Biology	Bball
31	10th	Male		yes	no	Biology	Bball
32	10th	Male		yes	yes	Biology	Wrestling
33	10th	Female		yes	no	Biology	no
34	10th	Female		yes	yes	Biology	Bball
35	10th	Female		yes	yes	Biology	no
36	10th	Female		yes	no	Biology	Swim
37	10th	Male		yes	no	Biology	Bball
38	10th	Female		yes	yes	Biology	Swim
39	10th	Male		yes	yes	Biology	Wrestling
40	10th	Male	i	yes	no	Biology	Bball
41	10th	Male		yes	no	Biology	Bball
42	10th	Female		yes	no	Biology	Swim
43	10th	Female		yes	no	Biology	Bball
44	10th	Female		yes	no	Biology	Swim
45	10th	Male		yes	no	Biology	Wrestling
46	10th	Male		yes	no	Biology	Wrestling
47	10th	Male		yes	yes	Biology	Wrestling
48	10th	Female		yes	yes	Biology	no
49	10th	Female		yes	yes	Biology	Swim
50	10th	Female	e	yes	no	Biology	Bball

Student Demographic Information — Grade 11

Student #	Grade	Gender	Sibling	Infected	Music	Science	Sport
51	11th	Male	b	yes	yes	Chemistry	Wrestling
52	11th	Female	f	yes	yes	Chemistry	Swim
53	11th	Female		yes	yes	Chemistry	Swim
54	11th	Female		no	yes	Chemistry	no
55	11th	Female		no	no	Chemistry	Bball
56	11th	Female	g	no	no	Chemistry	no
57	11th	Male		no	yes	Chemistry	Bball
58	11th	Male		no	yes	Chemistry	Bball
59	11th	Female		no	yes	Chemistry	no
60	11th	Female		yes	yes	Chemistry	Swim
61	11th	Male		yes	no	Chemistry	Wrestling
62	11th	Female		yes	yes	Chemistry	Swim
63	11th	Male		yes	no	Chemistry	Wrestling
64	11th	Female		no	no	Chemistry	no
65	11th	Female		yes	no	Chemistry	Swim
66	11th	Female		no	no	Chemistry	no
67	11th	Male		no	no	Chemistry	Bball
68	11th	Male		no	no	Biology 2	Bball
69	11th	Male		no	yes	Biology 2	Bball
70	11th	Female		no	yes	Biology 2	Bball
71	11th	Female		yes	yes	Biology 2	Swim
72	11th	Female		yes	yes	Biology 2	Swim
73	11th	Male		no	yes	Biology 2	no
74	11th	Female		no	yes	Biology 2	no
75	11th	Female		no	yes	Biology 2	Bball

Student Demographic Information — Grade 12

Student #	Grade	Gender	Sibling	Infected	Music	Science	Sport
76	12th	Male	c	no	no	Physics	Bball
77	12th	Female		no	yes	Physics	Bball
78	12th	Female		yes	yes	Physics	Swim
79	12th	Female		no	yes	Physics	no
80	12th	Male		yes	yes	Physics	Wrestling
81	12th	Male		no	yes	Physics	Bball
82	12th	Female	d	no	no	Physics	Bball
83	12th	Male		no	no	Physics	Bball
84	12th	Male		yes	no	Physics	Wrestling
85	12th	Male		no	no	Physics	Bball
86	12th	Female		no	yes	Physics	Bball
87	12th	Female		yes	yes	Physics	Swim
88	12th	Female		yes	yes	Physics	Swim
89	12th	Male		no	yes	Physics	Bball
90	12th	Male		no	no	Physics	Bball
91	12th	Male	i	no	no	Physics	Bball
92	12th	Female		yes	no	Physics	Swim
93	12th	Female	g	no	no	no	no
94	12th	Female		no	yes	no	Bball
95	12th	Male	e	no	no	no	Bball
96	12th	Male		no	yes	no	Bball
97	12th	Female		yes	yes	no	Swim
98	12th	Female		no	yes	no	no
99	12th	Male		yes	yes	no	Wrestling
100	12th	Female		no	yes	no	no