为2.68。而中、重度视力减退高峰则提前到14岁，定基比分别为4.94及26.25，重度视力减退增加速度最大。可见，在大年龄的学生中，对他们进行视力保护的宣传教育和采取必要的防护措施很有必要。

A Study on Vision of 6905 Pupils in Primary and Middle School in Chengdu *Sun Jigui, et al., Department of Ophthalmology and Department of Epidemiology Research The College of Hygiene Managers of Sichuan Province*

A study of epidemiological survey on the vision of 6905 Primary and Middle School pupils in Chengdu, 1984 was reported. The average vision of them was 1.23, 81.44% normal (with 67.47% excellent and good) and 18.56% reduced. The best vision in this category was a the 8-year-old group and there was a gradual decrease of vision along with the increase of age. The prevalence rate of vision reduction of the pupils in Middle School was higher than that of the pupils in the Primary School ($\chi^2=537.5$, $P<0.01$); and the same reduction of the pupils in the Key Primary School was higher than that of the pupils in Common Primary School ($\chi^2=9.66$, $P<0.01$). There was no sex difference either in Primary or Middle school pupils.

Key Words Visual acuity Investgation of visual acuity Mean visual acuity Normal vision Decreased visual acuity The best visual acuity age

鼠疫菌L型分离和培养

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鼠疫菌（Yersinia Pestis）由于遭受到内外界环境因子的作用，抑制或破坏了细菌的细胞壁中肽聚糖（Peptidoglycan）合成，致使细菌的细胞壁缺损或无有，形成鼠疫菌L型（Yersinia pestis L form）。鼠疫菌转变为L型后，许多特性与原菌不同，首先表现在失去保护细胞的细胞壁，在一般渗透压低的培养基不能生长，要求在高渗透压环境下才能生长和繁殖，故在制备培养基时必须加渗透压稳定剂如氯化钠或蔗糖等。鼠疫菌L型是鼠疫菌在不利环境下出现的一种保护形态、它的生长和繁殖需求营养丰富的环境。细菌的细胞壁坚韧而具有弹性，有保护细胞膜的作用，但是失去细胞壁，要求在培养基中添加保护外膜离子和因素。

L型培养基的种类有液体、半液体、半固体。增菌时用液体培养基为宜，分离时用半液体培养基为理想，观察菌落、返祖试验采用半固体培养基为好。鼠疫菌L型培养基成分是：以赫氏肉汤或牛心浸液或胰蛋白胨等为基础，添加3～4%NaCl，2%硫酸镁，10～15%马血清，1%健康兔溶血，调pH7.2～7.4为宜，组成L型液体培养基。在L型液体培养基中加0.25%琼脂粉组成半液体L型培养基，在L型液体培养基中加0.65%～0.75%琼脂粉组成半固体L型培养基。

具体操作是：取野生啮齿类动物的心、肝、脾时采用三剪法，用火焰灭菌剪刀，从剪刀前面依次向后移动剪三次。这样保证剪下类似芝麻大的中心样品为无污染样品，用白金环接种在L型液体或L型半液体试管深部，试管最好用胶塞。接种后试管放入28°C孵箱培养，72小时后取样涂片染色在光学显微镜下观察，连续一周。涂片自然干燥后用甲醇固定三分钟，而后染色在镜下观察，见有丝状等多形态出现后，用吸管吸取样品，接种在半固体的培养皿的培基上，同样，放入28°C孵养箱培养，2～7天观察菌落，L型菌落生长缓慢，形态较小，故需在显微镜下耐心观察。